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**JetEdge**  
CUTTING TOOLS

Shanghai JetEdge Cutting Tools Co., Ltd.  
上海捷刃切削工具有限公司

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# CUTTING TOOL CATALOGUE

- Turning Inserts
- Threading tools
- Grooving inserts
- Milling tools



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ISO Turning Inserts Identification System

C

1

N

2

M

3

G

4

12

5

04

6

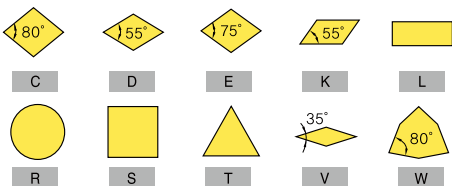
08

7

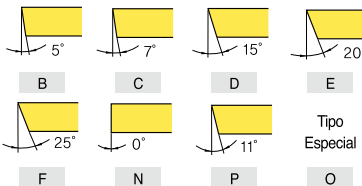
TM

8

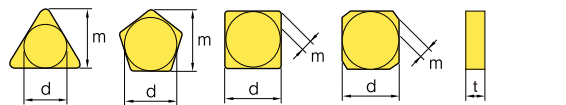
1 形状 Shape



2 后角 Clearance angle



3 公差 Tolerance



| Class | d           | m           | t      |
|-------|-------------|-------------|--------|
| A     | ±0.025      | ±0.005      | ±0.025 |
| C     | ±0.025      | ±0.013      | ±0.025 |
| H     | ±0.013      | ±0.013      | ±0.025 |
| E     | ±0.025      | ±0.025      | ±0.025 |
| G     | ±0.025      | ±0.025      | ±0.13  |
| J     | ±0.05~±0.15 | ±0.005      | ±0.025 |
| K     | ±0.05~±0.15 | ±0.013      | ±0.025 |
| L     | ±0.05~±0.15 | ±0.025      | ±0.025 |
| M     | ±0.05~±0.15 | ±0.08~±0.20 | ±0.13  |
| N     | ±0.05~±0.15 | ±0.08~±0.18 | ±0.025 |
| U     | ±0.08~±0.25 | ±0.13~±0.38 | ±0.13  |

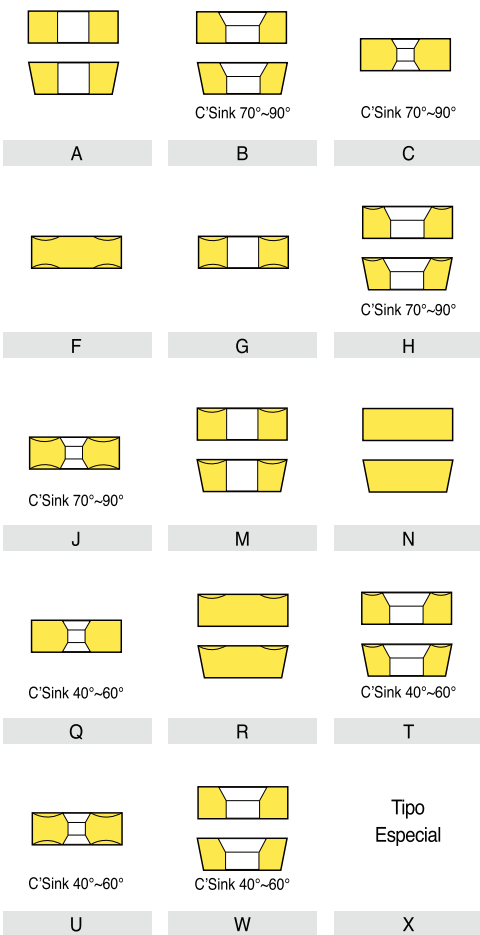
Tolerancia en clase C, H, R, T, W (Caso Excepcional)

| d      | Tolerancia on d |       | Tolerancia on m |       |
|--------|-----------------|-------|-----------------|-------|
|        | J, K, L, M, N   | U     | M, N            | U     |
| 6.35   | ±0.05           | ±0.08 | ±0.08           | ±0.13 |
| 9.525  | ±0.05           | ±0.08 | ±0.08           | ±0.13 |
| 12.7   | ±0.08           | ±0.13 | ±0.13           | ±0.20 |
| 15.875 | ±0.10           | ±0.18 | ±0.15           | ±0.27 |
| 19.05  | ±0.10           | ±0.18 | ±0.15           | ±0.27 |
| 25.4   | ±0.13           | ±0.25 | ±0.18           | ±0.38 |

Tolerancia en clase D (Caso Excepcional)

| d      | Tolerancia on d | Tolerancia on m |
|--------|-----------------|-----------------|
| 6.35   | ±0.05           | ±0.11           |
| 9.525  | ±0.05           | ±0.11           |
| 12.7   | ±0.08           | ±0.15           |
| 15.875 | ±0.10           | ±0.18           |
| 19.05  | ±0.10           | ±0.18           |

4 紧固方式 Seleccion transversal del inserto



5 刀片形状 Shape of blades

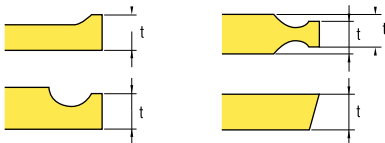
| Simbolo  |    |    |    |    |    |    |         | IC     |
|----------|----|----|----|----|----|----|---------|--------|
| C        | d  | S  | T  | R  | V  | W  | Inch    |        |
| Metricoo |    |    |    |    |    |    |         | d (mm) |
| 03       | 04 | 03 | 06 | 03 | -  | 02 | 1.2 (5) | 3.97   |
| 04       | 05 | 04 | 08 | 04 | 08 | S3 | 1.5 (6) | 4.76   |
| 05       | 06 | 05 | 09 | 05 | 09 | 03 | 1.8 (7) | 5.56   |
| -        | -  | -  | -  | 06 | -  | -  | -       | 6.00   |
| 06       | 07 | 06 | 11 | 06 | 11 | 04 | 2       | 6.35   |
| 08       | 09 | 07 | 13 | 07 | 13 | 05 | 2.5     | 7.94   |
| -        | -  | -  | -  | 08 | -  | -  | -       | 8.00   |
| 09       | 11 | 09 | 16 | 09 | 16 | 06 | 3       | 9.525  |
| -        | -  | -  | -  | 10 | -  | -  | -       | 10.00  |
| 11       | 13 | 11 | 19 | 11 | 19 | 07 | 3.5     | 11.11  |
| -        | -  | -  | -  | 12 | -  | -  | -       | 12.00  |
| 12       | 15 | 12 | 22 | 12 | 22 | 08 | 4       | 12.70  |
| 14       | 17 | 14 | 24 | 14 | 24 | 09 | 4.5     | 14.29  |
| 16       | 19 | 15 | 27 | 15 | 27 | 10 | 5       | 15.875 |
| -        | -  | -  | -  | 16 | -  | -  | -       | 16.00  |
| 17       | 21 | 17 | 30 | 17 | 30 | 11 | 5.5     | 17.46  |
| 19       | 23 | 19 | 33 | 19 | 33 | 13 | 6       | 19.05  |
| -        | -  | -  | -  | 20 | -  | -  | -       | 20.00  |
| 22       | 27 | 22 | 38 | 22 | 38 | 15 | 7       | 22.225 |
| -        | -  | -  | -  | 25 | -  | -  | -       | 25.00  |
| 25       | 31 | 25 | 44 | 25 | 44 | 17 | 8       | 25.40  |
| 32       | 38 | 31 | 54 | 31 | 54 | 21 | 10      | 31.75  |
| -        | -  | -  | -  | 32 | -  | -  | -       | 32.00  |

7 刀尖圆弧代号 Arc code of tool tip



| Simbolo |      | Radio de Punta          |        |
|---------|------|-------------------------|--------|
| Metric  | Inch | Metric                  | Inch   |
| 003     | 0.1  | 0.03                    | 0.0012 |
| 005     | 0.13 | 0.05                    | 0.002  |
| 01      | 0.2  | 0.1                     | 0.004  |
| 02      | 0.5  | 0.2                     | 0.008  |
| 04      | 1    | 0.4                     | 1/64   |
| 08      | 2    | 0.8                     | 1/32   |
| 12      | 3    | 1.2                     | 3/64   |
| 16      | 4    | 1.6                     | 1/16   |
| 20      | 5    | 2.0                     | 5/64   |
| 24      | 6    | 2.4                     | 3/32   |
| 28      | 7    | 2.8                     | 7/64   |
| 32      | 8    | 3.2                     | 1/8    |
| 00      | -    | Placa redondo (Inch)    |        |
| M0      | -    | Placa redondo (Métrico) |        |

6 刀片厚度 Thickness of blades



| Simbolo |         | Altura de filo de corte (t) |       |
|---------|---------|-----------------------------|-------|
| Metric  | Inch    | mm                          | Inch  |
| 01      | 1 (2)   | 1.59                        | 1/16  |
| T0      | 1.125   | 1.79                        | 9/128 |
| T1      | 1.2     | 1.98                        | 5/64  |
| 02      | 1.5 (3) | 2.38                        | 3/32  |
| T2      | 1.75    | 2.78                        | 7/64  |
| 03      | 2       | 3.18                        | 1/8   |
| T3      | 2.5     | 3.97                        | 5/32  |
| 04      | 3       | 4.76                        | 3/16  |
| 05      | 3.5     | 5.56                        | 7/32  |
| 06      | 4       | 6.35                        | 1/4   |
| 07      | 5       | 7.94                        | 5/16  |
| 09      | 6       | 9.52                        | 3/8   |
| 11      | 7       | 11.11                       | 7/16  |
| 12      | 8       | 12.70                       | 1/2   |

8 断屑槽型 Code of chip breaker type



Grade Application Range for Indexable Inserts

| ISO使用<br>ISO Use                                           |                   | 普通车削<br>Turning |         | 螺纹<br>Threading |         | 切断切槽<br>Parting and Grooving |         | ISO |
|------------------------------------------------------------|-------------------|-----------------|---------|-----------------|---------|------------------------------|---------|-----|
| 工件材料<br>Workpiece materials                                | ISO代号<br>ISO Code | 涂层 Coating      |         | 涂层 Coating      |         | 涂层 Coating                   |         |     |
|                                                            |                   | CVD             | PVD     | CVD             | PVD     | CVD                          | PVD     |     |
| P<br>钢件<br>Steel                                           | P01               | JE8015P         |         |                 | JE7015P |                              | JE7015P | P01 |
|                                                            | P10               | JE8020P         |         |                 | JE7015P |                              | JE7015P | P10 |
|                                                            | P20               | JE8025P         |         |                 | JE7025P |                              | JE7025P | P20 |
|                                                            | P30               | JE8035P         |         |                 | JE7025P |                              | JE7025P | P30 |
|                                                            | P40               |                 |         |                 |         |                              |         | P40 |
| M<br>不锈钢<br>Stainless Steel                                | M01               |                 |         |                 |         |                              |         | M01 |
|                                                            | M10               |                 | JE6015M |                 | JE6015M |                              | JE6015M | M10 |
|                                                            | M20               |                 | JE6025M |                 | JE6025M |                              | JE6025M | M20 |
|                                                            | M30               |                 | JE6035M |                 | JE6035M |                              | JE6035M | M30 |
|                                                            | M40               |                 |         |                 |         |                              |         | M40 |
| K<br>铸铁<br>Cast Iron                                       | K01               | JE4015K         | JE4015K | JE4015K         | JE4015K | JE4015K                      | JE4015K | K01 |
|                                                            | K10               | JE4025K         | JE4025K | JE4025K         | JE4025K | JE4025K                      | JE4025K | K10 |
|                                                            | K20               |                 |         |                 |         |                              |         | K20 |
|                                                            | K30               |                 |         |                 |         |                              |         | K30 |
| N<br>有色金属<br>Non-Ferrous Metal                             | N01               |                 |         |                 |         |                              |         | N01 |
|                                                            | N10               |                 |         |                 |         |                              |         | N10 |
|                                                            | N20               |                 |         |                 |         |                              |         | N20 |
|                                                            | N30               |                 |         |                 |         |                              |         | N30 |
| S<br>钛合金<br>耐热合金<br>Titanium Alloy<br>Heat Resisting Alloy | S01               |                 |         |                 |         |                              |         | S01 |
|                                                            | S10               |                 | JE5015S |                 | JE5015S |                              | JE5015S | S10 |
|                                                            | S20               |                 | JE5025S |                 | JE5025S |                              | JE5025S | S20 |
|                                                            | S30               |                 |         |                 |         |                              |         | S30 |
| H<br>高硬度材料<br>High Strength Material                       | H01               |                 |         |                 |         |                              |         | H01 |
|                                                            | H10               |                 |         |                 |         |                              |         | H10 |
|                                                            | H20               |                 |         |                 |         |                              |         | H20 |
|                                                            | H30               |                 |         |                 |         |                              |         | H30 |

K series grades are available with CVD / PVD coating depending on machining conditions.  
K 系列可根据工况选择 CVD 或 PVD 涂层。

Rhombic 80° with Hole  
(Negative)



| Inserts shape<br>Type  |                | Dimensions(mm) |      |      |      |     |  | Coating/Grade |         |         |         |         |         |         |         |
|------------------------|----------------|----------------|------|------|------|-----|--|---------------|---------|---------|---------|---------|---------|---------|---------|
|                        |                | I.C            | L    | S    | d    | r   |  | CVD           |         |         |         | PVD     |         | CVD     |         |
|                        |                |                |      |      |      |     |  | JE8015P       | JE8020P | JE8025P | JE8035P | JE6015M | JE6025M | JE6035M | JE4015K |
| 精加工<br>Finishing       | CNMA120408     | 12.7           | 12.9 | 4.76 | 5.16 | 0.8 |  |               |         |         |         |         |         |         |         |
|                        | CNMA120412     | 12.7           | 12.9 | 4.76 | 5.16 | 1.2 |  |               |         |         |         |         |         |         |         |
|                        | CNMG120404-TFA | 12.7           | 12.9 | 4.76 | 5.16 | 0.4 |  |               |         |         |         |         |         |         |         |
|                        | CNMG120408-TFA | 12.7           | 12.9 | 4.76 | 5.16 | 0.8 |  |               |         |         |         |         |         |         |         |
|                        | CNMG120412-TFA | 12.7           | 12.9 | 4.76 | 5.16 | 1.2 |  |               |         |         |         |         |         |         |         |
|                        | CNMG120404-TFB | 12.7           | 12.9 | 4.76 | 5.16 | 0.4 |  |               |         |         |         |         |         |         |         |
| 半精加工<br>Semi-finishing | CNMG120408-TFB | 12.7           | 12.9 | 4.76 | 5.16 | 0.8 |  |               |         |         |         |         |         |         |         |
|                        | CNMG120404-TMD | 12.7           | 12.9 | 4.76 | 5.16 | 0.4 |  |               |         |         |         |         |         |         |         |
|                        | CNMG120408-TMD | 12.7           | 12.9 | 4.76 | 5.16 | 0.8 |  |               |         |         |         |         |         |         |         |
|                        | CNMG120412-TMD | 12.7           | 12.9 | 4.76 | 5.16 | 1.2 |  |               |         |         |         |         |         |         |         |
|                        | CNMG120404-TMB | 12.7           | 12.9 | 4.76 | 5.16 | 0.4 |  |               |         |         |         |         |         |         |         |
|                        | CNMG120408-TMB | 12.7           | 12.9 | 4.76 | 5.16 | 0.8 |  |               |         |         |         |         |         |         |         |
| 粗加工<br>Roughing        | CNMG120412-TMB | 12.7           | 12.9 | 4.76 | 5.16 | 1.2 |  |               |         |         |         |         |         |         |         |
|                        | CNMG120404-TMC | 12.7           | 12.9 | 4.76 | 5.16 | 0.4 |  |               |         |         |         |         |         |         |         |
|                        | CNMG120408-TMC | 12.7           | 12.9 | 4.76 | 5.16 | 0.8 |  |               |         |         |         |         |         |         |         |
|                        | CNMG120412-TMC | 12.7           | 12.9 | 4.76 | 5.16 | 1.2 |  |               |         |         |         |         |         |         |         |
|                        | CNMG120404-TRB | 9.525          | 12.9 | 4.76 | 5.16 | 0.4 |  |               |         |         |         |         |         |         |         |
|                        | CNMG120408-TRB | 9.525          | 12.9 | 4.76 | 5.16 | 0.8 |  |               |         |         |         |         |         |         |         |
|                        | CNMG120412-TRB | 9.525          | 12.9 | 4.76 | 5.16 | 1.2 |  |               |         |         |         |         |         |         |         |
|                        | CNMG120404-TMA | 12.7           | 12.9 | 4.76 | 5.16 | 0.4 |  |               |         |         |         |         |         |         |         |
|                        | CNMG120408-TMA | 12.7           | 12.9 | 4.76 | 5.16 | 0.8 |  |               |         |         |         |         |         |         |         |
|                        | CNMG120412-TMA | 12.7           | 12.9 | 4.76 | 5.16 | 1.2 |  |               |         |         |         |         |         |         |         |
|                        | CNMG120404-TRA | 12.7           | 12.9 | 4.76 | 5.16 | 0.4 |  |               |         |         |         |         |         |         |         |
|                        | CNMG120408-TRA | 12.7           | 12.9 | 4.76 | 5.16 | 0.8 |  |               |         |         |         |         |         |         |         |
|                        | CNMG120412-TRA | 12.7           | 12.9 | 4.76 | 5.16 | 1.2 |  |               |         |         |         |         |         |         |         |
|                        | CNMG120416-TRA | 12.7           | 12.9 | 4.76 | 5.16 | 1.6 |  |               |         |         |         |         |         |         |         |

Featured grade  
主推牌号

Optional grade  
可选牌号

Rhombic 80° with Hole  
(Negative)



| <div></div>     |                |                 |                |       |       |      | <div>Workpiece material</div> <div><div>PSteel</div><div>MStainless steel</div><div>KCast iron</div><div>NNon-ferrous metal</div><div>SHeat resistant alloy Ti alloy</div></div> |         |         |         | <div>Continuous cutting</div> <div>General cutting</div> <div>断续切削 Interrupted cutting</div> |         |         |         |         |         |         |  |  |  |  |  |
|-----------------|----------------|-----------------|----------------|-------|-------|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------|---------|----------------------------------------------------------------------------------------------|---------|---------|---------|---------|---------|---------|--|--|--|--|--|
|                 |                |                 |                |       |       |      |                                                                                                                                                                                  |         |         |         |                                                                                              |         |         |         |         |         |         |  |  |  |  |  |
| Inserts shape   | Type           | Dimensions(mm)  |                |       |       |      | Coating/Grade                                                                                                                                                                    |         |         |         |                                                                                              |         |         |         |         |         |         |  |  |  |  |  |
|                 |                | I.C             | L              | S     | d     | r    | CVD                                                                                                                                                                              |         |         |         | PVD                                                                                          |         |         | CVD     |         | PVD     |         |  |  |  |  |  |
|                 |                |                 |                |       |       |      | JE8015P                                                                                                                                                                          | JE8020P | JE8025P | JE8035P | JE6015M                                                                                      | JE6025M | JE6035M | JE4015K | JE4025K | JE5015S | JE5025S |  |  |  |  |  |
| 粗加工<br>Roughing |                | CNMG120408L-TMF | 12.7           | 12.9  | 4.76  | 5.16 | 0.8                                                                                                                                                                              | ○       | ○       | ●       | ○                                                                                            |         |         |         |         |         |         |  |  |  |  |  |
|                 |                | CNMG120408R-TMF | 12.7           | 12.9  | 4.76  | 5.16 | 0.8                                                                                                                                                                              | ○       | ○       | ●       | ○                                                                                            |         |         |         |         |         |         |  |  |  |  |  |
|                 |                |                 |                |       |       |      |                                                                                                                                                                                  |         |         |         |                                                                                              |         |         |         |         |         |         |  |  |  |  |  |
| 粗加工<br>Roughing |                | CNMG160608-TRC  | 15.875         | 16.1  | 6.35  | 6.35 | 0.8                                                                                                                                                                              | ○       | ○       | ●       | ○                                                                                            |         |         |         |         |         |         |  |  |  |  |  |
|                 |                | CNMG160612-TRC  | 15.875         | 16.1  | 6.35  | 6.35 | 1.2                                                                                                                                                                              | ○       | ○       | ●       | ○                                                                                            |         |         |         |         |         |         |  |  |  |  |  |
|                 |                | CNMG160616-TRC  | 15.875         | 16.1  | 6.35  | 6.35 | 1.6                                                                                                                                                                              | ○       | ○       | ●       | ○                                                                                            |         |         |         |         |         |         |  |  |  |  |  |
|                 |                | CNMG190608-TRC  | 19.05          | 19.34 | 6.35  | 7.94 | 0.8                                                                                                                                                                              | ○       | ○       | ●       | ○                                                                                            |         |         |         |         |         |         |  |  |  |  |  |
|                 |                | CNMG190612-TRC  | 19.05          | 19.34 | 6.35  | 7.94 | 1.2                                                                                                                                                                              | ○       | ○       | ●       | ○                                                                                            |         |         |         |         |         |         |  |  |  |  |  |
|                 |                | CNMG190616-TRC  | 19.05          | 19.34 | 6.35  | 7.94 | 1.6                                                                                                                                                                              | ○       | ○       | ●       | ○                                                                                            |         |         |         |         |         |         |  |  |  |  |  |
|                 |                | CNMG190624-TRC  | 19.05          | 19.34 | 6.35  | 7.94 | 0.8                                                                                                                                                                              | ○       | ○       | ●       | ○                                                                                            |         |         |         |         |         |         |  |  |  |  |  |
|                 |                | CNMM190612-TRC  | 19.05          | 19.34 | 6.35  | 7.94 | 0.8                                                                                                                                                                              | ○       | ○       | ●       | ○                                                                                            |         |         |         |         |         |         |  |  |  |  |  |
|                 |                |                 | CNMM190616-TRC | 19.05 | 19.34 | 6.35 | 7.94                                                                                                                                                                             | 0.8     | ○       | ○       | ●                                                                                            | ○       |         |         |         |         |         |  |  |  |  |  |
|                 |                |                 | CNMM190624-TRC | 19.05 | 19.34 | 6.35 | 7.94                                                                                                                                                                             | 0.8     | ○       | ○       | ●                                                                                            | ○       |         |         |         |         |         |  |  |  |  |  |
| CNMM250624-TRC  | 12.7           |                 | 12.9           | 4.76  | 5.16  | 0.8  | ○                                                                                                                                                                                | ○       | ●       | ○       |                                                                                              |         |         |         |         |         |         |  |  |  |  |  |
|                 | CNMM190612-THA | 19.05           | 12.9           | 4.76  | 5.16  | 0.4  | ○                                                                                                                                                                                | ○       | ●       | ○       |                                                                                              |         |         |         |         |         |         |  |  |  |  |  |
|                 |                |                 |                |       |       |      |                                                                                                                                                                                  |         |         |         |                                                                                              |         |         |         |         |         |         |  |  |  |  |  |

● Featured grade 主推牌号 ○ Optional grade 可选牌号

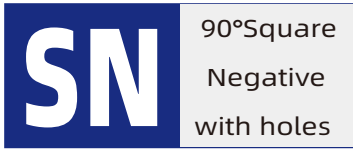
Rhombic 55° with Hole  
(Negative)



| Inserts shape  | Type           | Dimensions(mm) |      |      |      |      | Coating/Grade |         |         |         |         |         |         |         |         |         |         |  |  |
|----------------|----------------|----------------|------|------|------|------|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--|--|
|                |                | I.C            | L    | S    | d    | r    | CVD           |         |         |         | PVD     |         | CVD     |         | PVD     |         |         |  |  |
|                |                |                |      |      |      |      | JE8015P       | JE8020P | JE8025P | JE8035P | JE6015M | JE6025M | JE6035M | JE4015K | JE4025K | JE5015S | JE5025S |  |  |
|                | DNMA150408     | 12.7           | 15.5 | 4.76 | 5.08 | 0.8  |               |         |         |         |         |         |         |         | ○       | ●       |         |  |  |
|                | DNMA150412     | 12.7           | 15.5 | 4.76 | 5.08 | 1.2  |               |         |         |         |         |         |         |         | ○       | ●       |         |  |  |
|                | DNMA150608     | 12.7           | 15.5 | 6.35 | 5.08 | 0.8  |               |         |         |         |         |         |         |         | ○       | ●       |         |  |  |
|                | DNMA150412     | 12.7           | 15.5 | 6.35 | 5.08 | 1.2  |               |         |         |         |         |         |         |         | ○       | ●       |         |  |  |
|                | DNMA150416     | 12.7           | 15.5 | 6.35 | 5.08 | 1.6  |               |         |         |         |         |         |         |         | ○       | ●       |         |  |  |
|                |                | DNMG150404-TMB | 12.7 | 15.5 | 4.76 | 5.16 | 0.4           |         |         |         |         | ○       | ●       | ○       |         |         |         |  |  |
| DNMG150408-TMB |                | 12.7           | 15.5 | 4.76 | 5.16 | 0.8  |               |         |         |         | ○       | ●       | ○       |         |         |         |         |  |  |
|                | DNMG150408-TRA | 12.7           | 15.5 | 4.76 | 5.16 | 0.8  |               |         |         |         |         |         |         |         | ○       | ●       |         |  |  |
|                | DNMG150608-TRA | 12.7           | 15.5 | 6.35 | 5.16 | 0.8  |               |         |         |         |         |         |         |         | ○       | ●       |         |  |  |
|                | DNMG150612-TRA | 12.7           | 15.5 | 6.35 | 5.16 | 1.2  |               |         |         |         |         |         |         |         | ○       | ●       |         |  |  |
|                | DNMG150616-TRA | 12.7           | 15.5 | 6.35 | 5.16 | 1.6  |               |         |         |         |         |         |         |         | ○       | ●       |         |  |  |
|                |                | DNMG150404-TMA | 12.7 | 15.5 | 4.76 | 5.16 | 0.4           | ○       | ○       | ●       | ○       |         |         |         |         |         |         |  |  |
|                |                | DNMG150408-TMA | 12.7 | 15.5 | 4.76 | 5.16 | 0.8           | ○       | ○       | ●       | ○       |         |         |         |         |         |         |  |  |
|                |                | DNMG150412-TMA | 12.7 | 15.5 | 4.76 | 5.16 | 1.2           | ○       | ○       | ●       | ○       |         |         |         |         |         |         |  |  |
|                |                | DNMG150604-TMA | 12.7 | 15.5 | 6.35 | 5.16 | 0.4           | ○       | ○       | ●       | ○       |         |         |         |         |         |         |  |  |
|                |                | DNMG150608-TMA | 12.7 | 15.5 | 6.35 | 5.16 | 0.8           | ○       | ○       | ●       | ○       |         |         |         |         |         |         |  |  |
|                |                | DNMG150612-TMA | 12.7 | 15.5 | 6.35 | 5.16 | 1.2           | ○       | ○       | ●       | ○       |         |         |         |         |         |         |  |  |

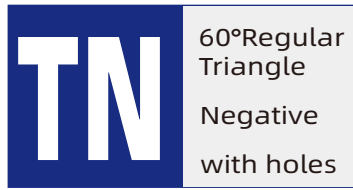
● Featured grade 主推牌号 ○ Optional grade 可选牌号

90°Square with holes  
(Negative)



|                                                 |  | Dimensions(mm)  |       |       |       |      |      | Coating/Grade |         |         |         |         |         |         |         |
|-------------------------------------------------|--|-----------------|-------|-------|-------|------|------|---------------|---------|---------|---------|---------|---------|---------|---------|
|                                                 |  | I.C             | L     | S     | d     | r    |      | CVD           | PVD     | CVD     | PVD     |         |         |         |         |
|                                                 |  |                 |       |       |       |      |      | JE8015P       | JE8020P | JE8025P | JE8035P | JE6015M | JE6025M | JE6035M | JE4015K |
|                                                 |  |                 |       |       |       |      |      |               |         |         |         |         |         |         | JE4025K |
|                                                 |  |                 |       |       |       |      |      |               |         |         |         |         |         |         | JE5015S |
|                                                 |  |                 |       |       |       |      |      |               |         |         |         |         |         |         | JE5025S |
| Semi-finishing<br>半精加工                          |  | SNMA120408      | 12.7  | 15.5  | 4.76  | 5.16 | 0.8  |               |         |         |         |         |         |         | ○ ●     |
|                                                 |  | SNMA120412      | 12.7  | 15.5  | 4.76  | 5.16 | 1.2  |               |         |         |         |         |         |         | ○ ●     |
|                                                 |  | SNMA120416      | 12.7  | 15.5  | 4.76  | 5.16 | 1.6  |               |         |         |         |         |         |         | ○ ●     |
|                                                 |  | SNMG120404-TMD  | 12.7  | 15.5  | 4.76  | 5.16 | 0.4  |               |         |         |         |         |         |         | ○ ●     |
|                                                 |  | SNMG120408-TMD  | 12.7  | 15.5  | 4.76  | 5.16 | 0.8  |               |         |         |         |         |         |         | ○ ●     |
|                                                 |  | SNMG120412-TMD  | 12.7  | 15.5  | 4.76  | 5.16 | 1.2  |               |         |         |         |         |         |         | ○ ●     |
|                                                 |  | SNMG120404-TMB  | 12.7  | 15.5  | 4.76  | 5.16 | 0.4  |               |         |         |         | ○ ● ○   |         |         |         |
|                                                 |  | SNMG120408-TMB  | 12.7  | 15.5  | 4.76  | 5.16 | 0.8  |               |         |         |         | ○ ● ○   |         |         |         |
|                                                 |  | SNMG120412-TMB  | 12.7  | 15.5  | 4.76  | 5.16 | 1.2  |               |         |         |         | ○ ● ○   |         |         |         |
|                                                 |  | SNMG120408-TMC  | 12.7  | 15.5  | 4.76  | 5.16 | 0.8  |               |         |         |         | ○ ● ○   |         |         |         |
| Roughing<br>粗加工                                 |  | SNMG120412-TMC  | 12.7  | 15.5  | 4.76  | 5.16 | 1.2  |               |         |         |         | ○ ● ○   |         |         |         |
|                                                 |  | SNMG120404-TMA  | 12.7  | 15.5  | 4.76  | 5.16 | 0.4  | ○ ○ ● ○       |         |         |         |         |         |         |         |
|                                                 |  | SNMG120408-TMA  | 12.7  | 15.5  | 4.76  | 5.16 | 0.8  | ○ ○ ● ○       |         |         |         |         |         |         |         |
|                                                 |  | SNMG120412-TMA  | 12.7  | 15.5  | 4.76  | 5.16 | 1.2  | ○ ○ ● ○       |         |         |         |         |         |         |         |
|                                                 |  | SNMG190612-TMA  | 19.05 | 19.05 | 6.35  | 7.94 | 1.2  | ○ ○ ● ○       |         |         |         |         |         |         |         |
|                                                 |  | SNMG120404L-TMA | 12.7  | 15.5  | 4.76  | 5.16 | 0.4  | ○ ○ ● ○       |         |         |         |         |         |         |         |
|                                                 |  | SNMG120404R-TMA | 12.7  | 15.5  | 4.76  | 5.16 | 0.4  | ○ ○ ● ○       |         |         |         |         |         |         |         |
|                                                 |  | SNMG120408L-TMA | 12.7  | 15.5  | 4.76  | 5.16 | 0.8  | ○ ○ ● ○       |         |         |         |         |         |         |         |
|                                                 |  | SNMG120408R-TMA | 12.7  | 15.5  | 4.76  | 5.16 | 0.8  | ○ ○ ● ○       |         |         |         |         |         |         |         |
|                                                 |  | SNMG190612-TRC  | 19.05 | 19.05 | 6.35  | 7.94 | 1.2  | ○ ○ ● ○       |         |         |         |         |         |         |         |
| Roughing&Heavy Duty Turning Insert<br>粗加工&重载车刀片 |  | SNMG190616-TRC  | 19.05 | 19.05 | 6.35  | 7.94 | 1.2  | ○ ○ ● ○       |         |         |         |         |         |         |         |
|                                                 |  | SNMG190624-TRC  | 19.05 | 19.05 | 6.35  | 7.94 | 1.2  | ○ ○ ● ○       |         |         |         |         |         |         |         |
|                                                 |  | SNMG250724-TRC  | 25.4  | 25.4  | 7.94  | 9.21 | 2.4  | ○ ○ ● ○       |         |         |         |         |         |         |         |
|                                                 |  | SNMG190624-TRD  | 19.05 | 19.05 | 6.35  | 7.94 | 1.2  | ○ ○ ● ○       |         |         |         |         |         |         |         |
|                                                 |  | SNMG250924-TRD  | 25.4  | 19.05 | 6.35  | 7.94 | 1.2  | ○ ○ ● ○       |         |         |         |         |         |         |         |
|                                                 |  | SNMM361250      | 36.4  | 36.4  | 12.55 | 18.4 | 3.85 |               |         |         |         |         |         |         |         |
|                                                 |  |                 |       |       |       |      |      |               |         |         |         |         |         |         |         |
|                                                 |  | SNMM190624-TRC  | 19.05 | 19.05 | 6.35  | 7.94 | 1.2  | ○ ○ ● ○       |         |         |         |         |         |         |         |
|                                                 |  | SNMM250724-TRC  | 25.4  | 25.4  | 7.94  | 9.21 | 2.4  | ○ ○ ● ○       |         |         |         |         |         |         |         |
|                                                 |  | SNMM250924-TRC  | 25.4  | 25.4  | 9.525 | 9.21 | 2.4  | ○ ○ ● ○       |         |         |         |         |         |         |         |

60°Regular Triangle with holes  
(Negative)



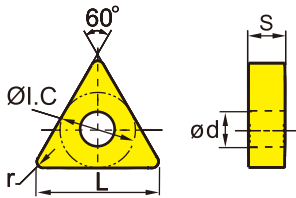
|                        |  | Dimensions(mm) |       |      |      |      |     | Coating/Grade |         |         |         |         |         |         |         |
|------------------------|--|----------------|-------|------|------|------|-----|---------------|---------|---------|---------|---------|---------|---------|---------|
|                        |  | I.C            | L     | S    | d    | r    |     | CVD           | PVD     | CVD     | PVD     |         |         |         |         |
|                        |  |                |       |      |      |      |     | JE8015P       | JE8020P | JE8025P | JE8035P | JE6015M | JE6025M | JE6035M | JE4015K |
|                        |  |                |       |      |      |      |     |               |         |         |         |         |         |         | JE4025K |
|                        |  |                |       |      |      |      |     |               |         |         |         |         |         |         | JE5015S |
|                        |  |                |       |      |      |      |     |               |         |         |         |         |         |         | JE5025S |
| Finishing<br>精加工       |  | TNMA160404     | 9.525 | 16.5 | 4.76 | 3.81 | 0.4 |               |         |         |         |         |         |         | ○ ●     |
|                        |  | TNMA160408     | 9.525 | 16.5 | 4.76 | 3.81 | 0.8 |               |         |         |         |         |         |         | ○ ●     |
|                        |  | TNMA160412     | 9.525 | 16.5 | 4.76 | 3.81 | 1.2 |               |         |         |         |         |         |         | ○ ●     |
|                        |  | TNMA220412     | 12.7  | 22   | 4.76 | 5.16 | 1.2 |               |         |         |         |         |         |         | ○ ●     |
|                        |  | TNMA220416     | 12.7  | 22   | 4.76 | 5.16 | 1.6 |               |         |         |         |         |         |         | ○ ●     |
|                        |  | TNMG160404-TFC | 9.525 | 16.5 | 4.76 | 3.81 | 0.4 |               |         |         |         | ○ ● ○   |         |         |         |
|                        |  | TNMG160408-TFC | 9.525 | 16.5 | 4.76 | 3.81 | 0.8 |               |         |         |         | ○ ● ○   |         |         |         |
|                        |  | TNMG160412-TFC | 9.525 | 16.5 | 4.76 | 3.81 | 1.2 |               |         |         |         | ○ ● ○   |         |         |         |
|                        |  | TNMG160404-TFA | 9.525 | 16.5 | 4.76 | 3.81 | 0.4 | ○ ○ ● ○       |         |         |         |         |         |         |         |
|                        |  | TNMG160408-TFA | 9.525 | 16.5 | 4.76 | 3.81 | 0.8 | ○ ○ ● ○       |         |         |         |         |         |         |         |
| Semi-finishing<br>半精加工 |  | TNMG160412-TFA | 9.525 | 16.5 | 4.76 | 3.81 | 1.2 | ○ ○ ● ○       |         |         |         |         |         |         |         |
|                        |  | TNMG160404-TFB | 9.525 | 16.5 | 4.76 | 3.81 | 0.4 | ○ ○ ● ○       |         |         |         |         |         |         |         |
|                        |  | TNMG160408-TFB | 9.525 | 16.5 | 4.76 | 3.81 | 0.8 | ○ ○ ● ○       |         |         |         |         |         |         |         |
|                        |  | TNMG160408-TMD | 9.525 | 16.5 | 4.76 | 3.81 | 0.8 |               |         |         |         |         |         |         | ○ ●     |
|                        |  | TNMG160412-TMD | 9.525 | 16.5 | 4.76 | 3.81 | 1.2 |               |         |         |         |         |         |         | ○ ●     |
|                        |  | TNMG160404-TMB | 9.525 | 16.5 | 4.76 | 3.81 | 0.4 |               |         |         |         | ○ ● ○   |         |         |         |
|                        |  | TNMG160408-TMB | 9.525 | 16.5 | 4.76 | 3.81 | 0.8 |               |         |         |         | ○ ● ○   |         |         |         |
|                        |  | TNMG160412-TMB | 9.525 | 16.5 | 4.76 | 3.81 | 1.2 |               |         |         |         | ○ ● ○   |         |         |         |
|                        |  | TNMG160404-TMC | 9.525 | 16.5 | 4.76 | 3.81 | 0.4 |               |         |         |         | ○ ● ○   |         |         |         |
|                        |  | TNMG160408-TMC | 9.525 | 16.5 | 4.76 | 3.81 | 0.8 |               |         |         |         | ○ ● ○   |         |         |         |
| Semi-finishing<br>半精加工 |  | TNMG160412-TMC | 9.525 | 16.5 | 4.76 | 3.81 | 1.2 |               |         |         |         | ○ ● ○   |         |         |         |
|                        |  | TNMG160404-TRB | 9.525 | 16.5 | 4.76 | 3.81 | 0.4 | ○ ○ ● ○       |         |         |         |         |         |         |         |
|                        |  | TNMG160408-TRB | 9.525 | 16.5 | 4.76 | 3.81 | 0.8 | ○ ○ ● ○       |         |         |         |         |         |         |         |
|                        |  | TNMG160412-TRB | 9.525 | 16.5 | 4.76 | 3.81 | 1.2 | ○ ○ ● ○       |         |         |         |         |         |         |         |

● Featured grade 主推牌号 ○ Optional grade 可选牌号

60°Regular Triangle with holes  
(Negative)

TN

60°Regular Triangle  
Negative  
with holes



| Workpiece material            | Continuous cutting |   |   |   | General cutting |   |   |   | Interrupted cutting |   |   |   |
|-------------------------------|--------------------|---|---|---|-----------------|---|---|---|---------------------|---|---|---|
|                               | P                  | M | K | N | P               | M | K | N | P                   | M | K | N |
| Steel                         | ●                  | ● | ● | ● | ●               | ● | ● | ● | ●                   | ● | ● | ● |
| Stainless steel               | ●                  | ● | ● | ● | ●               | ● | ● | ● | ●                   | ● | ● | ● |
| Cast iron                     | ●                  | ● | ● | ● | ●               | ● | ● | ● | ●                   | ● | ● | ● |
| Non-ferrous metal             | ●                  | ● | ● | ● | ●               | ● | ● | ● | ●                   | ● | ● | ● |
| Heat resistant alloy Ti alloy | ●                  | ● | ● | ● | ●               | ● | ● | ● | ●                   | ● | ● | ● |

| Inserts shape                                                                       | Type                                                                                | Dimensions(mm)                                                                      |                 |       |      |      | Coating/Grade |         |         |         |         |         |         |         |         |         |         |  |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------|-------|------|------|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--|
|                                                                                     |                                                                                     |                                                                                     |                 |       |      |      | CVD           |         |         |         | PVD     |         |         | CVD     |         | PVD     |         |  |
|                                                                                     |                                                                                     | I.C                                                                                 | L               | S     | d    | r    | JE8015P       | JE8020P | JE8025P | JE8035P | JE6015M | JE6025M | JE6035M | JE4015K | JE4025K | JE5015S | JE5025S |  |
| Roughing<br>粗加工                                                                     |    | TNMG160408-TRA                                                                      | 9.525           | 16.5  | 4.76 | 3.81 | 0.8           |         |         |         |         |         |         |         | ○       | ●       |         |  |
|                                                                                     |                                                                                     | TNMG160412-TRA                                                                      | 9.525           | 16.5  | 4.76 | 3.81 | 1.2           |         |         |         |         |         |         |         | ○       | ●       |         |  |
|                                                                                     |                                                                                     | TNMG160416-TRA                                                                      | 9.525           | 16.5  | 4.76 | 3.81 | 1.6           |         |         |         |         |         |         |         | ○       | ●       |         |  |
|                                                                                     |                                                                                     | TNMG220408-TRA                                                                      | 12.7            | 22    | 4.76 | 5.16 | 0.8           |         |         |         |         |         |         |         | ○       | ●       |         |  |
|                                                                                     |                                                                                     | TNMG220412-TRA                                                                      | 12.7            | 22    | 4.76 | 5.16 | 1.2           |         |         |         |         |         |         |         | ○       | ●       |         |  |
|                                                                                     |  | TNMG220416-TRA                                                                      | 12.7            | 22    | 4.76 | 5.16 | 1.6           |         |         |         |         |         |         |         | ○       | ●       |         |  |
|                                                                                     |                                                                                     | TNMG160404-TMA                                                                      | 9.525           | 16.5  | 4.76 | 3.81 | 0.4           | ○       | ○       | ●       | ○       |         |         |         |         |         |         |  |
|                                                                                     |                                                                                     | TNMG160408-TMA                                                                      | 9.525           | 16.5  | 4.76 | 3.81 | 0.8           | ○       | ○       | ●       | ○       |         |         |         |         |         |         |  |
|                                                                                     |                                                                                     | TNMG160412-TMA                                                                      | 9.525           | 16.5  | 4.76 | 3.81 | 1.2           | ○       | ○       | ●       | ○       |         |         |         |         |         |         |  |
|                                                                                     |                                                                                     |  | TNMG160404L-TMF | 9.525 | 16.5 | 4.76 | 3.81          | 0.4     | ○       | ○       | ●       | ○       |         |         |         |         |         |  |
| TNMG160404R-TMF                                                                     | 9.525                                                                               |                                                                                     | 16.5            | 4.76  | 3.81 | 0.4  | ○             | ○       | ●       | ○       |         |         |         |         |         |         |         |  |
| TNMG160408L-TMF                                                                     | 9.525                                                                               |                                                                                     | 16.5            | 4.76  | 3.81 | 0.8  | ○             | ○       | ●       | ○       |         |         |         |         |         |         |         |  |
| TNMG160408R-TMF                                                                     | 9.525                                                                               |                                                                                     | 16.5            | 4.76  | 3.81 | 0.8  | ○             | ○       | ●       | ○       |         |         |         |         |         |         |         |  |
|  | TNRW160302                                                                          |                                                                                     | 9.525           | 16.5  | 3.81 | 4.4  | 0.2           |         |         |         |         | ○       | ●       | ○       |         |         |         |  |
|                                                                                     | TNRA160402                                                                          | 9.525                                                                               | 16.5            | 4.76  | 3.81 | 0.2  |               |         |         |         | ○       | ●       | ○       |         |         |         |         |  |
|  | TNRG160402-TAB                                                                      | 9.525                                                                               | 16.5            | 4.76  | 3.81 | 0.2  |               |         |         |         | ○       | ●       | ○       |         |         |         |         |  |
|                                                                                     |                                                                                     |                                                                                     |                 |       |      |      |               |         |         |         |         |         |         |         |         |         |         |  |

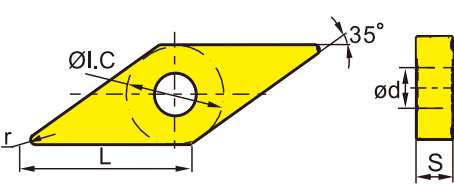
● Featured grade  
主推牌号

○ Optional grade  
可选牌号

Rhombic 35° with Hole  
(Negative)

VN

35°Rhombus  
Negative  
with holes



| Workpiece material            | Continuous cutting |   |   |   | General cutting |   |   |   | Interrupted cutting |   |   |   |
|-------------------------------|--------------------|---|---|---|-----------------|---|---|---|---------------------|---|---|---|
|                               | P                  | M | K | N | P               | M | K | N | P                   | M | K | N |
| Steel                         | ●                  | ● | ● | ● | ●               | ● | ● | ● | ●                   | ● | ● | ● |
| Stainless steel               | ●                  | ● | ● | ● | ●               | ● | ● | ● | ●                   | ● | ● | ● |
| Cast iron                     | ●                  | ● | ● | ● | ●               | ● | ● | ● | ●                   | ● | ● | ● |
| Non-ferrous metal             | ●                  | ● | ● | ● | ●               | ● | ● | ● | ●                   | ● | ● | ● |
| Heat resistant alloy Ti alloy | ●                  | ● | ● | ● | ●               | ● | ● | ● | ●                   | ● | ● | ● |

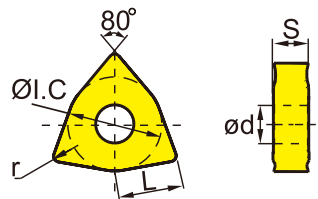
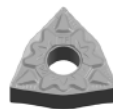
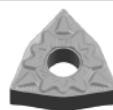
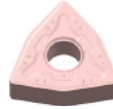
| Inserts shape          |                                                                                       | Type           | Dimensions(mm) |      |      |      |     | Coating/Grade |         |         |         |         |         |         |         |         |         |         |  |
|------------------------|---------------------------------------------------------------------------------------|----------------|----------------|------|------|------|-----|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--|
|                        |                                                                                       |                |                |      |      |      |     | CVD           |         |         |         | PVD     |         |         | CVD     |         | PVD     |         |  |
|                        |                                                                                       |                | I.C            | L    | S    | d    | r   | JE8015P       | JE8020P | JE8025P | JE8035P | JE6015M | JE6025M | JE6035M | JE4015K | JE4025K | JE5015S | JE5025S |  |
| Finishing<br>精加工       |    | VNMA160404     | 9.525          | 16.6 | 4.76 | 3.8  | 0.4 |               |         |         |         |         |         |         |         | ○       | ●       |         |  |
|                        |                                                                                       | VNMA160408     | 9.525          | 16.6 | 4.76 | 3.8  | 0.8 |               |         |         |         |         |         |         |         | ○       | ●       |         |  |
|                        |                                                                                       |                |                |      |      |      |     |               |         |         |         |         |         |         |         |         |         |         |  |
|                        |    | VNMG160404-TFB | 9.525          | 16.6 | 4.76 | 3.8  | 0.4 | ○             | ○       | ●       | ○       |         |         |         |         |         |         |         |  |
| VNMG160408-TFB         |                                                                                       | 9.525          | 16.6           | 4.76 | 5.16 | 0.8  | ○   | ○             | ●       | ○       |         |         |         |         |         |         |         |         |  |
| Semi-finishing<br>半精加工 |  | VNMG160404-TMD | 12.7           | 16.6 | 4.76 | 5.16 | 0.4 |               |         |         |         |         |         |         |         | ○       | ●       |         |  |
|                        |                                                                                       | VNMG160408-TMD | 12.7           | 16.6 | 4.76 | 5.16 | 0.8 |               |         |         |         |         |         |         |         | ○       | ●       |         |  |
|                        |                                                                                       | VNMG160412-TMD | 12.7           | 16.6 | 4.76 | 5.16 | 1.2 |               |         |         |         |         |         |         |         | ○       | ●       |         |  |
|                        |  | VNMG160404-TMB | 9.525          | 16.6 | 4.76 | 3.8  | 0.4 |               |         |         |         | ○       | ●       | ○       |         |         |         |         |  |
|                        |                                                                                       | VNMG160408-TMB | 9.525          | 16.6 | 4.76 | 3.8  | 0.8 |               |         |         |         | ○       | ●       | ○       |         |         |         |         |  |
|                        |  | VNMG160404-TMC | 9.525          | 16.6 | 4.76 | 3.8  | 0.4 |               |         |         |         | ○       | ●       | ○       |         |         |         |         |  |
|                        |                                                                                       | VNMG160408-TMC | 9.525          | 16.6 | 4.76 | 3.8  | 0.8 |               |         |         |         | ○       | ●       | ○       |         |         |         |         |  |
|                        |                                                                                       |                |                |      |      |      |     |               |         |         |         |         |         |         |         |         |         |         |  |
|                        |  | VNMG160404-TRB | 9.525          | 16.6 | 4.76 | 3.8  | 0.4 | ○             | ○       | ●       | ○       |         |         |         |         |         |         |         |  |
|                        |                                                                                       | VNMG160408-TRB | 9.525          | 16.6 | 4.76 | 3.8  | 0.8 | ○             | ○       | ●       | ○       |         |         |         |         |         |         |         |  |
| VNMG160412-TRB         |                                                                                       | 9.525          | 16.6           | 4.76 | 3.8  | 1.2  | ○   | ○             | ●       | ○       |         |         |         |         |         |         |         |         |  |
| Roughing<br>粗加工        |  | VNMG160408-TRA | 9.525          | 16.6 | 4.76 | 3.8  | 0.8 |               |         |         |         |         |         |         |         | ○       | ●       |         |  |
|                        |                                                                                       | VNMG160412-TRA | 9.525          | 16.6 | 4.76 | 3.8  | 1.2 |               |         |         |         |         |         |         |         | ○       | ●       |         |  |
|                        |                                                                                       |                |                |      |      |      |     |               |         |         |         |         |         |         |         |         |         |         |  |
|                        |  | VNMG160404-TMA | 9.525          | 16.6 | 4.76 | 3.8  | 0.4 | ○             | ○       | ●       | ○       |         |         |         |         |         |         |         |  |
| VNMG160408-TMA         |                                                                                       | 9.525          | 16.6           | 4.76 | 3.8  | 0.8  | ○   | ○             | ●       | ○       |         |         |         |         |         |         |         |         |  |
| VNMG160412-TMA         |                                                                                       | 9.525          | 16.6           | 4.76 | 3.8  | 1.2  | ○   | ○             | ●       | ○       |         |         |         |         |         |         |         |         |  |
| Semi-finishing<br>半精加工 |  | VNMW110302     | 6.35           | 11.1 | 3.18 | 2.8  | 0.2 |               |         |         |         |         |         |         |         | ○       | ●       |         |  |
|                        |                                                                                       |                |                |      |      |      |     |               |         |         |         |         |         |         |         |         |         |         |  |

● Featured grade  
主推牌号

○ Optional grade  
可选牌号

80°Trigon with holes  
(Negative)

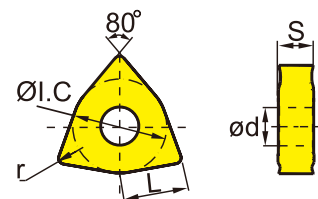
WN 80°Trigon  
Negative  
with holes

|                                                                                   |                                                                                     |                                                                                                                                                                                                                                                                                                                                       |      |         |                 |         |         |         |         |               |         |         |         |         |     |   |     |   |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|---------|-----------------|---------|---------|---------|---------|---------------|---------|---------|---------|---------|-----|---|-----|---|
|  |                                                                                     | <div><div><div>连续切削<br/>Continuous cutting</div><div>一般工况<br/>General cutting</div><div>断续切削<br/>Interrupted cutting</div></div><div><div>Workpiece material</div><div><div>P Steel</div><div>M Stainless steel</div><div>K Cast iron</div><div>N Non-ferrous metal</div><div>S Heat resistant alloy Ti alloy</div></div></div></div> |      |         |                 |         |         |         |         |               |         |         |         |         |     |   |     |   |
|                                                                                   |                                                                                     | Inserts shape                                                                                                                                                                                                                                                                                                                         |      | Type    | Dimensions (mm) |         |         |         |         | Coating/Grade |         |         |         |         |     |   |     |   |
| I.C                                                                               | L                                                                                   |                                                                                                                                                                                                                                                                                                                                       |      |         | S               | d       | r       | CVD     |         |               |         | PVD     |         |         | CVD |   | PVD |   |
|                                                                                   |                                                                                     |                                                                                                                                                                                                                                                                                                                                       |      | JE8015P | JE8020P         | JE8025P | JE8035P | JE6015M | JE6025M | JE6035M       | JE4015K | JE4025K | JE5015S | JE5025S |     |   |     |   |
| 半精加工<br>Semi-finishing                                                            |    | WNMA080408                                                                                                                                                                                                                                                                                                                            | 12.7 | 8.7     | 4.76            | 5.16    | 0.8     |         |         |               |         |         |         |         |     |   |     |   |
|                                                                                   |                                                                                     | WNMA080412                                                                                                                                                                                                                                                                                                                            | 12.7 | 8.7     | 4.76            | 5.16    | 1.2     |         |         |               |         |         |         |         |     |   |     |   |
|                                                                                   |                                                                                     |                                                                                                                                                                                                                                                                                                                                       |      |         |                 |         |         |         |         |               |         |         |         |         |     |   |     |   |
| 精加工<br>Finishing                                                                  |   | WNMG080404-TFC                                                                                                                                                                                                                                                                                                                        | 12.7 | 8.7     | 4.76            | 5.16    | 0.4     |         |         |               |         |         |         |         |     |   |     |   |
|                                                                                   |                                                                                     | WNMG080408-TFC                                                                                                                                                                                                                                                                                                                        | 12.7 | 8.7     | 4.76            | 5.16    | 0.8     |         |         |               |         |         |         |         |     |   |     |   |
|                                                                                   |                                                                                     | WNMG080412-TFC                                                                                                                                                                                                                                                                                                                        | 12.7 | 8.7     | 4.76            | 5.16    | 1.2     |         |         |               |         |         |         |         |     |   |     |   |
|                                                                                   |  | WNMG080404-TFA                                                                                                                                                                                                                                                                                                                        | 12.7 | 8.7     | 4.76            | 5.16    | 0.4     | ○       | ○       | ●             | ○       |         |         |         |     |   |     |   |
|                                                                                   |                                                                                     | WNMG080418-TFA                                                                                                                                                                                                                                                                                                                        | 12.7 | 8.7     | 4.76            | 5.16    | 1.8     | ○       | ○       | ●             | ○       |         |         |         |     |   |     |   |
|                                                                                   |                                                                                     | WNMG080412-TFA                                                                                                                                                                                                                                                                                                                        | 12.7 | 8.7     | 4.76            | 5.16    | 1.2     | ○       | ○       | ●             | ○       |         |         |         |     |   |     |   |
|                                                                                   |  | WNMG080404-TFB                                                                                                                                                                                                                                                                                                                        | 12.7 | 8.7     | 4.76            | 5.16    | 0.4     | ○       | ○       | ●             | ○       |         |         |         |     |   |     |   |
|                                                                                   |                                                                                     | WNMG080408-TFB                                                                                                                                                                                                                                                                                                                        | 12.7 | 8.7     | 4.76            | 5.16    | 0.8     | ○       | ○       | ●             | ○       |         |         |         |     |   |     |   |
| 半精加工<br>Semi-finishing                                                            |  | WNMG080404-TMD                                                                                                                                                                                                                                                                                                                        | 12.7 | 8.7     | 4.76            | 5.16    | 0.4     |         |         |               |         |         |         |         |     | ○ | ●   |   |
|                                                                                   |                                                                                     | WNMG080408-TMD                                                                                                                                                                                                                                                                                                                        | 12.7 | 8.7     | 4.76            | 5.16    | 0.8     |         |         |               |         |         |         |         |     | ○ | ●   |   |
|                                                                                   |                                                                                     | WNMG080412-TMD                                                                                                                                                                                                                                                                                                                        | 12.7 | 8.7     | 4.76            | 5.16    | 1.2     |         |         |               |         |         |         |         |     | ○ | ●   |   |
|                                                                                   |  | WNMG080404-TMB                                                                                                                                                                                                                                                                                                                        | 12.7 | 8.7     | 4.76            | 5.16    | 0.4     |         |         |               |         |         |         |         |     |   | ○   | ● |
|                                                                                   |                                                                                     | WNMG080408-TMB                                                                                                                                                                                                                                                                                                                        | 12.7 | 8.7     | 4.76            | 5.16    | 0.8     |         |         |               |         |         |         |         |     |   | ○   | ● |
|                                                                                   |                                                                                     | WNMG080412-TMB                                                                                                                                                                                                                                                                                                                        | 12.7 | 8.7     | 4.76            | 5.16    | 1.2     |         |         |               |         |         |         |         |     |   | ○   | ● |
|                                                                                   |  | WNMG080404-TMC                                                                                                                                                                                                                                                                                                                        | 12.7 | 8.7     | 4.76            | 5.16    | 0.4     |         |         |               |         |         |         |         |     |   | ○   | ● |
|                                                                                   |                                                                                     | WNMG080408-TMC                                                                                                                                                                                                                                                                                                                        | 12.7 | 8.7     | 4.76            | 5.16    | 0.8     |         |         |               |         |         |         |         |     |   | ○   | ● |
|                                                                                   |                                                                                     | WNMG080412-TMC                                                                                                                                                                                                                                                                                                                        | 12.7 | 8.7     | 4.76            | 5.16    | 1.2     |         |         |               |         |         |         |         |     |   | ○   | ● |
|                                                                                   |  | WNMG080404-TRB                                                                                                                                                                                                                                                                                                                        | 12.7 | 8.7     | 4.76            | 5.16    | 0.4     | ○       | ○       | ●             | ○       |         |         |         |     |   |     |   |
| WNMG080408-TRB                                                                    |                                                                                     | 12.7                                                                                                                                                                                                                                                                                                                                  | 8.7  | 4.76    | 5.16            | 0.8     | ○       | ○       | ●       | ○             |         |         |         |         |     |   |     |   |
| WNMG080412-TRB                                                                    |                                                                                     | 12.7                                                                                                                                                                                                                                                                                                                                  | 8.7  | 4.76    | 5.16            | 1.2     | ○       | ○       | ●       | ○             |         |         |         |         |     |   |     |   |
| 粗加工<br>Roughing                                                                   |  | WNMG080404-TRA                                                                                                                                                                                                                                                                                                                        | 12.7 | 8.7     | 4.76            | 5.16    | 0.4     |         |         |               |         |         |         |         |     |   | ○   | ● |
|                                                                                   |                                                                                     | WNMG080408-TRA                                                                                                                                                                                                                                                                                                                        | 12.7 | 8.7     | 4.76            | 5.16    | 0.8     |         |         |               |         |         |         |         |     |   | ○   | ● |
|                                                                                   |                                                                                     | WNMG080412-TRA                                                                                                                                                                                                                                                                                                                        | 12.7 | 8.7     | 4.76            | 5.16    | 1.2     |         |         |               |         |         |         |         |     |   | ○   | ● |

● Featured grade 主推牌号 ○ Optional grade 可选牌号

80°Trigon with holes  
(Negative)

WN 80°Trigon  
Negative  
with holes

|  |                                                                                      | Workpiece material |      | <div><div>连续切削 Continuous cutting</div><div>一般工况 General cutting</div><div>断续切削 Interrupted cutting</div></div> <table><tr><td>P Steel</td><td>●</td><td>→</td><td>→</td><td>→</td><td>→</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>M Stainless steel</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>●</td><td>→</td><td>→</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>K Cast iron</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>●</td><td>→</td></tr><tr><td>N Non-ferrous metal</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>S Heat resistant alloy Ti alloy</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>●</td><td>→</td></tr></table> |      |      |               |         |         |         |         |         |         |         |         |         |         |   |  | P Steel | ● | → | → | → | → |  |  |  |  |  |  |  |  |  |  |  |  | M Stainless steel |  |  |  |  |  |  |  |  |  | ● | → | → |  |  |  |  |  | K Cast iron |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ● | → | N Non-ferrous metal |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | S Heat resistant alloy Ti alloy |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ● | → |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---|--|---------|---|---|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|-------------------|--|--|--|--|--|--|--|--|--|---|---|---|--|--|--|--|--|-------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|---------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|
|                                                                                     |                                                                                      |                    |      | P Steel                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | ●    | →    | →             | →       | →       |         |         |         |         |         |         |         |         |   |  |         |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |
| M Stainless steel                                                                   |                                                                                      |                    |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |      |      |               |         |         | ●       | →       | →       |         |         |         |         |         |   |  |         |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |
| K Cast iron                                                                         |                                                                                      |                    |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |      |      |               |         |         |         |         |         |         |         |         | ●       | →       |   |  |         |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |
| N Non-ferrous metal                                                                 |                                                                                      |                    |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |      |      |               |         |         |         |         |         |         |         |         |         |         |   |  |         |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |
| S Heat resistant alloy Ti alloy                                                     |                                                                                      |                    |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |      |      |               |         |         |         |         |         |         |         |         |         | ●       | → |  |         |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |
| Inserts shape                                                                       | Type                                                                                 | Dimensions(mm)     |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |      |      | Coating/Grade |         |         |         |         |         |         |         |         |         |         |   |  |         |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |
|                                                                                     |                                                                                      |                    |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |      |      | CVD           |         |         |         | PVD     |         |         | CVD     |         | PVD     |         |   |  |         |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |
|                                                                                     |                                                                                      | I.C                | L    | S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | d    | r    | JE8015P       | JE8020P | JE8025P | JE8035P | JE6015M | JE6025M | JE6035M | JE4015K | JE4025K | JE5015S | JE5025S |   |  |         |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |
| 粗加工<br>Roughing                                                                     |   | WNMG080404-TMA     | 12.7 | 8.7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 4.76 | 5.16 | 0.4           | ○       | ○       | ●       | ○       |         |         |         |         |         |         |   |  |         |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |
|                                                                                     |                                                                                      | WNMG080408-TMA     | 12.7 | 8.7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 4.76 | 5.16 | 0.8           | ○       | ○       | ●       | ○       |         |         |         |         |         |         |   |  |         |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |
|                                                                                     |                                                                                      | WNMG080412-TMA     | 12.7 | 8.7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 4.76 | 5.16 | 1.2           | ○       | ○       | ●       | ○       |         |         |         |         |         |         |   |  |         |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |
|                                                                                     |  | WNMG080404L-TMF    | 12.7 | 8.7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 4.76 | 5.16 | 0.4           | ○       | ○       | ●       | ○       |         |         |         |         |         |         |   |  |         |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |
|                                                                                     |                                                                                      | WNMG080404R-TMF    | 12.7 | 8.7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 4.76 | 5.16 | 0.4           | ○       | ○       | ●       | ○       |         |         |         |         |         |         |   |  |         |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |
|                                                                                     |                                                                                      | WNMG080408L-TMF    | 12.7 | 8.7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 4.76 | 5.16 | 0.8           | ○       | ○       | ●       | ○       |         |         |         |         |         |         |   |  |         |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |
|                                                                                     |                                                                                      | WNMG080408R-TMF    | 12.7 | 8.7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 4.76 | 5.16 | 0.8           | ○       | ○       | ●       | ○       |         |         |         |         |         |         |   |  |         |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |
|                                                                                     |                                                                                      |                    |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |      |      |               |         |         |         |         |         |         |         |         |         |         |   |  |         |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |

● Featured grade 主推牌号 ○ Optional grade 可选牌号

Rhombic 80° with Hole

(Positive)



|                    |                               |                |       |      |      |     | 连续切削<br>Continuous cutting |         | 一般工况<br>General cutting |         | 断续切削<br>Interrupted cutting |         |         |         |         |         |         |   |
|--------------------|-------------------------------|----------------|-------|------|------|-----|----------------------------|---------|-------------------------|---------|-----------------------------|---------|---------|---------|---------|---------|---------|---|
| Workpiece material | Steel                         |                |       |      |      |     |                            |         |                         |         |                             |         |         |         |         |         |         |   |
|                    | Stainless steel               |                |       |      |      |     |                            |         |                         |         |                             |         |         |         |         |         |         |   |
|                    | Cast iron                     |                |       |      |      |     |                            |         |                         |         |                             |         |         |         |         |         |         |   |
|                    | Non-ferrous metal             |                |       |      |      |     |                            |         |                         |         |                             |         |         |         |         |         |         |   |
|                    | Heat resistant alloy Ti alloy |                |       |      |      |     |                            |         |                         |         |                             |         |         |         |         |         |         |   |
| Inserts shape      | Type                          | Dimensions(mm) |       |      |      |     | Coating/Grade              |         |                         |         |                             |         |         |         |         |         |         |   |
|                    |                               | I.C            | L     | S    | d    | r   | CVD                        |         |                         |         | PVD                         |         |         | CVD     |         | PVD     |         |   |
|                    |                               |                |       |      |      |     | JE8015P                    | JE8020P | JE8025P                 | JE8035P | JE6015M                     | JE6025M | JE6035M | JE4015K | JE4025K | JE5015S | JE5025S |   |
| 精加工                |                               | CCMT060202     | 6.35  | 6.45 | 2.38 | 2.8 | 0.2                        | ○       | ○                       | ●       | ○                           | ○       | ●       | ○       | ○       | ●       | ○       | ● |
|                    |                               | CCMT060204     | 6.35  | 6.45 | 2.38 | 2.8 | 0.4                        | ○       | ○                       | ●       | ○                           | ○       | ●       | ○       | ○       | ●       | ○       | ● |
|                    |                               | CCMT060208     | 6.35  | 6.45 | 2.38 | 2.8 | 0.8                        | ○       | ○                       | ●       | ○                           | ○       | ●       | ○       | ○       | ●       | ○       | ● |
|                    |                               | CCMT09T304     | 9.525 | 9.67 | 3.97 | 4.4 | 0.4                        | ○       | ○                       | ●       | ○                           | ○       | ●       | ○       | ○       | ●       | ○       | ● |
|                    |                               | CCMT09T308     | 9.525 | 9.67 | 3.97 | 4.4 | 0.8                        | ○       | ○                       | ●       | ○                           | ○       | ●       | ○       | ○       | ●       | ○       | ● |
|                    |                               | CCMT120404     | 12.7  | 12.9 | 4.76 | 5.5 | 0.4                        | ○       | ○                       | ●       | ○                           | ○       | ●       | ○       | ○       | ●       | ○       | ● |
|                    |                               | CCMT120408     | 12.7  | 12.9 | 4.76 | 5.5 | 0.8                        | ○       | ○                       | ●       | ○                           | ○       | ●       | ○       | ○       | ●       | ○       | ● |
|                    |                               | CCRT060202K    | 6.35  | 6.45 | 2.38 | 2.8 | 0.2                        | ○       | ○                       | ●       | ○                           | ○       | ●       | ○       | ○       | ●       | ○       | ● |
|                    |                               | CCRT09T302K    | 9.525 | 9.67 | 3.97 | 4.4 | 0.2                        | ○       | ○                       | ●       | ○                           | ○       | ●       | ○       | ○       | ●       | ○       | ● |
|                    |                               |                |       |      |      |     |                            |         |                         |         |                             |         |         |         |         |         |         |   |
|                    |                               | CCRT060202-TFD | 6.35  | 6.45 | 2.38 | 2.8 | 0.2                        | ○       | ○                       | ●       | ○                           | ○       | ●       | ○       | ○       | ●       | ○       | ● |
|                    |                               | CCRT09T302-TFD | 9.525 | 9.67 | 3.97 | 4.4 | 0.2                        | ○       | ○                       | ●       | ○                           | ○       | ●       | ○       | ○       | ●       | ○       | ● |
|                    |                               |                |       |      |      |     |                            |         |                         |         |                             |         |         |         |         |         |         |   |
|                    | CCRT09T302-TAA                | 9.525          | 9.67  | 3.97 | 4.4  | 0.2 | ○                          | ○       | ●                       | ○       | ○                           | ●       | ○       | ○       | ●       | ○       | ●       |   |
|                    |                               |                |       |      |      |     | ○                          | ○       | ●                       | ○       | ○                           | ●       | ○       | ○       | ●       | ○       | ●       |   |
| 半精加工               |                               | CCRW030101     | 3.5   | 3.55 | 1.4  | 1.9 | 0.1                        | ○       | ○                       | ●       | ○                           | ○       | ●       | ○       | ○       | ●       | ○       | ● |
|                    |                               | CCRW040101     | 4.3   | 4.37 | 1.8  | 2.3 | 0.1                        | ○       | ○                       | ●       | ○                           | ○       | ●       | ○       | ○       | ●       | ○       | ● |
|                    |                               | CCRW060202     | 6.35  | 6.45 | 2.38 | 2.8 | 0.2                        | ○       | ○                       | ●       | ○                           | ○       | ●       | ○       | ○       | ●       | ○       | ● |
|                    |                               | CCRW09T302     | 9.525 | 9.67 | 3.97 | 4.4 | 0.4                        | ○       | ○                       | ●       | ○                           | ○       | ●       | ○       | ○       | ●       | ○       | ● |
|                    |                               |                |       |      |      |     |                            |         |                         |         |                             |         |         |         |         |         |         |   |
|                    |                               |                |       |      |      |     | Featured grade<br>主推牌号     |         |                         |         |                             |         |         |         |         |         |         |   |
|                    |                               |                |       |      |      |     | Optional grade<br>可选牌号     |         |                         |         |                             |         |         |         |         |         |         |   |

Rhombic 55° with Hole

(Positive)



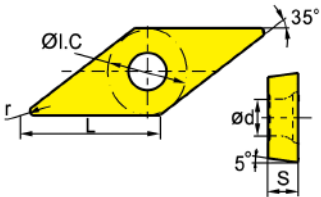
|               |                |                 | <div>Workpiece material</div> <div><div>P</div>Steel</div> <div><div>M</div>Stainless steel</div> <div><div>K</div>Cast iron</div> <div><div>N</div>Non-ferrous metal</div> <div><div>S</div>Heat resistant alloy Ti alloy</div> |      | <div><div>连续切削Continuous cutting</div><div>一般工况General cutting</div><div>断续切削Interrupted cutting</div></div> |     |               |         |         |         |         |         |         |         |         |         |         |  |  |  |
|---------------|----------------|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--------------------------------------------------------------------------------------------------------------|-----|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--|--|--|
|               |                |                 |                                                                                                                                                                                                                                  |      |                                                                                                              |     |               |         |         |         |         |         |         |         |         |         |         |  |  |  |
| Inserts shape | Type           | Dimensions (mm) |                                                                                                                                                                                                                                  |      |                                                                                                              |     | Coating/Grade |         |         |         |         |         |         |         |         |         |         |  |  |  |
|               |                | I.C             | L                                                                                                                                                                                                                                | S    | d                                                                                                            | r   | CVD           |         |         |         | PVD     |         |         | CVD     |         | PVD     |         |  |  |  |
|               |                |                 |                                                                                                                                                                                                                                  |      |                                                                                                              |     | JE8015P       | JE8020P | JE8025P | JE8035P | JE6015M | JE6025M | JE6035M | JE4015K | JE4025K | JE5015S | JE5025S |  |  |  |
|               | DCMT070204     | 6.35            | 6.45                                                                                                                                                                                                                             | 2.38 | 2.8                                                                                                          | 0.2 |               |         |         |         |         |         |         |         |         |         |         |  |  |  |
|               | DCMT070208     | 6.35            | 6.45                                                                                                                                                                                                                             | 2.38 | 2.8                                                                                                          | 0.4 |               |         |         |         |         |         |         |         |         |         |         |  |  |  |
|               | DCMT11T304     | 6.35            | 6.45                                                                                                                                                                                                                             | 2.38 | 2.8                                                                                                          | 0.8 |               |         |         |         |         |         |         |         |         |         |         |  |  |  |
|               | DCMT11T308     | 9.525           | 9.67                                                                                                                                                                                                                             | 3.97 | 4.4                                                                                                          | 0.4 |               |         |         |         |         |         |         |         |         |         |         |  |  |  |
|               | DCMT070202-TME | 9.525           | 9.67                                                                                                                                                                                                                             | 3.97 | 4.4                                                                                                          | 0.8 |               |         |         |         |         |         |         |         |         |         |         |  |  |  |
|               | DCMT070204-TME | 12.7            | 12.9                                                                                                                                                                                                                             | 4.76 | 5.5                                                                                                          | 0.4 |               |         |         |         |         |         |         |         |         |         |         |  |  |  |
|               | DCMT070208-TME | 12.7            | 12.9                                                                                                                                                                                                                             | 4.76 | 5.5                                                                                                          | 0.8 |               |         |         |         |         |         |         |         |         |         |         |  |  |  |
|               | DCMT11T304-TME | 6.35            | 6.45                                                                                                                                                                                                                             | 2.38 | 2.8                                                                                                          | 0.2 |               |         |         |         |         |         |         |         |         |         |         |  |  |  |
|               | DCMT11T308-TME | 9.525           | 9.67                                                                                                                                                                                                                             | 3.97 | 4.4                                                                                                          | 0.2 |               |         |         |         |         |         |         |         |         |         |         |  |  |  |
|               | DCRT070202K    | 6.35            | 7.75                                                                                                                                                                                                                             | 2.39 | 2.8                                                                                                          | 0.2 |               |         |         |         |         |         |         |         |         |         |         |  |  |  |
|               | DCRT11T302K    | 9.525           | 11.6                                                                                                                                                                                                                             | 2.39 | 4.4                                                                                                          | 0.2 |               |         |         |         |         |         |         |         |         |         |         |  |  |  |
|               | DCRT070202-TFD | 6.35            | 7.75                                                                                                                                                                                                                             | 2.38 | 2.8                                                                                                          | 0.2 |               |         |         |         |         |         |         |         |         |         |         |  |  |  |
|               | DCRT11T302-TFD | 6.35            | 11.6                                                                                                                                                                                                                             | 2.38 | 2.8                                                                                                          | 0.2 |               |         |         |         |         |         |         |         |         |         |         |  |  |  |
|               | DCRT11T304-TFD | 6.35            | 11.6                                                                                                                                                                                                                             | 2.38 | 2.8                                                                                                          | 0.4 |               |         |         |         |         |         |         |         |         |         |         |  |  |  |
|               | DCRT070202-TAA | 6.35            | 7.75                                                                                                                                                                                                                             | 2.38 | 2.8                                                                                                          | 0.2 |               |         |         |         |         |         |         |         |         |         |         |  |  |  |
|               | DCRT11T302-TAA | 6.35            | 11.6                                                                                                                                                                                                                             | 2.38 | 2.8                                                                                                          | 0.2 |               |         |         |         |         |         |         |         |         |         |         |  |  |  |
|               | DCRW070202     | 6.35            | 7.75                                                                                                                                                                                                                             | 2.38 | 2.8                                                                                                          | 0.2 |               |         |         |         |         |         |         |         |         |         |         |  |  |  |
|               | DCRW11T301     | 9.525           | 11.6                                                                                                                                                                                                                             | 3.97 | 4.4                                                                                                          | 0.1 |               |         |         |         |         |         |         |         |         |         |         |  |  |  |
|               | DCRW11T302     | 9.525           | 11.6                                                                                                                                                                                                                             | 3.97 | 4.4                                                                                                          | 0.2 |               |         |         |         |         |         |         |         |         |         |         |  |  |  |

Featured grade  
主推牌号

Optional grade  
可选牌号



Rhombic 35° with Hole  
(Positive)



| Workpiece material            | 连续切削<br>Continuous cutting |   |   |   | 一般工况<br>General cutting |   |   | 断续切削<br>Interrupted cutting |   |
|-------------------------------|----------------------------|---|---|---|-------------------------|---|---|-----------------------------|---|
|                               | P                          | M | K | N | S                       |   |   |                             |   |
| Steel                         | ●                          | ● | ● | ● | ●                       |   |   |                             |   |
| Stainless steel               |                            |   |   |   | ●                       | ● | ● |                             |   |
| Cast iron                     |                            |   |   |   |                         |   |   | ●                           | ● |
| Non-ferrous metal             |                            |   |   |   |                         |   |   |                             |   |
| Heat resistant alloy Ti alloy |                            |   |   |   |                         |   |   | ●                           | ● |

| Inserts shape                                                                       |                                                                                     | Type           | Dimensions(mm) |      |      |     |     | Coating/Grade |         |         |         |         |         |         |         |         |         |         |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------|----------------|------|------|-----|-----|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|                                                                                     |                                                                                     |                |                |      |      |     |     | CVD           |         |         |         | PVD     |         | CVD     |         | PVD     |         |         |
|                                                                                     |                                                                                     |                | I.C            | L    | S    | d   | r   | JE8015P       | JE8020P | JE8025P | JE8035P | JE6015M | JE6025M | JE6035M | JE4015K | JE4025K | JE5015S | JE5025S |
| 精加工<br>Finishing                                                                    |    | VBMT110304     | 6.35           | 11.1 | 2.38 | 2.8 | 0.4 | ○             | ○       | ●       | ○       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                     |                                                                                     | VBMT110308     | 6.35           | 11.1 | 2.38 | 2.8 | 0.8 | ○             | ○       | ●       | ○       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                     |                                                                                     | VBMT160404     | 9.525          | 16.6 | 3.97 | 4.4 | 0.4 | ○             | ○       | ●       | ○       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                     |                                                                                     | VBMT160408     | 9.525          | 16.6 | 3.97 | 4.4 | 0.8 | ○             | ○       | ●       | ○       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                     |  | VCRT110302K    | 6.35           | 11.1 | 3.18 | 2.8 | 0.2 | ○             | ○       | ●       | ○       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                     |                                                                                     | VCRT160402K    | 9.525          | 16.6 | 4.76 | 4.4 | 0.2 | ○             | ○       | ●       | ○       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                     |                                                                                     |                |                |      |      |     |     |               |         |         |         |         |         |         |         |         |         |         |
|                                                                                     |  | VCRT110302-TFD | 6.35           | 11.1 | 3.18 | 2.8 | 0.2 | ○             | ○       | ●       | ○       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                     |                                                                                     |                |                |      |      |     |     |               |         |         |         |         |         |         |         |         |         |         |
|                                                                                     |                                                                                     |                |                |      |      |     |     |               |         |         |         |         |         |         |         |         |         |         |
|                                                                                     |                                                                                     |                |                |      |      |     |     |               |         |         |         |         |         |         |         |         |         |         |
|  | VCRT110301-TAA                                                                      | 6.35           | 11.1           | 3.18 | 2.8  | 0.1 | ○   | ○             | ●       | ○       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |         |
|                                                                                     | VCRT110302-TAA                                                                      | 6.35           | 11.1           | 3.18 | 2.8  | 0.2 | ○   | ○             | ●       | ○       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |         |
|                                                                                     |                                                                                     |                |                |      |      |     |     |               |         |         |         |         |         |         |         |         |         |         |
|                                                                                     |                                                                                     |                |                |      |      |     |     |               |         |         |         |         |         |         |         |         |         |         |
| 半精加工<br>Semi-finishing                                                              |  | VBRW110301     | 6.35           | 11.1 | 3.18 | 2.8 | 0.1 | ○             | ○       | ●       | ○       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                     |                                                                                     | VBRW110302     | 6.35           | 11.1 | 3.18 | 2.8 | 0.2 | ○             | ○       | ●       | ○       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                     |                                                                                     | VBRW160402     | 9.525          | 16.6 | 4.76 | 4.4 | 0.2 | ○             | ○       | ●       | ○       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                     |                                                                                     | VPRW110302     | 6.35           | 11.1 | 3.18 | 2.8 | 0.2 | ○             | ○       | ●       | ○       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                     |                                                                                     |                |                |      |      |     |     |               |         |         |         |         |         |         |         |         |         |         |
|                                                                                     |                                                                                     |                |                |      |      |     |     |               |         |         |         |         |         |         |         |         |         |         |

● Featured grade  
主推牌号

○ Optional grade  
可选牌号

Common Problems and Solutions In Turning

这个因素需要重点检查或调整  
This factor requires careful examination or adjustment.

建议增加这个参数  
It is suggested to add this parameter.

建议降低这个参数  
It is suggested to reduce this parameter.

| 选择条件<br>Selection condition              |                                                                    |                                                                                                 | 刀具材料选择<br>Selection of Tool material     |                                        | 切削条件<br>Cutting Condition |               |
|------------------------------------------|--------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|------------------------------------------|----------------------------------------|---------------------------|---------------|
|                                          |                                                                    |                                                                                                 | 硬度更高的材料<br>Material with higher hardness | 韧性好的材料<br>Material with good toughness | 切削速度<br>Cutting speed     | 进给<br>Feeding |
| 常见问题<br>Main problem                     | 刀尖磨损过大<br>Too much wear for the knife point                        | 后刀面磨损增大<br>Flank wear increases                                                                 | ✓                                        |                                        |                           |               |
|                                          | 加工中精度超标<br>Machining accuracy beyond standard                      | 切削条件不适合<br>Cutting condition is not suitable                                                    |                                          |                                        | ↓                         | ↑             |
| 表面精度恶化<br>Surface accuracy deterioration | 表面质量差<br>Poor surface quality                                      | 刀具磨损增大、刀刃不够锋利<br>Tool wear increases and the blade is not sharp enough                          | ✓                                        |                                        | ↓                         |               |
|                                          |                                                                    | 切削刃缺损<br>Cutting edge defect                                                                    |                                          | ✓                                      |                           | ↓             |
|                                          |                                                                    | 切削刃几何形状不合适<br>Cutting edge geometry is not appropriate                                          |                                          |                                        |                           |               |
|                                          |                                                                    | 切削条件不合适<br>Cutting condition is not suitable                                                    |                                          |                                        | ↑                         | ↓             |
|                                          |                                                                    | 振动、发颤<br>Vibration and tremble                                                                  |                                          | ✓                                      | ↑↓                        | ↓             |
|                                          |                                                                    | 积屑瘤<br>built-up edge                                                                            |                                          |                                        | ↑                         | ↑             |
| 发热<br>Heat                               | 切削热的影响<br>Cutting heat effect                                      | 切削条件不合适<br>Cutting condition is not suitable                                                    |                                          |                                        | ↓                         |               |
|                                          |                                                                    | 切削刃几何形状不合适<br>Cutting edge geometry is not appropriate                                          | ✓                                        |                                        |                           |               |
| 尺寸精度差<br>Poor dimensional accuracy       | 加工中尺寸波动<br>Dimension fluctuation in machining                      | 刀片精度不合适<br>The blade accuracy is not suitable                                                   |                                          |                                        |                           |               |
|                                          |                                                                    | 工件、刀具位置偏移<br>Work tool offset                                                                   |                                          |                                        | ↑                         |               |
| 刀具切削刃损伤<br>Cutting edge damage           | 后刀面、前刀面磨损增大<br>Wear increases on the back and front knife surfaces | 后刀面磨损<br>The front edge wears                                                                   | ✓                                        |                                        | ↓                         |               |
|                                          |                                                                    | 前刀面磨损<br>The back edge wears                                                                    | ✓                                        |                                        | ↓                         | ↓             |
|                                          | 微崩 Minor Tipping                                                   | 振动、冲击<br>Vibration and impact                                                                   |                                          | ✓                                      |                           | ↓             |
|                                          | 积屑瘤 Built-up edge                                                  | 工件硬度与刀具切削条件不适合<br>The hardness of the tool material is not suitable for cutting condition       |                                          |                                        |                           | ↑             |
|                                          | 热龟裂 Thermal cracking                                               | 工件材料的硬度与刀具材料和切削条件不适合<br>The hardness of the tool material is not suitable for cutting condition |                                          |                                        | ↓                         | ↓             |
|                                          | 切削刃刀尖部分变形<br>Cutting edge deformation                              | 在断续切削大进给时发生<br>Occurs when intermittent cutting in large feeding                                | ✓                                        |                                        |                           | ↓             |
| 切屑控制<br>Cutting control                  | 长切屑缠绕<br>long cutting chips, winding                               | 材料、切削条件不合适<br>Tool material is not suitable for cutting condition                               |                                          | ✓                                      |                           | ↓             |
|                                          |                                                                    | 切削条件不合适<br>Cutting condition is not suitable                                                    |                                          |                                        | ↓                         | ↑             |
|                                          | 切屑太短，导致飞溅<br>Short cutting chips, causing splash                   | 刀刃几何形状不合适<br>Cutting edge geometry is not appropriate                                           |                                          |                                        |                           | ↓             |
|                                          |                                                                    | 切削条件不合适<br>Cutting condition is not suitable                                                    |                                          |                                        |                           |               |
| 毛刺、塌边<br>Burr, Collapse                  | 钢、铝，产生毛刺<br>Steel and aluminum, burrs                              | 切削条件不合适<br>Cutting condition is not suitable                                                    |                                          |                                        | ↑                         | ↓             |
|                                          |                                                                    | 刀具磨损、几何形状不合适<br>Cutting tool wears and Cutting edge geometry is not appropriate                 | ✓                                        |                                        |                           |               |
|                                          | 铸铁，塌边<br>Cast iron, collapse                                       | 切削条件不合适<br>Cutting condition is not suitable                                                    |                                          |                                        | ↓                         | ↑             |
|                                          |                                                                    | 刀具磨损、几何形状不合适<br>Cutting tool wears and Cutting edge geometry is not appropriate                 | ✓                                        |                                        |                           |               |
|                                          | 软钢，毛边<br>Mild steel, burrs                                         | 切削条件不合适<br>Cutting condition is not suitable                                                    |                                          |                                        |                           | ↓             |
|                                          |                                                                    | 刀具磨损、几何形状不合适<br>Cutting tool wears and Cutting edge geometry is not appropriate                 | ✓                                        |                                        |                           |               |

| 切削条件<br>Cutting Condition |                      | 刀具形状<br>Shape of tool                         |                   |                         |                           |                                |                                  |                                  | 机床装夹<br>Machine tool clamping       |                                 |                                    |
|---------------------------|----------------------|-----------------------------------------------|-------------------|-------------------------|---------------------------|--------------------------------|----------------------------------|----------------------------------|-------------------------------------|---------------------------------|------------------------------------|
| 切深<br>cutting depth       | 切削液<br>Cutting fluid | 改变刀片槽型<br>Change chip breakers of the inserts | 前角<br>front angle | 刀尖圆弧半径<br>corner radius | 主偏角<br>cutting edge angle | 切削刃强度<br>cutting edge strength | 提高刀片精度<br>Improve blade accuracy | 提高刀具刚性<br>improve blade rigidity | 工件刀柄装夹<br>Workpiece holder clamping | 刀柄悬伸<br>Tool holder overhanging | 动力、机床间隙<br>Power machine clearance |
|                           |                      |                                               |                   | ↑                       |                           |                                |                                  |                                  |                                     |                                 |                                    |
|                           |                      |                                               |                   |                         |                           |                                | ✓                                |                                  |                                     |                                 |                                    |
|                           | ✓                    |                                               | ↑                 | ↑                       |                           | ↓                              |                                  |                                  | ✓                                   | ✓                               | ✓                                  |
| ↓                         |                      | ✓                                             |                   | ↑                       |                           | ↑                              |                                  |                                  |                                     |                                 |                                    |
|                           |                      | ✓                                             |                   | ↑                       |                           | ↓                              | ✓                                |                                  |                                     |                                 |                                    |
| ↓                         | ✓                    |                                               |                   |                         |                           |                                |                                  |                                  |                                     |                                 |                                    |
| ↓                         | ✓                    | ✓                                             | ↑                 | ↓                       | ↑                         | ↓                              |                                  |                                  | ✓                                   | ✓                               | ✓                                  |
|                           | ✓                    | ✓                                             | ↑                 |                         |                           | ↓                              | ✓                                |                                  |                                     |                                 |                                    |
|                           |                      |                                               | ↑                 |                         |                           |                                |                                  |                                  |                                     |                                 |                                    |
|                           |                      | ✓                                             | ↑                 |                         |                           | ↓                              |                                  |                                  |                                     |                                 |                                    |
|                           |                      |                                               |                   |                         |                           |                                | ✓                                |                                  |                                     |                                 |                                    |
|                           |                      | ✓                                             | ↑                 | ↓                       | ↑                         |                                |                                  | ✓                                | ✓                                   | ✓                               | ✓                                  |
|                           |                      | ✓                                             | ↑                 |                         |                           |                                |                                  |                                  |                                     |                                 |                                    |
|                           |                      | ✓                                             | ↑                 | ↓                       | ↑                         |                                |                                  | ✓                                |                                     |                                 |                                    |
| ↓                         | ✓                    |                                               |                   |                         |                           |                                |                                  |                                  |                                     |                                 |                                    |
|                           |                      | ✓                                             |                   | ↓                       | ↑                         |                                |                                  |                                  |                                     |                                 |                                    |
| ↓                         | ✓                    |                                               |                   |                         |                           |                                |                                  |                                  |                                     |                                 |                                    |
|                           |                      | ✓                                             |                   | ↑                       | ↓                         |                                |                                  |                                  |                                     |                                 |                                    |
|                           | ✓                    |                                               |                   |                         |                           |                                |                                  |                                  |                                     |                                 |                                    |
|                           |                      | ✓                                             | ↑                 | ↓                       | ↑                         | ↓                              |                                  |                                  |                                     |                                 |                                    |
| ↓                         |                      |                                               |                   |                         |                           |                                |                                  |                                  |                                     |                                 |                                    |
|                           |                      | ✓                                             | ↑                 | ↑                       |                           | ↑                              |                                  | ✓                                | ✓                                   | ✓                               | ✓                                  |

## Thread Inserts Identification System

**16** **E** **R** **1.50** **ISO** **M** **HMC**  
**(1)** **(2)** **(3)** **(4)** **(5)** **(6)** **(7)**

| 1 Insert Size |        |
|---------------|--------|
| Code          | IC(mm) |
| 08            | 5      |
| 11            | 6.35   |
| 16            | 9.525  |
| 22            | 12.7   |
| 27            | 15.875 |

| 2 Thread Type                                           |  |
|---------------------------------------------------------|--|
| E=External Thread                                       |  |
| I=Internal Thread                                       |  |
| <input type="checkbox"/> =internal and External Threads |  |

| 3 Insert Direction                          |  |
|---------------------------------------------|--|
| R=Right-handed                              |  |
| L=Left-hand                                 |  |
| <input type="checkbox"/> =Left/Right-handed |  |

| 4 Pitch                            |          |       |
|------------------------------------|----------|-------|
| Fully Thread Profile Pitch Range   |          |       |
| mm                                 | TPI      |       |
| 0.35-5.0                           | 72-5     |       |
| Partial Thread Profile Pitch Range |          |       |
| Code                               | mm       | TPI   |
| A                                  | 0.5-1.5  | 48-16 |
| AG                                 | 0.5-3.0  | 48-8  |
| G                                  | 1.75-3.0 | 14-8  |
| N                                  | 3.5-5.0  | 7-5   |

| 5 Thread Standard                                |                                                |
|--------------------------------------------------|------------------------------------------------|
| 60=60° General Thread                            | ACME=American Trapezoidal Thread               |
| 55=55° General Thread                            | STACME=American Short Tooth Trapezoidal Thread |
| ISO=ISO Metric Screw Thread                      | ABUT=American Serrated Thread                  |
| UN=American Unified Thread                       | BBUT=British Serrated Thread                   |
| W=British Whitworth Thread                       | SAGE=Metric Serrated Thread                    |
| NPT=American National Standard Taper Pipe Thread | API=API Standard Thread                        |
| NPTF=National (American) Pipe Thread             | BUT=API Buttress Thread                        |
| BSPT=British National Standard Taper Pipe Thread | APIRD=API Round Thread for Casing and Tubing   |
| RD=Round Thread DIN405                           | MJ=Metric Aerospace Thread                     |
| RD20400=Round Thread 20400                       | UNJ=American Aerospace Thread                  |
| TR=Metric Trapezoidal Thread                     | PG=German Standard PG Thread                   |

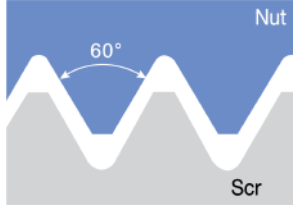
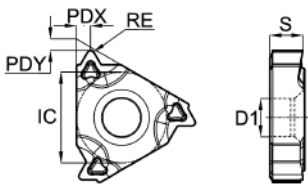
| 6 Additional Information                             |  |
|------------------------------------------------------|--|
| Used to Define the Number of Teeth or Geometry, etc. |  |

## THREAD TYPES & APPLICATIONS

| Thread Type          | ISO Metric Thread ISO                       | 60° V-Thread 60° | 55° V-Thread 55° | Unified Thread UN | Whitworth Thread W            | British Standard Pipe Taper Thread BSPT | National Pipe Taper Thread NPT |
|----------------------|---------------------------------------------|------------------|------------------|-------------------|-------------------------------|-----------------------------------------|--------------------------------|
| Thread Profile       |                                             |                  |                  |                   |                               |                                         |                                |
| Pitch Unit           | mm                                          | TPI              | TPI              | TPI               | TPI                           | TPI                                     | TPI                            |
| Typical Applications | General Machinery & Industrial Applications |                  |                  |                   | Gas, Water & Pipe Connections |                                         |                                |

| Thread Type          | Dryseal Pipe Thread NPTF      | Metric Trapezoidal Threac TR           | ACME Thread ACME | Stub ACME Thread STACME | American Buttress Thread ABUT | DIN Buttress Thread SAGE | Round Rd Rd                                     |
|----------------------|-------------------------------|----------------------------------------|------------------|-------------------------|-------------------------------|--------------------------|-------------------------------------------------|
| Thread Profile       |                               |                                        |                  |                         |                               |                          |                                                 |
| Pitch Unit           | TPI                           | mm                                     | TPI              | TPI                     | TPI                           | mm                       | TPI                                             |
| Typical Applications | Gas, Water & Pipe Connections | Power Transmission & Mechanical Motion |                  |                         |                               |                          | Food Processing Equipment & Fire Hose Couplings |

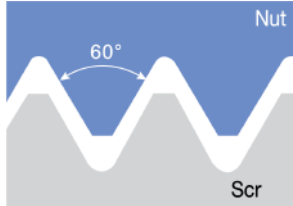
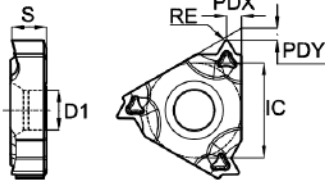
**60° General  
External Threading**



| Inserts<br>shape                                                                  | Type         | Pitch Range<br>(mm) | Dimensions(mm) |     |      |       |      |    | Coated Cemented Carbide |         |         |         |         |         |         |         |         |
|-----------------------------------------------------------------------------------|--------------|---------------------|----------------|-----|------|-------|------|----|-------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
|                                                                                   |              |                     | PDY            | PDX | RE   | IC    | S    | D1 | JE7015P                 | JE7025P | JE6015M | JE6025M | JE6035M | JE4015K | JE4025K | JE5015S | JE5025S |
|  | 16ERAG60-HGA | 0.5~3.0             | 1.1            | 1.5 | 0.08 | 9.525 | 3.47 | 4  | ○                       | ●       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                   |              |                     |                |     |      |       |      |    |                         |         |         |         |         |         |         |         |         |

● Featured grade  
主推牌号 ○ Optional grade  
可选牌号

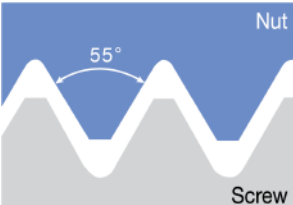
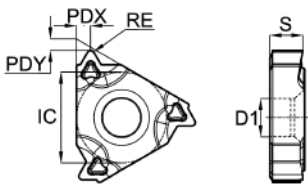
**60° General  
Internal Threading**



| Inserts<br>shape                                                                    | Type         | Pitch Range<br>(mm) | Dimensions(mm) |     |      |       |      |    | Recommended Grade |         |         |         |         |         |         |         |         |
|-------------------------------------------------------------------------------------|--------------|---------------------|----------------|-----|------|-------|------|----|-------------------|---------|---------|---------|---------|---------|---------|---------|---------|
|                                                                                     |              |                     | PDY            | PDX | RE   | IC    | S    | D1 | JE7015P           | JE7025P | JE6015M | JE6025M | JE6035M | JE4015K | JE4025K | JE5015S | JE5025S |
|  | 16IRAG60-HGA | 0.5-3.0             | 1.1            | 1.5 | 0.08 | 9.525 | 3.47 | 4  | ○                 | ●       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                     |              |                     |                |     |      |       |      |    |                   |         |         |         |         |         |         |         |         |

● Featured grade  
主推牌号 ○ Optional grade  
可选牌号

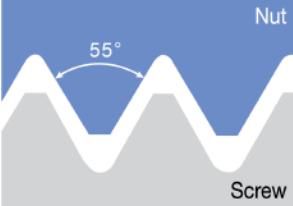
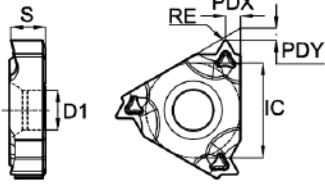
**55° General  
External Threading**



| Inserts<br>shape                                                                    | Type         | Pitch Range<br>(TPI) | Dimensions(mm) |     |      |       |      |    | Coated Cemented Carbide |         |         |         |         |         |         |         |         |
|-------------------------------------------------------------------------------------|--------------|----------------------|----------------|-----|------|-------|------|----|-------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
|                                                                                     |              |                      | PDY            | PDX | RE   | IC    | S    | D1 | JE7015P                 | JE7025P | JE6015M | JE6025M | JE6035M | JE4015K | JE4025K | JE5015S | JE5025S |
|  | 16ERAG55-HGA | 48-8                 | 1.1            | 1.5 | 0.08 | 9.525 | 3.47 | 4  | ○                       | ●       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                     |              |                      |                |     |      |       |      |    |                         |         |         |         |         |         |         |         |         |

● Featured grade  
主推牌号 ○ Optional grade  
可选牌号

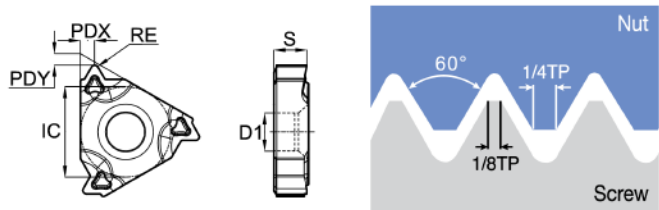
**55° General  
Internal Threading**



| Inserts<br>shape                                                                      | Type         | Pitch Range<br>(TPI) | Dimensions(mm) |     |      |       |      |    | Coated Cemented Carbide |         |         |         |         |         |         |         |         |
|---------------------------------------------------------------------------------------|--------------|----------------------|----------------|-----|------|-------|------|----|-------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
|                                                                                       |              |                      | PDY            | PDX | RE   | IC    | S    | D1 | JE7015P                 | JE7025P | JE6015M | JE6025M | JE6035M | JE4015K | JE4025K | JE5015S | JE5025S |
|  | 16IRAG55-HGA | 48-8                 | 1.1            | 1.5 | 0.08 | 9.525 | 3.47 | 4  | ○                       | ●       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                       |              |                      |                |     |      |       |      |    |                         |         |         |         |         |         |         |         |         |

● Featured grade  
主推牌号 ○ Optional grade  
可选牌号

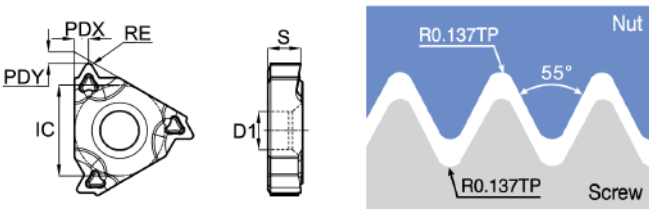
## ISO Metric Screw External Thread



| Inserts<br>shape                                                                  | Type            | Pitch Range<br>(mm) | Dimensions(mm) |     |      |       |      |    | Coated Cemented Carbide |         |         |         |         |         |         |         |         |
|-----------------------------------------------------------------------------------|-----------------|---------------------|----------------|-----|------|-------|------|----|-------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
|                                                                                   |                 |                     | PDY            | PDX | RE   | IC    | S    | D1 | JE7015P                 | JE7025P | JE6015M | JE6025M | JE6035M | JE4015K | JE4025K | JE5015S | JE5025S |
|  | 16ERM150ISO-HGB | 1.50                | 0.8            | 1.0 | 0.22 | 9.525 | 3.47 | 4  | ○                       | ●       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                   | 16ERM200ISO-HGB | 2.00                | 1.2            | 1.3 | 0.29 | 9.525 | 3.47 | 4  | ○                       | ●       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                   | 16ERM250ISO-HGB | 2.50                | 1.2            | 1.5 | 0.36 | 9.525 | 3.47 | 4  | ○                       | ●       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                   | 16ERM300ISO-HGB | 3.00                | 1.2            | 1.5 | 0.43 | 9.525 | 3.47 | 4  | ○                       | ●       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                   |                 |                     |                |     |      |       |      |    |                         | ○       | ●       | ○       | ●       | ○       | ○       | ●       | ○       |

● Featured grade 主推牌号 ○ Optional grade 可选牌号

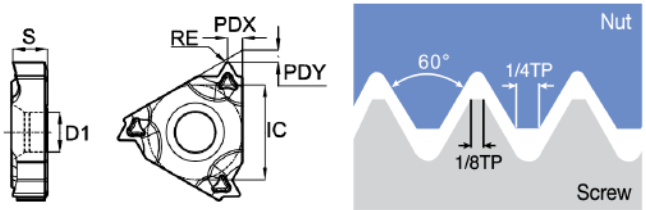
## W External Thread



| Inserts<br>shape                                                                    | Type         | Pitch Range<br>(TPI) | Dimensions(mm) |     |      |       |      |    | Coated Cemented Carbide |         |         |         |         |         |         |         |         |
|-------------------------------------------------------------------------------------|--------------|----------------------|----------------|-----|------|-------|------|----|-------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
|                                                                                     |              |                      | PDY            | PDX | RE   | IC    | S    | D1 | JE7015P                 | JE7025P | JE6015M | JE6025M | JE6035M | JE4015K | JE4025K | JE5015S | JE5025S |
|  | 16ERM11W-HGA | 11                   | 1.2            | 1.5 | 0.30 | 9.525 | 3.47 | 4  | ○                       | ●       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                     | 16ERM14W-HGA | 14                   | 1.2            | 1.5 | 0.24 | 9.525 | 3.47 | 4  | ○                       | ●       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                     |              |                      |                |     |      |       |      |    |                         |         |         |         |         |         |         |         |         |
|                                                                                     |              |                      |                |     |      |       |      |    |                         |         |         |         |         |         |         |         |         |

● Featured grade 主推牌号 ○ Optional grade 可选牌号

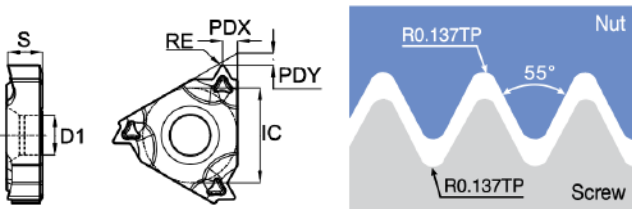
## ISO Metric Screw Internal Thread



| Inserts<br>shape                                                                    | Type             | Pitch Range<br>(mm) | Dimensions(mm) |     |      |       |      |     | Coated Cemented Carbide |         |         |         |         |         |         |         |         |
|-------------------------------------------------------------------------------------|------------------|---------------------|----------------|-----|------|-------|------|-----|-------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
|                                                                                     |                  |                     | PDY            | PDX | RE   | IC    | S    | D1  | JE7015P                 | JE7025P | JE6015M | JE6025M | JE6035M | JE4015K | JE4025K | JE5015S | JE5025S |
|  | 11IRM1.00ISO-HGB | 1.00                | 0.8            | 0.7 | 0.07 | 6.35  | 3.00 | 3.2 | ○                       | ●       | ○       | ●       | ○       | ○       | ○       | ○       | ●       |
|                                                                                     | 16IRM150ISO-HGB  | 1.50                | 0.8            | 1.0 | 0.11 | 9.525 | 3.47 | 4   | ○                       | ●       | ○       | ●       | ○       | ○       | ○       | ○       | ●       |
|                                                                                     | 16IRM200ISO-HGB  | 2.00                | 1.2            | 1.3 | 0.15 | 9.525 | 3.47 | 4   | ○                       | ●       | ○       | ●       | ○       | ○       | ○       | ○       | ●       |
|                                                                                     | 16IRM250ISO-HGB  | 2.50                | 1.2            | 1.5 | 0.18 | 9.525 | 3.47 | 4   | ○                       | ●       | ○       | ●       | ○       | ○       | ○       | ○       | ●       |
|                                                                                     | 16IRM300ISO-HGB  | 3.00                | 1.2            | 1.5 | 0.22 | 9.525 | 3.47 | 4   | ○                       | ●       | ○       | ●       | ○       | ○       | ○       | ○       | ●       |

● Featured grade 主推牌号 ○ Optional grade 可选牌号

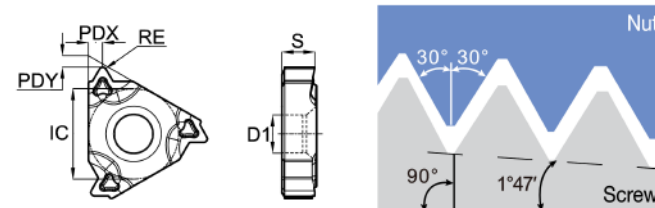
## W Internal Thread



| Inserts<br>shape                                                                      | Type         | Pitch Range<br>(TPI) | Dimensions(mm) |     |      |       |      |    | Coated Cemented Carbide |         |         |         |         |         |         |         |         |
|---------------------------------------------------------------------------------------|--------------|----------------------|----------------|-----|------|-------|------|----|-------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
|                                                                                       |              |                      | PDY            | PDX | RE   | IC    | S    | D1 | JE7015P                 | JE7025P | JE6015M | JE6025M | JE6035M | JE4015K | JE4025K | JE5015S | JE5025S |
|  | 16IRM11W-HGA | 11                   | 1.2            | 1.5 | 0.30 | 9.525 | 3.47 | 4  | ○                       | ●       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                       | 16IRM14W-HGA | 14                   | 1.2            | 1.5 | 0.24 | 9.525 | 3.47 | 4  | ○                       | ●       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                       |              |                      |                |     |      |       |      |    |                         |         |         |         |         |         |         |         |         |
|                                                                                       |              |                      |                |     |      |       |      |    |                         |         |         |         |         |         |         |         |         |

● Featured grade 主推牌号 ○ Optional grade 可选牌号

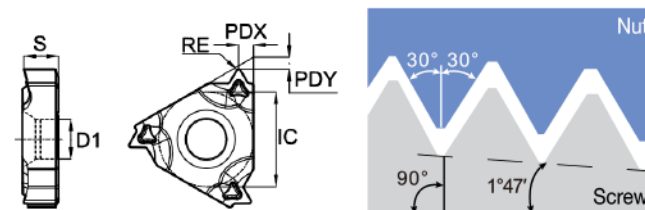
## NPT External Thread



| Inserts shape                                                                     | Type             | Pitch Range (TPI) | Dimensions(mm) |     |      |       |      |    | Coated Cemented Carbide |         |         |         |         |         |         |         |         |
|-----------------------------------------------------------------------------------|------------------|-------------------|----------------|-----|------|-------|------|----|-------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
|                                                                                   |                  |                   | PDY            | PDX | RE   | IC    | S    | D1 | JE7015P                 | JE7025P | JE6015M | JE6025M | JE6035M | JE4015K | JE4025K | JE5015S | JE5025S |
|  | 16ERM11.5NPT-HGB | 11.5              | 1.2            | 1.5 | 0.25 | 9.525 | 3.47 | 4  | ○                       | ●       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                   | 16ERM14NPT-HGB   | 14                | 1.2            | 1.5 | 0.22 | 9.525 | 3.47 | 4  | ○                       | ●       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                   |                  |                   |                |     |      |       |      |    |                         |         |         |         |         |         |         |         |         |
|                                                                                   |                  |                   |                |     |      |       |      |    |                         |         |         |         |         |         |         |         |         |

● Featured grade 主推牌号 ○ Optional grade 可选牌号

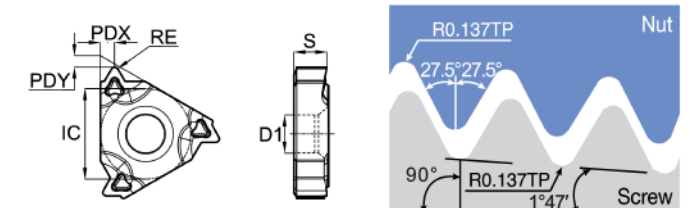
## NPT Internal Thread



| Inserts<br>shape                                                                    | Type             | Pitch Range<br>(TPI) | Dimensions(mm) |     |      |       |      |    | Coated Cemented Carbide |         |         |         |         |         |         |         |         |
|-------------------------------------------------------------------------------------|------------------|----------------------|----------------|-----|------|-------|------|----|-------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
|                                                                                     |                  |                      | PDY            | PDX | RE   | IC    | S    | D1 | JE7015P                 | JE7025P | JE6015M | JE6025M | JE6035M | JE4015K | JE4025K | JE5015S | JE5025S |
|  | 16IRM11.5NPT-HGB | 11.5                 | 1.2            | 1.5 | 0.25 | 9.525 | 3.47 | 4  | ○                       | ●       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                     | 16IRM14NPT-HGB   | 14                   | 1.2            | 1.5 | 0.22 | 9.525 | 3.47 | 4  | ○                       | ●       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                     |                  |                      |                |     |      |       |      |    |                         |         |         |         |         |         |         |         |         |
|                                                                                     |                  |                      |                |     |      |       |      |    |                         |         |         |         |         |         |         |         |         |

● Featured grade 主推牌号 ○ Optional grade 可选牌号

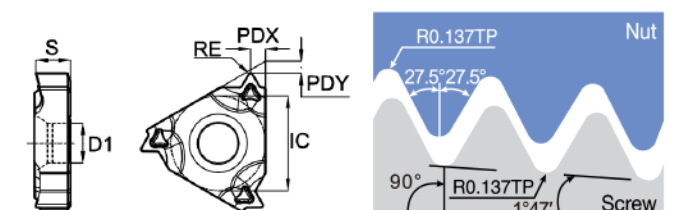
## BSPT External Thread



| Inserts shape                                                                       | Type            | Pitch Range (TPI) | Dimensions(mm) |     |      |       |      |    | Coated Cemented Carbide |         |         |         |         |         |         |         |         |
|-------------------------------------------------------------------------------------|-----------------|-------------------|----------------|-----|------|-------|------|----|-------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
|                                                                                     |                 |                   | PDY            | PDX | RE   | IC    | S    | D1 | JE7015P                 | JE7025P | JE6015M | JE6025M | JE6035M | JE4015K | JE4025K | JE5015S | JE5025S |
|  | 16ERM11BSPT-HGB | 11                | 1.2            | 1.5 | 0.30 | 9.525 | 3.47 | 4  | ○                       | ●       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                     | 16ERM14BSPT-HGB | 14                | 1.2            | 1.5 | 0.24 | 9.525 | 3.47 | 4  | ○                       | ●       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                     |                 |                   |                |     |      |       |      |    |                         |         |         |         |         |         |         |         |         |
|                                                                                     |                 |                   |                |     |      |       |      |    |                         |         |         |         |         |         |         |         |         |

● Featured grade 主推牌号 ○ Optional grade 可选牌号

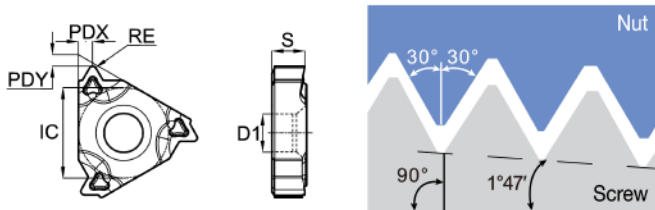
## BSPT Internal Thread



| Inserts shape                                                                         | Type            | Pitch Range (TPI) | Dimensions(mm) |     |      |       |      |    | Coated Cemented Carbide |         |         |         |         |         |         |         |         |
|---------------------------------------------------------------------------------------|-----------------|-------------------|----------------|-----|------|-------|------|----|-------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
|                                                                                       |                 |                   | PDY            | PDX | RE   | IC    | S    | D1 | JE7015P                 | JE7025P | JE6015M | JE6025M | JE6035M | JE4015K | JE4025K | JE5015S | JE5025S |
|  | 16IRM11BSPT-HGB | 11                | 1.2            | 1.5 | 0.30 | 9.525 | 3.47 | 4  | ○                       | ●       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                       | 16IRM14BSPT-HGB | 14                | 1.2            | 1.5 | 0.24 | 9.525 | 3.47 | 4  | ○                       | ●       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                       |                 |                   |                |     |      |       |      |    |                         |         |         |         |         |         |         |         |         |
|                                                                                       |                 |                   |                |     |      |       |      |    |                         |         |         |         |         |         |         |         |         |

● Featured grade 主推牌号 ○ Optional grade 可选牌号

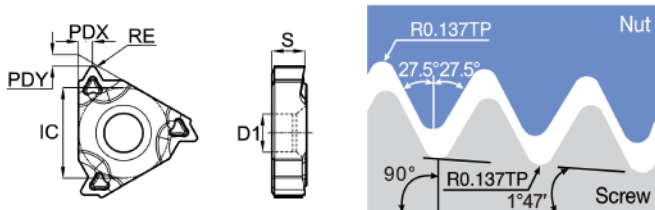
## NPT External Thread



| Inserts<br>shape                                                                  | Type             | Pitch Range<br>(TPI) | Dimensions(mm) |     |      |       |      |    | Coated Cemented Carbide |         |         |         |         |         |         |         |         |
|-----------------------------------------------------------------------------------|------------------|----------------------|----------------|-----|------|-------|------|----|-------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
|                                                                                   |                  |                      | PDY            | PDX | RE   | IC    | S    | D1 | JE7015P                 | JE7025P | JE6015M | JE6025M | JE6035M | JE4015K | JE4025K | JE5015S | JE5025S |
|  | 16ERM11.5NPT-HGB | 11.5                 | 1.2            | 1.5 | 0.25 | 9.525 | 3.47 | 4  | ○                       | ●       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                   | 16ERM14NPT-HGB   | 14                   | 1.2            | 1.5 | 0.22 | 9.525 | 3.47 | 4  | ○                       | ●       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                   |                  |                      |                |     |      |       |      |    |                         |         |         |         |         |         |         |         |         |
|                                                                                   |                  |                      |                |     |      |       |      |    |                         |         |         |         |         |         |         |         |         |

● Featured grade 主推牌号 ○ Optional grade 可选牌号

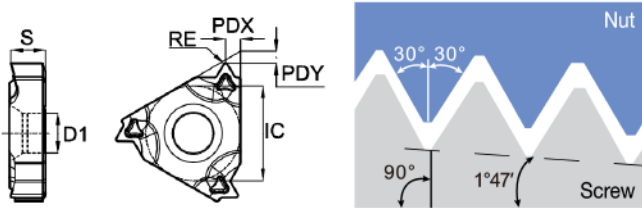
## BSPT External Thread



| Inserts<br>shape                                                                    | Type            | Pitch Range<br>(TPI) | Dimensions(mm) |     |      |       |      |    | Coated Cemented Carbide |         |         |         |         |         |         |         |         |
|-------------------------------------------------------------------------------------|-----------------|----------------------|----------------|-----|------|-------|------|----|-------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
|                                                                                     |                 |                      | PDY            | PDX | RE   | IC    | S    | D1 | JE7015P                 | JE7025P | JE6015M | JE6025M | JE6035M | JE4015K | JE4025K | JE5015S | JE5025S |
|  | 16ERM11BSPT-HGB | 11                   | 1.2            | 1.5 | 0.30 | 9.525 | 3.47 | 4  | ○                       | ●       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                     | 16ERM14BSPT-HGB | 14                   | 1.2            | 1.5 | 0.24 | 9.525 | 3.47 | 4  | ○                       | ●       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                     |                 |                      |                |     |      |       |      |    |                         |         |         |         |         |         |         |         |         |
|                                                                                     |                 |                      |                |     |      |       |      |    |                         |         |         |         |         |         |         |         |         |

● Featured grade 主推牌号 ○ Optional grade 可选牌号

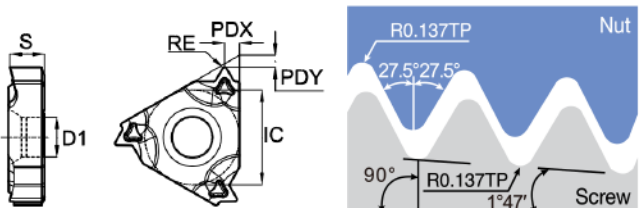
## NPT Internal Thread



| Inserts<br>shape                                                                    | Type             | Pitch Range<br>(TPI) | Dimensions(mm) |     |      |       |      |    | Coated Cemented Carbide |         |         |         |         |         |         |         |         |
|-------------------------------------------------------------------------------------|------------------|----------------------|----------------|-----|------|-------|------|----|-------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
|                                                                                     |                  |                      | PDY            | PDX | RE   | IC    | S    | D1 | JE7015P                 | JE7025P | JE6015M | JE6025M | JE6035M | JE4015K | JE4025K | JE5015S | JE5025S |
|  | 16IRM11.5NPT-HGB | 11.5                 | 1.2            | 1.5 | 0.25 | 9.525 | 3.47 | 4  | ○                       | ●       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                     | 16IRM14NPT-HGB   | 14                   | 1.2            | 1.5 | 0.22 | 9.525 | 3.47 | 4  | ○                       | ●       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                     |                  |                      |                |     |      |       |      |    |                         |         |         |         |         |         |         |         |         |
|                                                                                     |                  |                      |                |     |      |       |      |    |                         |         |         |         |         |         |         |         |         |

● Featured grade 主推牌号 ○ Optional grade 可选牌号

## BSPT Internal Thread



| Inserts<br>shape                                                                      | Type            | Pitch Range<br>(TPI) | Dimensions(mm) |     |      |       |      |    | Coated Cemented Carbide |         |         |         |         |         |         |         |         |
|---------------------------------------------------------------------------------------|-----------------|----------------------|----------------|-----|------|-------|------|----|-------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
|                                                                                       |                 |                      | PDY            | PDX | RE   | IC    | S    | D1 | JE7015P                 | JE7025P | JE6015M | JE6025M | JE6035M | JE4015K | JE4025K | JE5015S | JE5025S |
|  | 16IRM11BSPT-HGB | 11                   | 1.2            | 1.5 | 0.30 | 9.525 | 3.47 | 4  | ○                       | ●       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                       | 16IRM14BSPT-    | 14                   | 1.2            | 1.5 | 0.24 | 9.525 | 3.47 | 4  | ○                       | ●       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                       |                 |                      |                |     |      |       |      |    |                         |         |         |         |         |         |         |         |         |
|                                                                                       |                 |                      |                |     |      |       |      |    |                         |         |         |         |         |         |         |         |         |

● Featured grade 主推牌号 ○ Optional grade 可选牌号

Grooving Inserts

MGMN

|               |            | Dimensions(mm) |      |      |      |      |   | Recommended Grade |   |   |   |   |   |   |   |
|---------------|------------|----------------|------|------|------|------|---|-------------------|---|---|---|---|---|---|---|
| Inserts shape | Type       | b              | r    | l    | d    | t    |   |                   |   |   |   |   |   |   |   |
|               |            |                |      |      |      |      |   |                   |   |   |   |   |   |   |   |
|               | MGMN150-G  | 1.50           | 0.15 | 16.0 | 1.20 | 3.5  | ○ | ●                 | ○ | ● | ○ | ○ | ● | ○ | ● |
|               | MGMN200-G  | 2.0            | 0.2  | 16.0 | 1.6  | 3.5  | ○ | ●                 | ○ | ● | ○ | ○ | ● | ○ | ● |
|               | MGMN250-G  | 2.5            | 0.2  | 18.5 | 2.0  | 3.85 | ○ | ●                 | ○ | ● | ○ | ○ | ● | ○ | ● |
|               | MGMN300-G  | 3.0            | 0.4  | 21.0 | 2.35 | 4.8  | ○ | ●                 | ○ | ● | ○ | ○ | ● | ○ | ● |
|               | MGMN300-M  | 3.0            | 0.4  | 21.0 | 2.35 | 4.8  | ○ | ●                 | ○ | ● | ○ | ○ | ● | ○ | ● |
|               | MGMN400-M  | 4.0            | 0.4  | 21.0 | 3.3  | 4.8  | ○ | ●                 | ○ | ● | ○ | ○ | ● | ○ | ● |
|               | MGMN500-M  | 5.0            | 0.8  | 26.0 | 4.1  | 5.8  | ○ | ●                 | ○ | ● | ○ | ○ | ● | ○ | ● |
|               | MGMN600-M  | 6.0            | 0.8  | 26.0 | 5.0  | 5.8  | ○ | ●                 | ○ | ● | ○ | ○ | ● | ○ | ● |
|               | MGMN150-T  | 1.5            | 0.15 | 16.0 | 1.2  | 3.5  | ○ | ●                 | ○ | ● | ○ | ○ | ● | ○ | ● |
|               | MGMN200-T  | 2.0            | 0.2  | 16.0 | 1.6  | 3.5  | ○ | ●                 | ○ | ● | ○ | ○ | ● | ○ | ● |
|               | MGMN250-T  | 2.5            | 0.2  | 18.5 | 2.0  | 3.85 | ○ | ●                 | ○ | ● | ○ | ○ | ● | ○ | ● |
|               | MGMN300-T  | 3.0            | 0.4  | 21.0 | 2.35 | 4.8  | ○ | ●                 | ○ | ● | ○ | ○ | ● | ○ | ● |
|               | MGMN400-T  | 4.0            | 0.4  | 21.0 | 3.3  | 4.8  | ○ | ●                 | ○ | ● | ○ | ○ | ● | ○ | ● |
|               | MGMN500-T  | 5.0            | 0.8  | 25.9 | 4.1  | 5.8  | ○ | ●                 | ○ | ● | ○ | ○ | ● | ○ | ● |
|               | MGMN600-T  | 6.0            | 0.8  | 26.2 | 5.0  | 5.8  | ○ | ●                 | ○ | ● | ○ | ○ | ● | ○ | ● |
|               | MGMN150-DR | 1.5            | 0.15 | 16.0 | 1.2  | 3.5  | ○ | ●                 | ○ | ● | ○ | ○ | ● | ○ | ● |
|               | MGMN200-DR | 2.0            | 0.15 | 16.0 | 1.6  | 3.5  | ○ | ●                 | ○ | ● | ○ | ○ | ● | ○ | ● |
|               | MGMN250-DR | 2.5            | 0.2  | 18.5 | 2.0  | 3.85 | ○ | ●                 | ○ | ● | ○ | ○ | ● | ○ | ● |
|               | MGMN300-DR | 3.0            | 0.2  | 21.0 | 2.35 | 4.8  | ○ | ●                 | ○ | ● | ○ | ○ | ● | ○ | ● |
|               | MGMN400-DR | 4.0            | 0.4  | 21.0 | 3.3  | 4.8  | ○ | ●                 | ○ | ● | ○ | ○ | ● | ○ | ● |
|               | MGMN500-DR | 5.0            | 0.6  | 25.9 | 4.1  | 5.8  | ○ | ●                 | ○ | ● | ○ | ○ | ● | ○ | ● |
|               | MGMN600-DR | 6.0            | 0.8  | 26.2 | 5.0  | 5.8  | ○ | ●                 | ○ | ● | ○ | ○ | ● | ○ | ● |

● Featured grade 主推牌号 ○ Optional grade 可选牌号

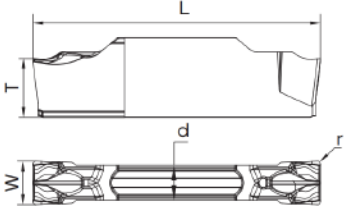
Grooving Inserts

MRMN

|               |           | Dimensions(mm) |     |      |      |     |   | Recommended Grade |   |   |   |   |   |   |   |
|---------------|-----------|----------------|-----|------|------|-----|---|-------------------|---|---|---|---|---|---|---|
| Inserts shape | Type      | b              | r   | l    | d    | t   |   |                   |   |   |   |   |   |   |   |
|               |           |                |     |      |      |     |   |                   |   |   |   |   |   |   |   |
|               | MRMN200-M | 2.0            | 1.0 | 16.0 | 1.65 | 3.5 | ○ | ●                 | ○ | ● | ○ | ○ | ● | ○ | ● |
|               | MRMN300-M | 3.0            | 1.5 | 21.0 | 2.35 | 4.8 | ○ | ●                 | ○ | ● | ○ | ○ | ● | ○ | ● |
|               | MRMN400-M | 4.0            | 2.0 | 21.0 | 3.3  | 4.8 | ○ | ●                 | ○ | ● | ○ | ○ | ● | ○ | ● |
|               | MRMN500-M | 5.0            | 2.5 | 26.0 | 4.1  | 5.8 | ○ | ●                 | ○ | ● | ○ | ○ | ● | ○ | ● |
|               | MRMN600-M | 6.0            | 2.5 | 26.0 | 5.0  | 5.8 | ○ | ●                 | ○ | ● | ○ | ○ | ● | ○ | ● |

● Featured grade 主推牌号 ○ Optional grade 可选牌号

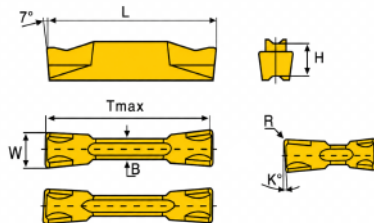
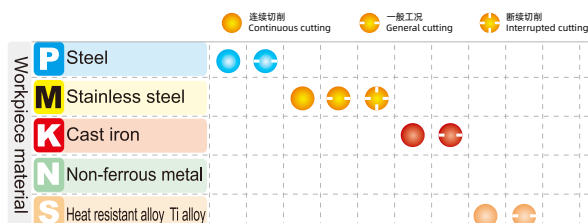
TDJ

|  |      | <div><div><div>Workpiece material</div><div><div>P</div>Steel</div><div><div>M</div>Stainless steel</div><div><div>K</div>Cast iron</div><div><div>N</div>Non-ferrous metal</div><div><div>S</div>Heat resistant alloy Ti alloy</div></div><div><div><div>連続切削</div>Continuous cutting</div><div><div>一般加工</div>General cutting</div><div><div>断続切削</div>Interrupted cutting</div></div></div> |                |     |     |      |     |                   |         |         |         |         |         |         |         |         |  |  |
|---------------------------------------------------------------------------------------|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----|-----|------|-----|-------------------|---------|---------|---------|---------|---------|---------|---------|---------|--|--|
| Inserts shape                                                                         | Type | Blade holder size                                                                                                                                                                                                                                                                                                                                                                              | Dimensions(mm) |     |     |      |     | Recommended Grade |         |         |         |         |         |         |         |         |  |  |
|                                                                                       |      |                                                                                                                                                                                                                                                                                                                                                                                                | W              | R   | B   | L    | H   | JE7015P           | JE7025P | JE6015M | JE6025M | JE6035M | JE4015K | JE4025K | JE5015S | JE5025S |  |  |
|  | TDJ2 | 2                                                                                                                                                                                                                                                                                                                                                                                              | 2.0            | 0.2 | 1.7 | 20.0 | 4.7 | ○                 | ●       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |  |  |
|                                                                                       | TDJ3 | 3                                                                                                                                                                                                                                                                                                                                                                                              | 3.0            | 0.2 | 2.4 | 20.0 | 4.7 | ○                 | ●       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |  |  |
|                                                                                       | TDJ4 | 4                                                                                                                                                                                                                                                                                                                                                                                              | 4.0            | 0.3 | 3.0 | 20.0 | 4.7 | ○                 | ●       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |  |  |

● Featured grade 主推牌号 ○ Optional grade 可选牌号

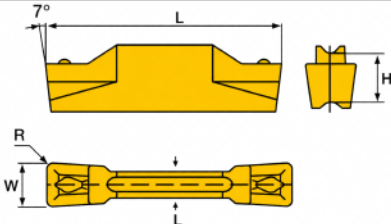
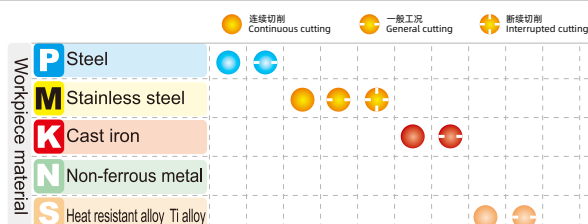
## Grooving Inserts

### TDC□□

|   |      |                   |  |     |     |      |     |                   |         |         |         |         |         |         |         |         |
|------------------------------------------------------------------------------------|------|-------------------|------------------------------------------------------------------------------------|-----|-----|------|-----|-------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| Inserts shape                                                                      | Type | Blade holder size | Dimensions(mm)                                                                     |     |     |      |     | Recommended Grade |         |         |         |         |         |         |         |         |
|                                                                                    |      |                   | W                                                                                  | R   | B   | L    | H   | JE7015P           | JE7025P | JE6015M | JE6025M | JE6035M | JE4015K | JE4025K | JE5015S | JE5025S |
|  | TDC2 | 2                 | 2.0                                                                                | 0.2 | 1.7 | 20.0 | 4.7 | ○                 | ●       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                    | TDC3 | 3                 | 3.0                                                                                | 0.2 | 2.4 | 20.0 | 4.7 | ○                 | ●       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                    | TDC4 | 4                 | 4.0                                                                                | 0.3 | 3.0 | 20.0 | 4.7 | ○                 | ●       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |

● Featured grade 主推牌号  
○ Optional grade 可选牌号

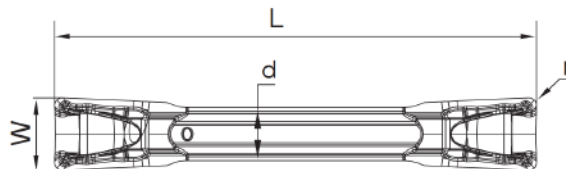
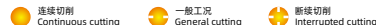
### TDT□□

|  |               |                   |  |     |      |      |     |                   |         |         |         |         |         |         |         |         |  |
|-------------------------------------------------------------------------------------|---------------|-------------------|--------------------------------------------------------------------------------------|-----|------|------|-----|-------------------|---------|---------|---------|---------|---------|---------|---------|---------|--|
| Inserts shape                                                                       | Type          | Blade holder size | Dimensions(mm)                                                                       |     |      |      |     | Recommended Grade |         |         |         |         |         |         |         |         |  |
|                                                                                     |               |                   | W                                                                                    | R   | B    | L    | H   | JE7015P           | JE7025P | JE6015M | JE6025M | JE6035M | JE4015K | JE4025K | JE5015S | JE5025S |  |
|  | TDT3          | 3                 | 3                                                                                    | 0.3 | 2.25 | 10.0 | 4.7 | ○                 | ●       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |  |
|                                                                                     | TDT4          | 4                 | 4                                                                                    | 0.4 | 3.05 | 20.0 | 4.7 | ○                 | ●       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |  |
|                                                                                     | TDT2E-1.0-GTA | 2                 | 2                                                                                    | 1.0 | 1.7  | 20.0 | 4.7 | ○                 | ●       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |  |
|                                                                                     | TDT3E-1.5-GTA | 3                 | 3                                                                                    | 1.5 | 2.25 | 20.0 | 4.7 | ○                 | ●       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |  |
|                                                                                     | TDT4E-2.0-GTA | 4                 | 4                                                                                    | 2.0 | 3.0  | 19.9 | 4.7 | ○                 | ●       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |  |

● Featured grade 主推牌号  
○ Optional grade 可选牌号

## Grooving Inserts

### TDXU□□

|   |                                        |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |     |                                                                                             |                                                                                             |                                                                                             |                                                                                             |                                                                                             |                                                                                             |                                                                                             |                                                                                             |                                                                                             |  |  |
|--------------------------------------------------------------------------------------|----------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|--|--|
| Workpiece material                                                                   | <b>P</b> Steel                         |  |  |                                                                                     |                                                                                     |                                                                                     |     |                                                                                             |                                                                                             |                                                                                             |                                                                                             |                                                                                             |                                                                                             |                                                                                             |                                                                                             |                                                                                             |  |  |
|                                                                                      | <b>M</b> Stainless steel               |                                                                                     |                                                                                     |  |  |  |     |                                                                                             |                                                                                             |                                                                                             |                                                                                             |                                                                                             |                                                                                             |                                                                                             |                                                                                             |                                                                                             |  |  |
|                                                                                      | <b>K</b> Cast iron                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |     |                                                                                             |                                                                                             |          |          |                                                                                             |                                                                                             |                                                                                             |                                                                                             |                                                                                             |  |  |
|                                                                                      | <b>N</b> Non-ferrous metal             |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |     |                                                                                             |                                                                                             |                                                                                             |                                                                                             |                                                                                             |                                                                                             |                                                                                             |                                                                                             |                                                                                             |  |  |
|                                                                                      | <b>S</b> Heat resistant alloy Ti alloy |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |     |                                                                                             |                                                                                             |                                                                                             |                                                                                             |                                                                                             |                                                                                             |                                                                                             |          |          |  |  |
| Inserts shape                                                                        | Type                                   | Blade holder size                                                                   | Dimensions(mm)                                                                      |                                                                                     |                                                                                     |                                                                                     |     | Recommended Grade                                                                           |                                                                                             |                                                                                             |                                                                                             |                                                                                             |                                                                                             |                                                                                             |                                                                                             |                                                                                             |  |  |
|                                                                                      |                                        |                                                                                     | W                                                                                   | R                                                                                   | B                                                                                   | L                                                                                   | H   |  JE7015P |  JE7025P |  JE6015M |  JE6025M |  JE6035M |  JE4015K |  JE4025K |  JE5015S |  JE5025S |  |  |
|  | TDXU2E-0.3                             | 2                                                                                   | 2                                                                                   | 0.3                                                                                 | 1.75                                                                                | 20.0                                                                                | 4.7 |          |          |          |          |          |          |          |          |          |  |  |
|                                                                                      | TDXU3E-0.3                             | 3                                                                                   | 3                                                                                   | 0.3                                                                                 | 2.2                                                                                 | 20.0                                                                                | 4.7 |          |          |          |          |          |          |          |          |          |  |  |
|                                                                                      | TDXU4E-0.4                             | 4                                                                                   | 4                                                                                   | 0.4                                                                                 | 3.0                                                                                 | 20.0                                                                                | 4.7 |          |          |          |          |          |          |          |          |          |  |  |

● Featured grade 主推牌号  
○ Optional grade 可选牌号

## ■ Shallow Grooving Inserts

TGF ☐ ☐[illegible]

## Designation Rules of ISO Milling Insert Type

| Code | Shape                  | Tip Angle (°) | Graphics |
|------|------------------------|---------------|----------|
| H    | Regular Hexagon        | 120°          |          |
| O    | Regular Octagon        | 135°          |          |
| P    | Regular Pentagon       | 108°          |          |
| S    | Square                 | 90°           |          |
| T    | Regular Triangle       | 60°           |          |
| C    | Diamond                | 80°           |          |
| D    |                        | 55°           |          |
| E    |                        | 75°           |          |
| F    |                        | 50°           |          |
| M    |                        | 86°           |          |
| V    |                        | 35°           |          |
| W    | Hexagon                | 80°           |          |
| L    | Rectangle              | 90°           |          |
| A    | Parallel Quadrilateral | 85°           |          |
| B    |                        | 82°           |          |
| K    |                        | 55°           |          |
| R    | Circular               | —             |          |

① Shape Code

| Code | Relief Angle (°) |
|------|------------------|
| A    | 3°               |
| B    | 5°               |
| C    | 7°               |
| D    | 15°              |
| E    | 20°              |
| F    | 25°              |
| G    | 30°              |
| N    | 0°               |
| P    | 11°              |
| O    | Others           |

② Relief Angle Code

| Code | Tolerance (mm) |               |                       | Tolerance (inch) |               |                       |
|------|----------------|---------------|-----------------------|------------------|---------------|-----------------------|
|      | Tip Height (M) | Thickness (s) | Inscribed Circle (Ød) | Tip Height (M)   | Thickness (s) | Inscribed Circle (Ød) |
| A    | ± 0.005        | ± 0.025       | ± 0.025               | ± 0.0002         | ± 0.001       | ± 0.001               |
| F    | ± 0.005        | ± 0.025       | ± 0.013               | ± 0.0002         | ± 0.001       | ± 0.0005              |
| C    | ± 0.013        | ± 0.025       | ± 0.025               | ± 0.0005         | ± 0.001       | ± 0.001               |
| H    | ± 0.013        | ± 0.025       | ± 0.013               | ± 0.0005         | ± 0.001       | ± 0.0005              |
| E    | ± 0.025        | ± 0.025       | ± 0.025               | ± 0.001          | ± 0.001       | ± 0.001               |
| G    | ± 0.025        | ± 0.13        | ± 0.025               | ± 0.001          | ± 0.005       | ± 0.001               |
| J    | ± 0.005        | ± 0.025       | ± 0.05~± 0.13         | ± 0.0002         | ± 0.001       | ± 0.002~± 0.005       |
| K    | ± 0.013        | ± 0.025       | ± 0.05~± 0.13         | ± 0.0005         | ± 0.001       | ± 0.002~± 0.005       |
| L    | ± 0.025        | ± 0.025       | ± 0.05~± 0.13         | ± 0.001          | ± 0.001       | ± 0.002~± 0.005       |
| M    | ± 0.08~± 0.18  | ± 0.13        | ± 0.05~± 0.13         | ± 0.003~± 0.007  | ± 0.005       | ± 0.002~± 0.005       |
| N    | ± 0.08~± 0.18  | ± 0.025       | ± 0.05~± 0.13         | ± 0.003~± 0.007  | ± 0.001       | ± 0.002~± 0.005       |
| U    | ± 0.13~± 0.38  | ± 0.13        | ± 0.08~± 0.25         | ± 0.005~± 0.015  | ± 0.005       | ± 0.003~± 0.01        |

③ Accuracy Code

| Applicable Insert Shape: H,O,P,S,T,C,E,M,W,R |                                         |           |                                  |           |                                  |                                           |         |                                    |         |
|----------------------------------------------|-----------------------------------------|-----------|----------------------------------|-----------|----------------------------------|-------------------------------------------|---------|------------------------------------|---------|
| Standard Inscribed Circle (mm)               | Tolerance of Inscribed Circle (Ød) (mm) |           | Tolerance of Tip Height (m) (mm) |           | Standard Inscribed Circle (inch) | Tolerance of Inscribed Circle (Ød) (inch) |         | Tolerance of Tip Height (m) (inch) |         |
|                                              | J,K,L, M,N (grade)                      | U (grade) | M,N (grade)                      | U (grade) |                                  | Class J,K, L,M,N                          | Class U | Class J,K, L,M,N                   | Class U |
| 6.35                                         | ± 0.05                                  | ± 0.08    | ± 0.08                           | ± 0.13    | 0.250                            | ± 0.002                                   | ± 0.003 | ± 0.003                            | ± 0.005 |
| 9.525                                        |                                         |           |                                  |           | 0.375                            |                                           |         |                                    |         |
| 12.7                                         | ± 0.08                                  | ± 0.13    | ± 0.13                           | ± 0.2     | 0.500                            | ± 0.003                                   | ± 0.005 | ± 0.005                            | ± 0.008 |
| 15.875                                       |                                         |           |                                  |           | 0.625                            |                                           |         |                                    |         |
| 19.05                                        | ± 0.1                                   | ± 0.18    | ± 0.15                           | ± 0.27    | 0.750                            | ± 0.004                                   | ± 0.007 | ± 0.006                            | ± 0.011 |
| 25.4                                         |                                         |           |                                  |           | 1.000                            |                                           |         |                                    |         |
| 31.75                                        | ± 0.15                                  | ± 0.25    | ± 0.18                           | ± 0.38    | 1.250                            | ± 0.005                                   | ± 0.010 | ± 0.007                            | ± 0.015 |
| 32                                           |                                         |           |                                  |           | 1.260                            |                                           |         |                                    |         |

| Applicable Insert Shape: D |       |                               |         |                         |         | Applicable Insert Shape: V |       |                               |         |                         |         |
|----------------------------|-------|-------------------------------|---------|-------------------------|---------|----------------------------|-------|-------------------------------|---------|-------------------------|---------|
| Inscribed Circle (Ød)      |       | Tolerance of Inscribed Circle |         | Tolerance of Tip Height |         | Inscribed Circle (Ød)      |       | Tolerance of Inscribed Circle |         | Tolerance of Tip Height |         |
| mm                         | inch  | mm                            | inch    | mm                      | inch    | mm                         | inch  | mm                            | inch    | mm                      | inch    |
| 6.35                       | 0.250 | ± 0.05                        | ± 0.002 | ± 0.11                  | ± 0.004 | 6.35                       | 0.250 | ± 0.05                        | ± 0.002 | ± 0.15                  | ± 0.006 |
| 9.525                      | 0.375 | ± 0.05                        | ± 0.002 | ± 0.11                  | ± 0.004 | 9.525                      | 0.375 | ± 0.05                        | ± 0.002 | ± 0.15                  | ± 0.006 |
| 12.7                       | 0.500 | ± 0.08                        | ± 0.003 | ± 0.15                  | ± 0.006 | 12.7                       | 0.500 | ± 0.08                        | ± 0.003 | ± 0.20                  | ± 0.008 |
| 15.875                     | 0.625 | ± 0.10                        | ± 0.004 | ± 0.18                  | ± 0.007 | 15.875                     | 0.625 | ± 0.10                        | ± 0.004 | ± 0.27                  | ± 0.011 |
| 19.05                      | 0.750 | ± 0.10                        | ± 0.004 | ± 0.18                  | ± 0.007 | 19.05                      | 0.750 | ± 0.10                        | ± 0.004 | ± 0.27                  | ± 0.011 |

| Code | Thickness (mm) |
|------|----------------|
| 01   | 1.59           |
| T1   | 1.98           |
| 02   | 2.38           |
| T2   | 2.78           |
| 03   | 3.18           |
| T3   | 3.97           |
| 04   | 4.76           |
| 05   | 5.56           |
| 06   | 6.35           |
| 07   | 7.94           |
| 09   | 9.52           |

⑥ Thickness code

(1) S (2) N (3) E (4) U (5) 12

(1) R (2) D (3) E (4) T (5) 12

(6) 06 (7) AN (8) E (9) N (10) GM

(6) 04 (7) MO (8) T (9) — (10) MM

| ④ Chip Breaker - Hole Code |                   |                                                      |              |       |
|----------------------------|-------------------|------------------------------------------------------|--------------|-------|
| Code                       | With/without hole | Hole shape                                           | Chip breaker | Shape |
| N                          | No                | —                                                    | No           |       |
| R                          |                   |                                                      | Single-sided |       |
| F                          |                   |                                                      | Double-sided |       |
| A                          | Yes               | Cylindrical hole                                     | No           |       |
| M                          |                   |                                                      | Single-sided |       |
| G                          |                   | Partial cylindrical hole, sin - glesided, 40° ~ 60°  | Double-sided |       |
| W                          |                   |                                                      | No           |       |
| T                          | Yes               | Partial cylindrical hole, dou - ble-sided, 40° ~ 60° | Single-sided |       |
| Q                          |                   |                                                      | Double-sided |       |
| U                          |                   | Partial cylindrical hole, sin - glesided, 70° ~ 90°  | No           |       |
| B                          |                   |                                                      | Single-sided |       |
| H                          | Yes               | Partial cylindrical hole, dou - ble-sided, 70° ~ 90° | No           |       |
| C                          |                   |                                                      | Double-sided |       |
| J                          |                   | Partial cylindrical hole, sin - glesided, 70° ~ 90°  | No           |       |
| X                          |                   |                                                      | Double-sided |       |

| ⑤ Iso Cutting Edge Length Code (Mm) |               |      |               |      |               |      |               |      |               |      |               |      |               |
|-------------------------------------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|
| Code                                | Dimen - sions | Code | Dimen - sions | Code | Dimen - sions | Code | Dimen - sions | Code | Dimen - sions | Code | Dimen - sions | Code | Dimen - sions |
| 03                                  | 3.97          | 03   | 4.0           | 06   | 6.9           | 4    | 4.8           | 08   | 8.2           | 5    | 5.8           | 09   | 9.6           |
| 04                                  | 4.76          | 04   | 4.8           | 08   | 8.2           | 5    | 5.8           | 09   | 9.6           | 6    | 6.8           | 11   | 11.2          |
| 05                                  | 5             | 05   | 5.6           | 05   | 5.6           | 03   | 3.8           | 09   | 9.6           | 6    | 6.8           | 11   | 11.2          |
| 06                                  | 6             | 06   | 6.35          | 06   | 6.5           | 04   | 4.3           | 11   | 11            | 7    | 7.8           | 11   | 11.2          |
| 07                                  | 7.94          | 08   | 8.1           | 05   | 5.4           | 13   | 13.8          | 9    | 9.7           | 11   | 11.2          | 11   | 11.2          |
| 08                                  | 8             | 08   | 8.1           | 05   | 5.4           | 13   | 13.8          | 9    | 9.7           | 11   | 11.2          | 11   | 11.2          |
| 09                                  | 9.525         | 09   | 9.525         | 09   | 9.7           | 06   | 6.5           | 16   | 16.5          | 11   | 11.6          | 16   | 16.6          |
| 10                                  | 10            | 10   | 10            | 10   | 10            | 10   | 10            | 16   | 16.6          | 16   | 16.6          | 16   | 16.6          |
| 12                                  | 12            | 12   | 12            | 12   | 12            | 12   | 12            | 16   | 16.6          | 16   | 16.6          | 16   | 16.6          |
| 12                                  | 12.7          | 12   | 12.7          | 12   | 12.9          | 08   | 8.7           | 22   | 22            | 15   | 15.5          | 22   | 22.1          |
| 15                                  | 15.875        | 15   | 15.875        | 16   | 16.1          | 10   | 10.9          | 27   | 27.5          | 19   | 19.4          | 27   | 27.5          |
| 16                                  | 16            | 16   | 16            | 16   | 16            | 16   | 16            | 27   | 27.5          | 19   | 19.4          | 27   | 27.5          |
| 19                                  | 19.05         | 19   | 19.05         | 19   | 19.3          | 13   | 13            | 33   | 33            | 23   | 23.3          | 33   | 33.3          |
| 20                                  | 20            | 20   | 20            | 20   | 20            | 20   | 20            | 33   | 33            | 23   | 23.3          | 33   | 33.3          |
| 22                                  | 22.225        | 22   | 22.6          | 22   | 22.6          | 22   | 22.6          | 38   | 38.5          | 27   | 27.1          | 38   | 38.5          |
| 25                                  | 25            | 25   | 25            | 25   | 25            | 25   | 25            | 44   | 44            | 31   | 31            | 44   | 44            |
| 25                                  | 25.4          | 25   | 25.4          | 25   | 25.8          | 25   | 25.8          | 44   | 44            | 31   | 31            | 44   | 44            |
| 31                                  | 31.75         | 31   | 31.75         | 32   | 32.2          | 32   | 32.2          | 55   | 55            | 38   | 38.8          | 55   | 55            |
| 31                                  | 32            | 31   | 32            | 32   | 32.2          | 32   | 32.2          | 55   | 55            | 38   | 38.8          | 55   | 55            |

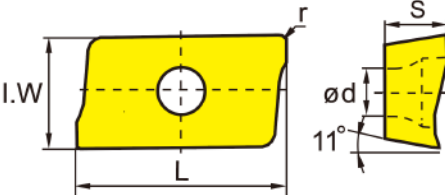
| Inscribed Circle (Ød) | ⑦ Tool Cutting Edge Angle, Wiper Relief Angle, and Tip Shape |                     |                         |        |                    |                 |                     |  |  |  |
|-----------------------|--------------------------------------------------------------|---------------------|-------------------------|--------|--------------------|-----------------|---------------------|--|--|--|
| Tip Height (m)        |                                                              |                     |                         |        |                    |                 |                     |  |  |  |
| Insert Thickness (s)  |                                                              |                     |                         |        |                    |                 |                     |  |  |  |
|                       |                                                              |                     |                         |        |                    |                 |                     |  |  |  |
|                       |                                                              |                     |                         |        |                    |                 |                     |  |  |  |
|                       |                                                              |                     |                         |        |                    |                 |                     |  |  |  |
| Code                  |                                                              | Tool Approach Angle | Tool Cutting Edge Angle | Code   | Wiper Relief Angle | Code            | Tip Arc Radius (mm) |  |  |  |
| A                     | 45°                                                          | 45°                 | A                       | 3°     | M0                 | Circular Insert |                     |  |  |  |
| D                     | 30°                                                          | 60°                 | B                       | 5°     | 00                 | 0.03            |                     |  |  |  |
| E                     | 15°                                                          | 75°                 | C                       | 7°     | 02                 | 0.2             |                     |  |  |  |
| F                     | 5°                                                           | 85°                 | D                       | 15°    | 04                 | 0.4             |                     |  |  |  |
| P                     | 0°                                                           | 90°                 | E                       | 20°    | 08                 | 0.8             |                     |  |  |  |
| Z                     | Others                                                       |                     | F                       | 25°    | 12                 | 1.2             |                     |  |  |  |
|                       |                                                              |                     | G                       | 30°    | 16                 | 1.6             |                     |  |  |  |
|                       |                                                              |                     | N                       | 0°     | 20                 | 2.0             |                     |  |  |  |
|                       |                                                              |                     | P                       | 11°    | 24                 | 2.4             |                     |  |  |  |
|                       |                                                              |                     | Z                       | Others | 28                 | 2.8             |                     |  |  |  |
|                       |                                                              |                     |                         |        | 32                 | 3.2             |                     |  |  |  |

| ⑧ Code for Major Cutting Edge |                           |       | ⑩ Code for Chip Breaker |                       |         |
|-------------------------------|---------------------------|-------|-------------------------|-----------------------|---------|
| Code                          | Shape of Cutting Edge     | Shape | Code                    | Shape of Cutting Edge | Diagram |
| F                             | Sharp Edge                |       |                         |                       |         |
| E                             | Circular Edge             |       |                         |                       |         |
| T                             | Negative Land Angle       |       |                         |                       |         |
| S                             | Composite Passivated Edge |       |                         |                       |         |

| ⑨ Code for Cutting Direction |                       |         |
|------------------------------|-----------------------|---------|
| Code                         | Shape of Cutting Edge | Diagram |
| R                            | Right                 |         |
| L                            | Left                  |         |
| N                            | No                    |         |

Shoulder Milling

AP



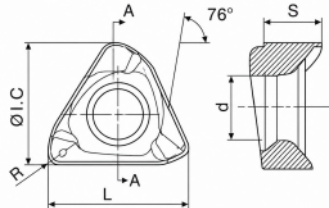
Workpiece material

|                                 |                            |                         |                             |
|---------------------------------|----------------------------|-------------------------|-----------------------------|
| P Steel                         | 连续切削<br>Continuous cutting | 一般工况<br>General cutting | 断续切削<br>Interrupted cutting |
| M Stainless steel               |                            |                         |                             |
| K Cast iron                     |                            |                         |                             |
| N Non-ferrous metal             |                            |                         |                             |
| S Heat resistant alloy Ti alloy |                            |                         |                             |

| Inserts shape                                                                       | Type             | Dimensions(mm) |       |      |     |     |  | Coating/Grade |         |         |         |         |         |         |         |         |         |         |
|-------------------------------------------------------------------------------------|------------------|----------------|-------|------|-----|-----|--|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|                                                                                     |                  | I.W            | L     | S    | d   | r   |  | CVD           |         |         |         |         | PVD     |         |         |         |         |         |
|                                                                                     |                  |                |       |      |     |     |  | JE8015P       | JE8020P | JE8025P | JE8035P | JE6015M | JE6025M | JE6035M | JE4015K | JE4025K | JE5015S | JE5025S |
|   | APKT170508R-MGB  | 10.74          | 18.44 | 5.56 | 4.5 | 0.8 |  |               |         |         |         |         |         |         |         |         |         |         |
|                                                                                     | APKT170516R-MGB  | 10.74          | 18.44 | 5.56 | 4.5 | 1.6 |  |               |         |         |         |         |         |         |         |         |         |         |
|                                                                                     | APKT170524R-MGB  | 10.74          | 18.44 | 5.56 | 4.5 | 2.4 |  |               |         |         |         |         |         |         |         |         |         |         |
|                                                                                     | APKT170530R-MGB  | 10.74          | 18.3  | 5.56 | 4.5 | 3   |  |               |         |         |         |         |         |         |         |         |         |         |
|                                                                                     | APKT170540R-MGB  | 10.74          | 16.84 | 5.56 | 4.5 | 4   |  |               |         |         |         |         |         |         |         |         |         |         |
|  | APMT1135PDER-MGF | 6.16           | 10.83 | 3.18 | 2.8 | 0.8 |  |               |         |         |         |         |         |         |         |         |         |         |
|                                                                                     | APMT1604PDER-MGF | 9.25           | 16.26 | 4.76 | 4.4 | 0.8 |  |               |         |         |         |         |         |         |         |         |         |         |
|  | APMT1135PDER-MRA | 6.16           | 10.83 | 3.18 | 2.8 | 0.8 |  |               |         |         |         |         |         |         |         |         |         |         |
|                                                                                     | APMT1604PDER-MRA | 9.25           | 16.26 | 4.76 | 4.4 | 0.8 |  |               |         |         |         |         |         |         |         |         |         |         |
|  | APMT1135PDER-MRB | 6.16           | 10.83 | 3.18 | 2.8 | 0.8 |  |               |         |         |         |         |         |         |         |         |         |         |
|                                                                                     | APMT1604PDER-MRB | 9.26           | 16.26 | 4.76 | 4.4 | 0.8 |  |               |         |         |         |         |         |         |         |         |         |         |

● Featured grade 主推牌号 ○ Optional grade 可选牌号

3P



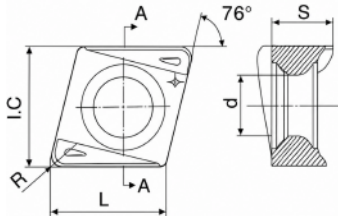
Workpiece material

|   |                               |                    |                 |                     |
|---|-------------------------------|--------------------|-----------------|---------------------|
| P | Steel                         | Continuous cutting | General cutting | Interrupted cutting |
| M | Stainless steel               |                    |                 |                     |
| K | Cast iron                     |                    |                 |                     |
| N | Non-ferrous metal             |                    |                 |                     |
| S | Heat resistant alloy Ti alloy |                    |                 |                     |

| Inserts shape                                                                        | Type            | Dimensions(mm) |      |     |      |     | Coating/Grade |         |         |         |         |         |         |         |         |         |         |  |
|--------------------------------------------------------------------------------------|-----------------|----------------|------|-----|------|-----|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--|
|                                                                                      |                 | I.C            | L    | S   | d    | r   | CVD           |         |         |         | PVD     |         |         | CVD     |         |         | PVD     |  |
|                                                                                      |                 |                |      |     |      |     | JE8015P       | JE8020P | JE8025P | JE8035P | JE6015M | JE6025M | JE6035M | JE4015K | JE4025K | JE5015S | JE5025S |  |
|  | 3PKT100408R-MGC | 6.9            | 10.5 | 4.0 | 3.25 | 0.8 | ○             | ○       | ●       | ○       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |  |
|                                                                                      | 3PKT150508R-MGC | 10.7           | 15.5 | 5.0 | 4.75 | 0.8 | ○             | ○       | ●       | ○       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |  |

● Featured grade 主推牌号 ○ Optional grade 可选牌号

4N



Workpiece material

|   |                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---|-------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| P | Steel                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| M | Stainless steel               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| K | Cast iron                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| N | Non-ferrous metal             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| S | Heat resistant alloy Ti alloy |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

连续切削  
Continuous cutting

一般工况  
General cutting

断续切削  
Interrupted cutting

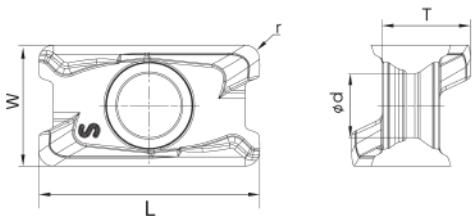
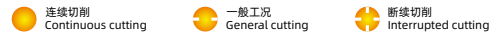
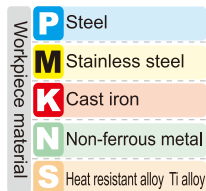
| Inserts shape                                                                         | Type            | Dimensions(mm) |     |      |     |     | Coating/Grade |         |         |         |         |         |         |         |         |         |         |  |
|---------------------------------------------------------------------------------------|-----------------|----------------|-----|------|-----|-----|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--|
|                                                                                       |                 | I.C            | L   | S    | d   | r   | CVD           |         |         |         | PVD     |         |         | CVD     |         | PVD     |         |  |
|                                                                                       |                 |                |     |      |     |     | JE8015P       | JE8020P | JE8025P | JE8035P | JE6015M | JE6025M | JE6035M | JE4015K | JE4025K | JE5015S | JE5025S |  |
|  | 4NKT060308R-MGC | 6.6            | 6.6 | 3.71 | 3.4 | 0.8 |               |         |         |         |         |         |         |         |         |         |         |  |
|                                                                                       |                 |                |     |      |     |     |               |         |         |         |         |         |         |         |         |         |         |  |

● Featured grade 主推牌号 ○ Optional grade 可选牌号

Shoulder Milling

LN□□

LO□□

|   |                                 |  |       |      |      |     |               |         |         |         |         |         |         |         |         |         |         |
|------------------------------------------------------------------------------------|---------------------------------|------------------------------------------------------------------------------------|-------|------|------|-----|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|   | P Steel                         |                                                                                    |       |      |      |     |               |         |         |         |         |         |         |         |         |         |         |
|                                                                                    | M Stainless steel               |                                                                                    |       |      |      |     |               |         |         |         |         |         |         |         |         |         |         |
|                                                                                    | K Cast iron                     |                                                                                    |       |      |      |     |               |         |         |         |         |         |         |         |         |         |         |
|                                                                                    | N Non-ferrous metal             |                                                                                    |       |      |      |     |               |         |         |         |         |         |         |         |         |         |         |
|                                                                                    | S Heat resistant alloy Ti alloy |                                                                                    |       |      |      |     |               |         |         |         |         |         |         |         |         |         |         |
| Inserts shape                                                                      | Type                            | Dimensions(mm)                                                                     |       |      |      |     | Coating/Grade |         |         |         |         |         |         |         |         |         |         |
|                                                                                    |                                 | I.W                                                                                | L     | T    | d    | r   | CVD           |         |         |         | PVD     |         | CVD     |         | PVD     |         |         |
|                                                                                    |                                 |                                                                                    |       |      |      |     | JE8015P       | JE8020P | JE8025P | JE8035P | JE6015M | JE6025M | JE6035M | JE4015K | JE4025K | JE5015S | JE5025S |
|  | LNMU15T608SRGE                  | 10                                                                                 | 16.15 | 6.95 | 4.65 | 0.8 | ○             | ○       | ●       | ○       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                    | LNMU0303ZER                     | 6.0                                                                                | 11.6  | 3.7  | 3.2  | 2   | ○             | ○       | ●       | ○       |         |         |         |         |         |         |         |
|                                                                                    | LNMU110408SRGE                  | 6.6                                                                                | 11.3  | 4.83 | 3.4  | 0.8 | ○             | ○       | ●       | ○       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                    | LORU030310ER-MGA                | 6.2                                                                                | 11.96 | 3.96 | 3.45 | 2   | ○             | ○       | ●       | ○       |         |         |         |         |         |         |         |

JDMT□□

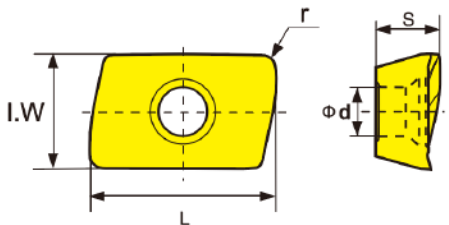
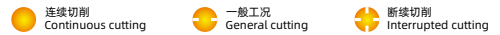
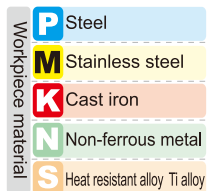
|                    |                                        |                |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |     |   |               |         |         |         |         |         |         |         |         |                    |                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--------------------|----------------------------------------|----------------|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|---|---------------|---------|---------|---------|---------|---------|---------|---------|---------|--------------------|----------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|                    |                                        |                |      | <table><tr><td rowspan="5">Workpiece material</td><td><b>P</b> Steel</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td><b>M</b> Stainless steel</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td><b>K</b> Cast iron</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td><b>N</b> Non-ferrous metal</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td><b>S</b> Heat resistant alloy Ti alloy</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> |     |   |               |         |         |         |         |         |         |         |         | Workpiece material | <b>P</b> Steel |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>M</b> Stainless steel |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>K</b> Cast iron |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>N</b> Non-ferrous metal |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>S</b> Heat resistant alloy Ti alloy |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Workpiece material | <b>P</b> Steel                         |                |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |     |   |               |         |         |         |         |         |         |         |         |                    |                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                    | <b>M</b> Stainless steel               |                |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |     |   |               |         |         |         |         |         |         |         |         |                    |                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                    | <b>K</b> Cast iron                     |                |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |     |   |               |         |         |         |         |         |         |         |         |                    |                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                    | <b>N</b> Non-ferrous metal             |                |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |     |   |               |         |         |         |         |         |         |         |         |                    |                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                    | <b>S</b> Heat resistant alloy Ti alloy |                |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |     |   |               |         |         |         |         |         |         |         |         |                    |                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                    | Type                                   | Dimensions(mm) |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |     |   | Coating/Grade |         |         |         |         |         |         |         |         |                    |                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                    |                                        | I.W            | L    | S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | d   | r | CVD           |         |         |         | PVD     |         |         | CVD     |         | PVD                |                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                    |                                        |                |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |     |   | JE8015P       | JE8020P | JE8025P | JE8035P | JE6015M | JE6025M | JE6035M | JE4015K | JE4025K | JE5015S            | JE5025S        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| JDMT070204R        | 4.25                                   | 7.05           | 2.45 | 1.95                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 0.4 |   |               |         |         |         |         |         |         |         |         |                    |                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| JDMT070208R        | 4.25                                   | 7.05           | 2.45 | 1.95                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 0.8 |   |               |         |         |         |         |         |         |         |         |                    |                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

● Featured grade 主推牌号 ○ Optional grade 可选牌号

BDMT□□

| Inserts shape | Type             | Dimensions(mm) |       |     |     |     | Coating/Grade |         |         |         |         |         |         |         |         |         |         |
|---------------|------------------|----------------|-------|-----|-----|-----|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|               |                  | I.C            | L     | S   | d   | r   | CVD           |         |         |         | PVD     |         | CVD     |         | PVD     |         |         |
|               |                  |                |       |     |     |     | JE8015P       | JE8020P | JE8025P | JE8035P | JE6015M | JE6025M | JE6035M | JE4015K | JE4025K | JE5015S | JE5025S |
|               | BDMT11T308ER-MGL | 6.95           | 12.15 | 3.8 | 2.8 | 0.8 | ○             | ○       | ●       | ○       |         |         |         |         |         |         |         |
|               |                  |                |       |     |     |     |               |         |         |         |         |         |         |         |         |         |         |

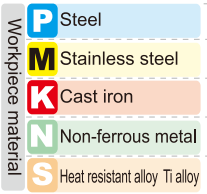
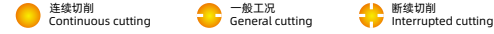
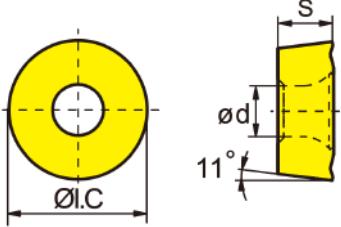
XOMX□□

|  |                                 |  |                                                                                       |                                                                                       |                                                                                       |     |                                                                                       |                                                                                       |                                                                                       |         |                                                                                       |                                                                                       |         |                                                                                       |                                                                                       |         |         |
|---------------------------------------------------------------------------------------|---------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-----|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------|---------|
|  | P Steel                         |  |  |  |  |     |                                                                                       |                                                                                       |                                                                                       |         |                                                                                       |                                                                                       |         |                                                                                       |                                                                                       |         |         |
|                                                                                       | M Stainless steel               |                                                                                       |                                                                                       |                                                                                       |                                                                                       |     |  |  |  |         |                                                                                       |                                                                                       |         |                                                                                       |                                                                                       |         |         |
|                                                                                       | K Cast iron                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |     |                                                                                       |                                                                                       |                                                                                       |         |  |  |         |                                                                                       |                                                                                       |         |         |
|                                                                                       | N Non-ferrous metal             |                                                                                       |                                                                                       |                                                                                       |                                                                                       |     |                                                                                       |                                                                                       |                                                                                       |         |                                                                                       |                                                                                       |         |                                                                                       |                                                                                       |         |         |
|                                                                                       | S Heat resistant alloy Ti alloy |                                                                                       |                                                                                       |                                                                                       |                                                                                       |     |                                                                                       |                                                                                       |                                                                                       |         |                                                                                       |                                                                                       |         |  |  |         |         |
| Inserts shape                                                                         | Type                            | Dimensions (mm)                                                                       |                                                                                       |                                                                                       |                                                                                       |     | Coating/Grade                                                                         |                                                                                       |                                                                                       |         |                                                                                       |                                                                                       |         |                                                                                       |                                                                                       |         |         |
|                                                                                       |                                 | I.W                                                                                   | L                                                                                     | S                                                                                     | d                                                                                     | r   | CVD                                                                                   |                                                                                       |                                                                                       |         | PVD                                                                                   |                                                                                       | CVD     |                                                                                       | PVD                                                                                   |         |         |
|                                                                                       |                                 |                                                                                       |                                                                                       |                                                                                       |                                                                                       |     | JE8015P                                                                               | JE8020P                                                                               | JE8025P                                                                               | JE8035P | JE6015M                                                                               | JE6025M                                                                               | JE6035M | JE4015K                                                                               | JE4025K                                                                               | JE5015S | JE5025S |
|  | XOMX120408TR-MGE                | 8.2                                                                                   | 14.6                                                                                  | 5.07                                                                                  | 3.9                                                                                   | 0.8 | ○                                                                                     | ○                                                                                     | ●                                                                                     | ○       | ○                                                                                     | ●                                                                                     | ○       | ○                                                                                     | ●                                                                                     | ○       | ●       |
|                                                                                       | XOMX120420TR-MGE                | 8.2                                                                                   | 13.7                                                                                  | 5.07                                                                                  | 3.9                                                                                   | 2   | ○                                                                                     | ○                                                                                     | ●                                                                                     | ○       | ○                                                                                     | ●                                                                                     | ○       | ○                                                                                     | ●                                                                                     | ○       | ●       |
|                                                                                       | XOMX120440TR-MGE                | 8.2                                                                                   | 13.1                                                                                  | 5.07                                                                                  | 3.9                                                                                   | 4   | ○                                                                                     | ○                                                                                     | ●                                                                                     | ○       | ○                                                                                     | ●                                                                                     | ○       | ○                                                                                     | ●                                                                                     | ○       | ●       |
|                                                                                       | XOMX060204R-MGG                 | 4.06                                                                                  | 6.9                                                                                   | 2.45                                                                                  | 1.95                                                                                  | 0.8 | ○                                                                                     | ○                                                                                     | ●                                                                                     | ○       |                                                                                       |                                                                                       |         |                                                                                       |                                                                                       |         |         |
|                                                                                       | XOMX060208R-MGG                 | 4.06                                                                                  | 6.9                                                                                   | 2.45                                                                                  | 1.95                                                                                  | 0.8 | ○                                                                                     | ○                                                                                     | ●                                                                                     | ○       |                                                                                       |                                                                                       |         |                                                                                       |                                                                                       |         |         |

● Featured grade 主推牌号 ○ Optional grade 可选牌号

Profiling & Round Insert Milling

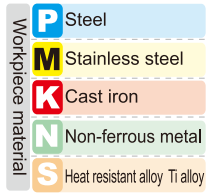
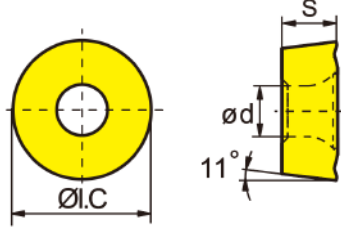
RD



| Inserts shape                                                                       | Type            | Dimensions (mm) |      |      |     |   | Coating/Grade |         |         |         |         |         |         |         |         |         |
|-------------------------------------------------------------------------------------|-----------------|-----------------|------|------|-----|---|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|                                                                                     |                 | I.W             | L    | S    | d   | r | CVD           |         |         |         |         | PVD     |         |         |         |         |
|                                                                                     |                 |                 |      |      |     |   | JE8015P       | JE8020P | JE8025P | JE8035P | JE6015M | JE6025M | JE6035M | JE4015K | JE4025K | JE5015S |
|    | RDET10T3MOT     | 10.0            | 10.0 | 3.97 | 4.4 |   | ○             | ○       | ●       | ○       |         |         |         |         |         |         |
|                                                                                     | RDET1204MOT     | 12.0            | 12.0 | 4.76 | 4.4 |   | ○             | ○       | ●       | ○       |         |         |         |         |         |         |
|  | RDMT10T3M0      | 10.0            | 10.0 | 3.97 | 4.4 |   | ○             | ○       | ●       | ○       |         |         |         |         |         |         |
|                                                                                     | RDMT1604M0      | 16.0            | 16.0 | 4.76 | 5.5 |   | ○             | ○       | ●       | ○       |         |         |         |         |         |         |
|  | RDMW1204M0T-MGH | 12.0            | 12.0 | 4.76 | 4.4 |   | ○             | ○       | ●       | ○       |         |         |         |         |         |         |
|                                                                                     |                 |                 |      |      |     |   |               |         |         |         |         |         |         |         |         |         |
|  | RDMW10T3M0      | 10.0            | 10.0 | 3.97 | 4.4 |   | ○             | ○       | ●       | ○       |         |         |         |         |         |         |
|                                                                                     | RDMW1204MOT     | 12.0            | 12.0 | 4.76 | 4.4 |   | ○             | ○       | ●       | ○       |         |         |         |         |         |         |
|  | RDMW1605M0T     | 16.0            | 16.0 | 5.56 | 5.5 |   | ○             | ○       | ●       | ○       |         |         |         |         |         |         |
|                                                                                     | RDMW1204M0T-MRB | 12.0            | 12.0 | 4.76 | 4.4 |   | ○             | ○       | ●       | ○       |         |         |         |         |         |         |
|  |                 |                 |      |      |     |   |               |         |         |         |         |         |         |         |         |         |
|                                                                                     |                 |                 |      |      |     |   |               |         |         |         |         |         |         |         |         |         |

● Featured grade 主推牌号 ○ Optional grade 可选牌号

RP



| Inserts shape                                                                         | Type            | Dimensions (mm) |      |      |      |   | Coating/Grade |         |         |         |         |         |         |         |         |         |
|---------------------------------------------------------------------------------------|-----------------|-----------------|------|------|------|---|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|                                                                                       |                 | I.W             | L    | S    | d    | r | CVD           |         |         |         |         | PVD     |         |         |         |         |
|                                                                                       |                 |                 |      |      |      |   | JE8015P       | JE8020P | JE8025P | JE8035P | JE6015M | JE6025M | JE6035M | JE4015K | JE4025K | JE5015S |
|    | RPET1204MO-MAA  | 12.0            | 12.0 | 4.76 | 4.4  |   | ○             | ○       | ●       | ○       |         |         |         |         |         |         |
|                                                                                       |                 |                 |      |      |      |   |               |         |         |         |         |         |         |         |         |         |
|  | RPMT10T3MOE-MGI | 10.0            | 10.0 | 3.18 | 4.4  |   | ○             | ○       | ●       | ○       |         |         |         |         |         |         |
|                                                                                       |                 |                 |      |      |      |   |               |         |         |         |         |         |         |         |         |         |
|  | RPMT1204MO-MRA  | 12.0            | 12.0 | 4.76 | 4.4  |   | ○             | ○       | ●       | ○       |         |         |         |         |         |         |
|                                                                                       |                 |                 |      |      |      |   |               |         |         |         |         |         |         |         |         |         |
|  | RPMW08T2M0A-MGA | 8.0             | 8.0  | 2.78 | 3.08 |   | ○             | ○       | ●       | ○       |         |         |         |         |         |         |
|                                                                                       |                 |                 |      |      |      |   |               |         |         |         |         |         |         |         |         |         |
|  | RPMW1003M0      | 10.0            | 10.0 | 3.18 | 4.4  |   | ○             | ○       | ●       | ○       |         |         |         |         |         |         |
|                                                                                       | RPMW1204M0      | 12.0            | 12.0 | 4.76 | 4.4  |   | ○             | ○       | ●       | ○       |         |         |         |         |         |         |
|  | RPMW1003MO-MRA  | 12.0            | 12.0 | 4.76 | 4.4  |   | ○             | ○       | ●       | ○       |         |         |         |         |         |         |
|                                                                                       |                 |                 |      |      |      |   |               |         |         |         |         |         |         |         |         |         |

● Featured grade 主推牌号 ○ Optional grade 可选牌号

HNRX ☐ ☐

● Featured grade  
主推牌号

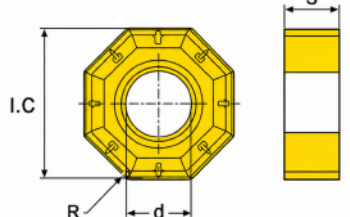
○ Optional grade  
可选牌号

S N ☐ ☐

● Featured grade      ○ Optional grade  
主推牌号              可选牌号

Face & Double-Sided Milling

ON



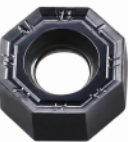
Workpiece material

- P Steel
- M Stainless steel
- K Cast iron
- N Non-ferrous metal
- S Heat resistant alloy Ti alloy

连续切削 Continuous cutting

一般工况 General cutting

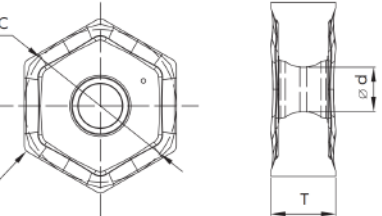
断续切削 Interrupted cutting

| Inserts shape                                                                      | Type           | Dimensions(mm) |   |      |      |     | Coating/Grade |         |         |         |         |         |         |         |
|------------------------------------------------------------------------------------|----------------|----------------|---|------|------|-----|---------------|---------|---------|---------|---------|---------|---------|---------|
|                                                                                    |                | I.C            | L | S    | d    | r   | CVD           |         |         |         | PVD     |         |         |         |
|                                                                                    |                |                |   |      |      |     | JE8015P       | JE8020P | JE8025P | JE8035P | JE6015M | JE6025M | JE6035M | JE4015K |
|  | ONMU050608     | 13.4           |   | 5.88 | 4.68 | 0.8 | ○             | ○       | ●       | ○       |         |         |         |         |
|                                                                                    | ONRG060407ANEN | 13.5           |   | 5.38 | 2.0  | 0.7 | ○             | ○       | ●       | ○       | ○       | ●       | ○       | ○       |
|                                                                                    |                |                |   |      |      |     |               |         |         |         |         |         |         |         |

● Featured grade 主推牌号

○ Optional grade 可选牌号

HD



Workpiece material

- P Steel
- M Stainless steel
- K Cast iron
- N Non-ferrous metal
- S Heat resistant alloy Ti alloy

连续切削 Continuous cutting

一般工况 General cutting

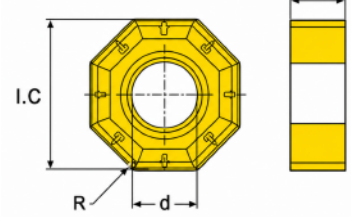
断续切削 Interrupted cutting

| Inserts shape                                                                       | Type         | Dimensions(mm) |   |      |     |     | Coating/Grade |         |         |         |         |         |         |         |
|-------------------------------------------------------------------------------------|--------------|----------------|---|------|-----|-----|---------------|---------|---------|---------|---------|---------|---------|---------|
|                                                                                     |              | I.C            | L | T    | d   | r   | CVD           |         |         |         | PVD     |         |         |         |
|                                                                                     |              |                |   |      |     |     | JE8015P       | JE8020P | JE8025P | JE8035P | JE6015M | JE6025M | JE6035M | JE4015K |
|  | HDMX070408MM | 12.7           |   | 4.76 | 4.5 | 0.8 | ○             | ○       | ●       | ○       | ○       | ●       | ○       | ○       |
|                                                                                     |              |                |   |      |     |     |               |         |         |         |         |         |         |         |
|                                                                                     |              |                |   |      |     |     |               |         |         |         |         |         |         |         |

● Featured grade 主推牌号

○ Optional grade 可选牌号

OD



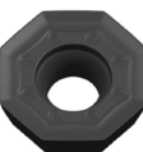
Workpiece material

- P Steel
- M Stainless steel
- K Cast iron
- N Non-ferrous metal
- S Heat resistant alloy Ti alloy

连续切削 Continuous cutting

一般工况 General cutting

断续切削 Interrupted cutting

| Inserts shape                                                                        | Type       | Dimensions(mm) |   |      |      |     | Coating/Grade |         |         |         |         |         |         |         |
|--------------------------------------------------------------------------------------|------------|----------------|---|------|------|-----|---------------|---------|---------|---------|---------|---------|---------|---------|
|                                                                                      |            | I.C            | L | S    | d    | r   | CVD           |         |         |         | PVD     |         |         |         |
|                                                                                      |            |                |   |      |      |     | JE8015P       | JE8020P | JE8025P | JE8035P | JE6015M | JE6025M | JE6035M | JE4015K |
|  | ODRT040404 | 12.7           |   | 4.76 | 4.7  | 0.4 | ○             | ○       | ●       | ○       | ○       | ●       | ○       | ○       |
|                                                                                      | ODRT090308 | 9.525          |   | 3.18 | 3.56 | 0.8 | ○             | ○       | ●       | ○       | ○       | ●       | ○       | ○       |
|                                                                                      | OERW060400 | 14.29          |   | 4.76 | 4.75 |     | ○             | ○       | ●       | ○       | ○       | ●       | ○       | ○       |
|                                                                                      | OPRT160512 | 15.875         |   | 5.56 | 5.59 | 1.2 | ○             | ○       | ●       | ○       | ○       | ●       | ○       | ○       |
|                                                                                      |            |                |   |      |      |     |               |         |         |         |         |         |         |         |

● Featured grade 主推牌号

○ Optional grade 可选牌号

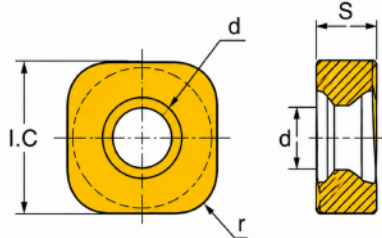
JE8015P  
JE8020P  
JE8025P  
JE8035P  
JE6015M  
JE6025M  
JE6035M  
JE4015K  
JE4025K  
JE5015S  
JE5025S



Milling Tools

High-Feed Milling

SDMT□□



Continuous cutting

General cutting

Interrupted cutting

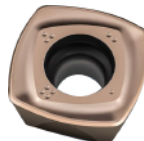
Steel

Stainless steel

Cast iron

Non-ferrous metal

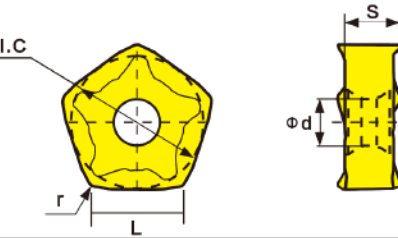
Heat resistant alloy Ti alloy

| Inserts shape                                                                      | Type       | Dimensions(mm) |   |      |     |   | Coating/Grade |         |         |         |         |         |         |         |
|------------------------------------------------------------------------------------|------------|----------------|---|------|-----|---|---------------|---------|---------|---------|---------|---------|---------|---------|
|                                                                                    |            | I.C            | L | S    | d   | r | CVD           |         |         |         | PVD     |         |         |         |
|                                                                                    |            |                |   |      |     |   | JE8015P       | JE8020P | JE8025P | JE8035P | JE6015M | JE6025M | JE6035M | JE4015K |
|  | SDMT120512 | 12.7           |   | 5.56 | 1.2 |   | ○             | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                    | SDMT150512 | 15.875         |   | 5.56 | 1.2 |   | ○             | ○       | ●       | ○       | ○       | ●       | ○       | ●       |

● Featured grade  
主推牌号

○ Optional grade  
可选牌号

PNMU□□



Continuous cutting

General cutting

Interrupted cutting

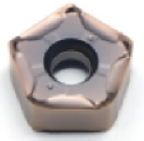
Steel

Stainless steel

Cast iron

Non-ferrous metal

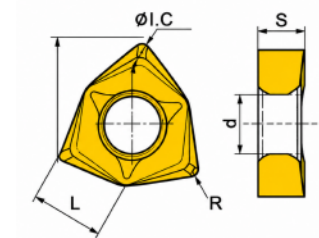
Heat resistant alloy Ti alloy

| Inserts shape                                                                       | Type             | Dimensions(mm) |   |      |     |     | Coating/Grade |         |         |         |         |         |         |         |
|-------------------------------------------------------------------------------------|------------------|----------------|---|------|-----|-----|---------------|---------|---------|---------|---------|---------|---------|---------|
|                                                                                     |                  | I.C            | L | S    | d   | r   | CVD           |         |         |         | PVD     |         |         |         |
|                                                                                     |                  |                |   |      |     |     | JE8015P       | JE8020P | JE8025P | JE8035P | JE6015M | JE6025M | JE6035M | JE4015K |
|  | PNMU0905XNER-MGA | 13.5           |   | 5.56 | 4.7 | 0.8 | ○             | ○       | ●       | ○       | ○       | ●       | ○       | ●       |

● Featured grade  
主推牌号

○ Optional grade  
可选牌号

WNMU□□



Continuous cutting

General cutting

Interrupted cutting

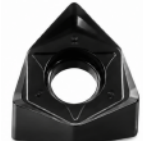
Steel

Stainless steel

Cast iron

Non-ferrous metal

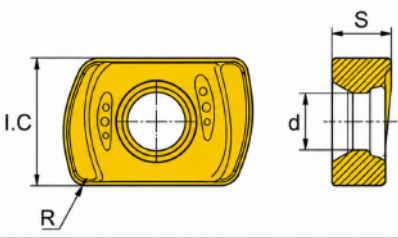
Heat resistant alloy Ti alloy

| Inserts shape                                                                        | Type             | Dimensions(mm) |   |     |     |     | Coating/Grade |         |         |         |         |         |         |         |
|--------------------------------------------------------------------------------------|------------------|----------------|---|-----|-----|-----|---------------|---------|---------|---------|---------|---------|---------|---------|
|                                                                                      |                  | I.C            | L | S   | d   | r   | CVD           |         |         |         | PVD     |         |         |         |
|                                                                                      |                  |                |   |     |     |     | JE8015P       | JE8020P | JE8025P | JE8035P | JE6015M | JE6025M | JE6035M | JE4015K |
|  | WNMU080608EN-MGA | 14             |   | 8.3 | 6.2 | 0.8 | ○             | ○       | ●       | ○       | ○       | ●       | ○       | ●       |

● Featured grade  
主推牌号

○ Optional grade  
可选牌号

BLMP□□



Continuous cutting

General cutting

Interrupted cutting

Steel

Stainless steel

Cast iron

Non-ferrous metal

Heat resistant alloy Ti alloy

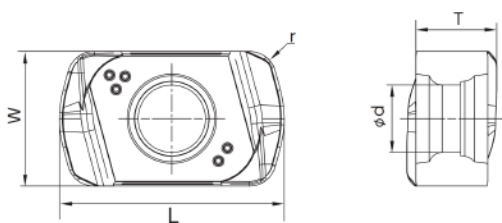
| Inserts shape                                                                         | Type          | Dimensions(mm) |   |      |      |   | Coating/Grade |         |         |         |         |         |         |         |
|---------------------------------------------------------------------------------------|---------------|----------------|---|------|------|---|---------------|---------|---------|---------|---------|---------|---------|---------|
|                                                                                       |               | I.C            | L | S    | d    | r | CVD           |         |         |         | PVD     |         |         |         |
|                                                                                       |               |                |   |      |      |   | JE8015P       | JE8020P | JE8025P | JE8035P | JE6015M | JE6025M | JE6035M | JE4015K |
|  | BLMP0603R-MGC | 6.22           | 9 | 3.37 | 3.15 | 6 | ○             | ○       | ●       | ○       | ○       | ●       | ○       | ●       |
|                                                                                       | BLMP0603R-MGJ | 6.22           | 9 | 3.37 | 3.2  | 6 | ○             | ○       | ●       | ○       | ○       | ●       | ○       | ●       |

● Featured grade  
主推牌号

○ Optional grade  
可选牌号

High-Feed Milling

ENMU

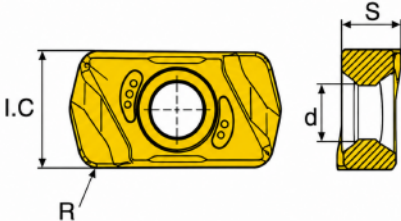
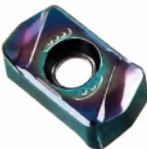
|                                                                                                                                                                                |                   |                                                                                                        |    |     |   |     |               |         |         |         |         |         |         |         |         |         |         |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------------------------------------------------------------------------------------------------|----|-----|---|-----|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--|
|                                                                                               |                   | <div>连续切削 Continuous cutting</div> <div>一般工况 General cutting</div> <div>断续切削 Interrupted cutting</div> |    |     |   |     |               |         |         |         |         |         |         |         |         |         |         |  |
| <div>Workpiece material</div> <div>P Steel</div> <div>M Stainless steel</div> <div>K Cast iron</div> <div>N Non-ferrous metal</div> <div>S Heat resistant alloy Ti alloy</div> |                   | Dimensions(mm)                                                                                         |    |     |   |     | Coating/Grade |         |         |         |         |         |         |         |         |         |         |  |
|                                                                                                                                                                                |                   |                                                                                                        |    |     |   |     | CVD           |         |         |         | PVD     |         |         |         |         |         |         |  |
|                                                                                                                                                                                |                   |                                                                                                        |    |     |   |     |               |         |         |         |         |         |         |         |         |         |         |  |
|                                                                                                                                                                                |                   |                                                                                                        |    |     |   |     |               |         |         |         |         |         |         |         |         |         |         |  |
|                                                                                                                                                                                |                   |                                                                                                        |    |     |   |     |               |         |         |         |         |         |         |         |         |         |         |  |
|                                                                                             | Type              | I.W                                                                                                    | L  | T   | d | r   | JE8015P       | JE8020P | JE8025P | JE8035P | JE6015M | JE6025M | JE6035M | JE4015K | JE4025K | JE5015S | JE5025S |  |
|                                                                                                                                                                                | ENMU100412PER-MGK | 6                                                                                                      | 10 | 3.6 | 3 | 1.2 | ○             | ○       | ●       | ○       | ○       | ●       | ○       | ○       | ●       | ○       | ●       |  |
|                                                                                                                                                                                |                   |                                                                                                        |    |     |   |     |               |         |         |         |         |         |         |         |         |         |         |  |
|                                                                                                                                                                                |                   |                                                                                                        |    |     |   |     |               |         |         |         |         |         |         |         |         |         |         |  |
|                                                                                                                                                                                |                   |                                                                                                        |    |     |   |     |               |         |         |         |         |         |         |         |         |         |         |  |

● Featured grade 主推牌号

○ Optional grade 可选牌号

End & Peripheral Milling

LNMC

|                                                                                                                                                                                |  |                                                                                                                             |                  |                   |                 |                |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |              |              |              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------|------------------|-------------------|-----------------|----------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------|--------------|--------------|
| <div></div>                                                                                 |  | <div><div>连续切削<br/>Continuous cutting</div><div>一般工况<br/>General cutting</div><div>断续切削<br/>Interrupted cutting</div></div> |                  |                   |                 |                |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |              |              |              |
| <div>Workpiece material</div> <div>P Steel</div> <div>M Stainless steel</div> <div>K Cast iron</div> <div>N Non-ferrous metal</div> <div>S Heat resistant alloy Ti alloy</div> |  | <div>Coating/Grade</div>                                                                                                    |                  |                   |                 |                |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |              |              |              |
|                                                                                                                                                                                |  | <div>Dimensions(mm)</div>                                                                                                   |                  |                   |                 |                |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |              |              |              |
|                                                                                                                                                                                |  | <div>I.W</div>                                                                                                              | <div>L</div>     | <div>S</div>      | <div>d</div>    | <div>r</div>   | <div>CVD</div>     |                    |                    |                    | <div>PVD</div>     |                    |                    |                    |                    |                    |                    |                    |              |              |              |
|                                                                                                                                                                                |  |                                                                                                                             |                  |                   |                 |                |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |              |              |              |
|                                                                                                                                                                                |  |                                                                                                                             |                  |                   |                 |                | <div>JE8015P</div> | <div>JE8020P</div> | <div>JE8025P</div> | <div>JE8035P</div> | <div>JE6015M</div> | <div>JE6025M</div> | <div>JE6035M</div> | <div>JE4015K</div> | <div>JE4025K</div> | <div>JE5015S</div> | <div>JE5025S</div> |                    |              |              |              |
| <div>Inserts shape</div>                                                                                                                                                       |  | <div>Type</div>                                                                                                             | <div>I.W</div>   | <div>L</div>      | <div>S</div>    | <div>d</div>   | <div>r</div>       | <div>JE8015P</div> | <div>JE8020P</div> | <div>JE8025P</div> | <div>JE8035P</div> | <div>JE6015M</div> | <div>JE6025M</div> | <div>JE6035M</div> | <div>JE4015K</div> | <div>JE4025K</div> | <div>JE5015S</div> | <div>JE5025S</div> |              |              |              |
| <div></div>                                                                               |  | <div>LNMC120500</div>                                                                                                       | <div>12.7</div>  | <div>12.7</div>   | <div>5.56</div> | <div>4.5</div> |                    |                    |                    |                    |                    |                    |                    |                    |                    | <div>○</div>       | <div>●</div>       |                    |              |              |              |
|                                                                                                                                                                                |  | <div>LNMC130600</div>                                                                                                       | <div>12.7</div>  | <div>12.7</div>   | <div>6.35</div> | <div>5.2</div> |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    | <div>○</div>       | <div>●</div>       |              |              |              |
|                                                                                                                                                                                |  | <div>LNMC150600</div>                                                                                                       | <div>12.7</div>  | <div>15.875</div> | <div>7.94</div> | <div>5.6</div> |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    | <div>○</div>       | <div>●</div> |              |              |
|                                                                                                                                                                                |  | <div>LNMC150700</div>                                                                                                       | <div>15.88</div> | <div>15.875</div> | <div>7.94</div> | <div>5.6</div> |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    | <div>○</div>       | <div>●</div> |              |              |
|                                                                                                                                                                                |  | <div>LNMC190602</div>                                                                                                       | <div>14.3</div>  | <div>19.05</div>  | <div>6.35</div> | <div>5.8</div> |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    | <div>○</div>       | <div>●</div> |              |              |
|                                                                                                                                                                                |  | <div>LNMC250500</div>                                                                                                       | <div>14.3</div>  | <div>25.4</div>   | <div>4.76</div> | <div>5.4</div> |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    | <div>○</div>       | <div>●</div> |              |              |
|                                                                                                                                                                                |  | <div>LNMC251200</div>                                                                                                       | <div>15.88</div> | <div>25.4</div>   | <div>12.7</div> | <div>6.5</div> |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    | <div>○</div>       | <div>●</div> |              |              |
|                                                                                                                                                                                |  | <div>LNMC270902</div>                                                                                                       | <div>15.6</div>  | <div>27.9</div>   | <div>9.52</div> | <div>5.7</div> |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    | <div>○</div>       | <div>●</div> |              |              |
|                                                                                                                                                                                |  | <div>LNMC280500</div>                                                                                                       | <div>15.0</div>  | <div>28.8</div>   | <div>4.76</div> | <div>5.7</div> |                    |                    |                    | <div>○</div>       | <div>○</div>       | <div>●</div>       | <div>○</div>       | <div>○</div>       | <div>●</div>       | <div>○</div>       | <div>○</div>       | <div>○</div>       | <div>●</div> | <div>○</div> | <div>●</div> |
|                                                                                                                                                                                |  |                                                                                                                             |                  |                   |                 |                |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |              |              |              |
|                                                                                                                                                                                |  |                                                                                                                             |                  |                   |                 |                |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |              |              |              |

● Featured grade  
主推牌号

○ Optional grade  
可选牌号

