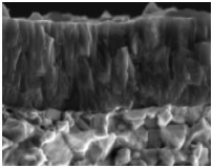


DRILLING


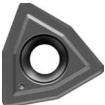
Drilling Overview

Drilling Grades



| Drilling Grades | | P Steel | | | | M Stainless Steel | | | | K Cast Iron | | | |
|-----------------|-------|---------|-----|-----|-----|-------------------|-----|-----|-----|-------------|-----|-----|-----|
| | | P05 | P15 | P25 | P35 | M05 | M15 | M25 | M35 | K05 | K15 | K25 | K35 |
| PVD | YG602 | | | | 602 | | | | 602 | | | | 602 |

| | | |
|--|--|---|
| YG602 P20 - P35 M20 - M40 K20 - K40 S15 - S25 | PVD - TiAlN  | Universal grade for General Drilling Application <ul style="list-style-type: none"> • Ultra Dense PVD Coating with optimal thermal resistance & strength • Sub-Micron substrate designed for demanding application |
|--|--|---|

Universal Drilling Inserts

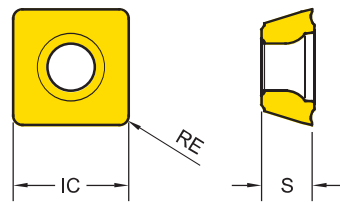
| | | | | |
|---|--------------|-------------|------|------------------------|
|  | 4 Corner | SPMX Series | SPMX | 05, 06, 07, 09, 11, 14 |
|  | ISO 3 Corner | WCMX Series | WCMX | 04, 05, 06, 08 |

Drilling Chipbreakers



| P | M | K | | |
|---|---|---|-------------------------------------|--|
| | M | | -ST |  <ul style="list-style-type: none"> • Sharp Geometry • Sticky Material, Stainless Steel |
| P | M | K | General Inserts (No Description) |  <ul style="list-style-type: none"> • First Choice for General Application |

Drilling - Inserts

Drilling Inserts (SPMX)



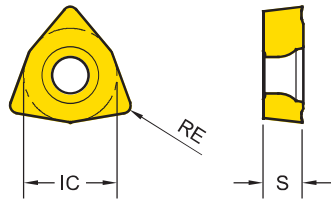
| Series | IC | S |
|-------------|-------|------|
| SPMX 050204 | 5.00 | 2.38 |
| SPMX 060204 | 6.00 | 2.41 |
| SPMX 07T308 | 7.94 | 3.97 |
| SPMX 090408 | 9.80 | 4.30 |
| SPMX 110408 | 11.50 | 4.90 |
| SPMX 140512 | 14.30 | 5.30 |

| SPMX | | Designation | Fn (mm/rev.) | YG602 |
|---|--|------------------|-----------------|-------|
| SPMX General  | | SPMX 050204 | 0.07~0.14 | ● |
| | | SPMX 060204 | 0.08~0.14 | ● |
| | | SPMX 07T308 | 0.08~0.16 | ● |
| | | SPMX 090408 | 0.08~0.16 | ● |
| | | SPMX 110408 | 0.1~0.18 | ● |
| | | SPMX 140512 | 0.1~0.2 | ● |
| -ST Stainless Steel  | | SPMX 050204 - ST | 0.03~0.1 | ● |
| | | SPMX 060204 - ST | 0.04~0.11 | ● |
| | | SPMX 07T308 - ST | 0.04~0.11 | ● |
| | | SPMX 090408 - ST | 0.05~0.12 | ● |

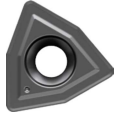
| Cutting Speed | | | Vc (m/min.) | |
|---------------|-------|----------------------------|-------------|------|
| ISO | VDI | Sub Group | YG602 | |
| | | | Min. | Max. |
| P | 1~5 | Non Alloy Steel | 140 | 240 |
| | 6~9 | Low Alloy Steel | 120 | 220 |
| | 10~11 | High Alloy Steel | 70 | 150 |
| M | 12~13 | Ferritic & Martensitic | 120 | 200 |
| | 14 | Austenitic Stainless Steel | 140 | 250 |
| K | 15~16 | Grey Cast Iron | 140 | 220 |
| | 17~18 | Nodular Cast Iron | 150 | 240 |

Drilling - Inserts

Drilling Inserts (WCMX)



| Series | IC | S |
|-------------|-------|------|
| WCMX 040208 | 6.35 | 2.38 |
| WCMX 050308 | 7.94 | 3.18 |
| WCMX 06T308 | 9.53 | 3.97 |
| WCMX 080412 | 12.70 | 4.76 |

| WCMX | | Designation | Fn (mm/rev.) | YG602 |
|--|--|-------------|-----------------|-------|
| WCMX General  | | WCMX 040208 | 0.05~0.11 | ● |
| | | WCMX 050308 | 0.06~0.14 | ● |
| | | WCMX 06T308 | 0.08~0.14 | ● |
| | | WCMX 080412 | 0.08~0.14 | ● |

Compatible Screw for WCMX

| Insert | Thread | Length | Head Diameter | Head Angle | Torx Screw |
|---------|--------|--------|---------------|------------|--------------|
| WCMX 06 | M3.5 | 7.4 | 4.8 | 60 | Torx Plus 15 |
| WCMX 08 | M4 | 9.4 | 5.6 | 60 | Torx Plus 15 |

| Cutting Speed | | | Vc (m/min.) | |
|---------------|-------|----------------------------|-------------|------|
| ISO | VDI | Sub Group | YG602 | |
| | | | Min. | Max. |
| P | 1~5 | Non Alloy Steel | 140 | 240 |
| | 6~9 | Low Alloy Steel | 120 | 220 |
| | 10~11 | High Alloy Steel | 70 | 150 |
| M | 12~13 | Ferritic & Martensitic | 120 | 200 |
| | 14 | Austenitic Stainless Steel | 140 | 250 |
| K | 15~16 | Grey Cast Iron | 140 | 220 |
| | 17~18 | Nodular Cast Iron | 150 | 240 |