
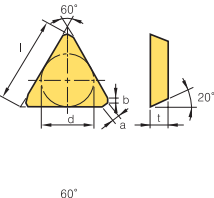

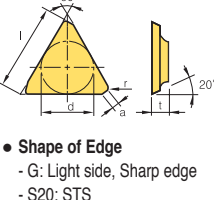

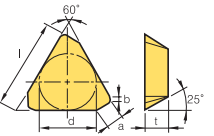

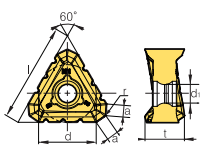

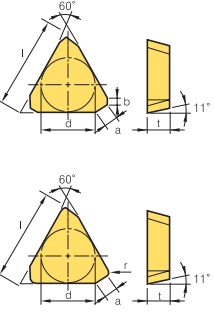


E Milling Inserts

| Workpiece | Steel | P | ● ○ ◆ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ | | | | | | | | | | | Machining types | |
|----------------|--------------------------------------|---|---|--|--|--|--|--|--|--|--|--|--|--|--|
| | Stainless steel | M | ● ○ ◆ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ | | | | | | | | | | | ● Continuous cutting ○ General cutting ◆ Interrupted cutting | |
| | Cast iron | K | ● ○ ◆ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ | | | | | | | | | | | | |
| | Non-ferrous metal | N | ● ○ ◆ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ | | | | | | | | | | | | |
| | Heat resistant alloy, Titanium alloy | S | ● ○ ◆ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ | | | | | | | | | | | | |
| Hardened steel | H | ● ○ ◆ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ ○ ◆ | | | | | | | | | | | | | |

| Inserts | Designation | Cermet | | Coated | | | | | | | Uncoated | | Dimensions (mm) | | | | | | Geometries | Available tools | | | | | |
|---|-------------|--------|------|--------|--------|--------|--------|--------|--------|--------|----------|--------|-----------------|--------|-------|------|--------|--------|------------|-----------------|------|------|---|---|-----|
| | | CN2000 | CN30 | NCM325 | NCM335 | NC5330 | NCM535 | NCM545 | PC3700 | PC6510 | PC9530 | PC9540 | PC5300 | PC5400 | ST30A | G10 | H01 | l | | | d | t | r | d ₁ | a |
| TEC(E)N  | TECN 22R | | | | | | | | | | | | | | | | 11.0 | 6.35 | 3.18 | - | - | 1.0 | 0.5 |  | E58 |
| | 22TR | ● | | | | | | | | | | | | | | | 11.0 | 6.35 | 3.18 | 0.8 | - | 0.5 | - | | |
| | 32R | | | | | | | | | | | | | | | | 16.5 | 9.525 | 3.18 | - | - | 1.0 | 0.5 | | |
| | 32R-G | | | | | | | | | | | | | | | | 16.5 | 9.525 | 3.18 | - | - | 1.0 | 0.5 | | |
| | 32TR | ● | | ● | | | | | | | | | | | | | 16.5 | 9.525 | 3.18 | 0.8 | - | 0.5 | - | | |
| | 32TR-S20 | | | | | | | | | | ● | | | | | | 16.5 | 9.525 | 3.18 | 0.8 | - | 0.5 | - | | |
| | 43R-G | | | | | | | | | | | | | | | | 22.0 | 12.7 | 4.76 | - | - | 2.0 | 0.5 | | |
| | 43TR-Z | | | | | | | | | | | | | | | | 22.0 | 12.7 | 4.76 | 0.8 | - | 1.5 | - | | |
| 43TR | | | | | | | | | | | | | | | | 22.0 | 12.7 | 4.76 | 0.8 | - | 1.5 | - | | | |
| TEEN  | TEEN 32TR | | | | | | | | | | | | | | | 16.5 | 9.525 | 3.18 | 0.8 | - | 0.5 | - |  | E52 | |
| 43R-Z | | | | | | | | | | | | | | | | 22.0 | 12.7 | 4.76 | - | - | 2.0 | 0.5 | | | |
| 43TR-Z | | | | | | | | | | | | | | | | 22.0 | 12.7 | 4.76 | 0.8 | - | 1.5 | - | | | |
| 43TR-ZH | | | | | | | | | | ● | | | | | | 22.0 | 12.7 | 4.76 | 0.8 | - | 1.5 | - | | | |
| 43R | | | | | | | | | | | | | | | | 22.0 | 12.7 | 4.76 | - | - | 2.0 | 0.5 | | | |
| 43R-G | | | | | | | | | | | | | | | | 22.0 | 12.7 | 4.76 | - | - | 2.0 | 0.5 | | | |
| TFCN  | 2203PFR | | | | | | | | | | | | | | | 22.0 | 12.7 | 3.18 | - | - | 2.42 | 0.71 |  | E65~ E67 | |
| 2203PFL | | | | | | | | | | | | | | | | 22.0 | 12.7 | 3.18 | - | - | 2.42 | 0.71 | | | |
| TNMX  | 2710AZNR-NM | | | | ● | ● | | ● | ● | ● | ● | | | | | 27 | 15.875 | 10 | 0.8 | 5.6 | 2.63 | - |  | E53 | |
| 2710AZNL-NM | | | | | | | | | | | | | | | | 27 | 15.875 | 10 | 0.8 | 5.6 | 2.63 | - | | | |
| 3012PNR-NM | | | | | | | | | | | | | | | | 30 | 17.462 | 11.970 | 0.8 | 5.6 | 3.5 | - | | | |
| TPCN  | 1103PPN | | ● | | | | | | | | | | | | | 11.0 | 6.35 | 3.18 | - | - | 0.7 | 0.7 |  | E53 | |
| 1103PPTN | | | | | | | | | | | | | | | | 11.0 | 6.35 | 3.18 | - | - | 0.7 | 0.7 | | | |
| 1603PDR | | | | ● | | | | | | | | | | | | 16.5 | 9.525 | 3.18 | - | - | 1.2 | 0.7 | | | |
| 1603PPN | | | ● | ● | | | | | | ● | | | | | | 16.5 | 9.525 | 3.18 | - | - | 1.2 | 1.2 | | | |
| 1603PPR | | | ● | ● | | | | | | | | | | | | 16.5 | 9.525 | 3.18 | - | - | 1.2 | 1.0 | | | |
| 1603PPR-RH | | | | | | | | | | | | | | | | 16.5 | 9.525 | 3.18 | - | - | 1.2 | 1.0 | | | |
| 1603PPR-G | | | | | | | | | | | | | | ● | | 16.5 | 9.525 | 3.18 | - | - | 1.2 | 1.0 | | | |
| 1603PPSR | | | | | | | | | | | | | | | | 16.5 | 9.525 | 3.18 | - | - | 1.2 | 1.0 | | | |
| 1603PPTN | | | | | | | | | | | | | | | | 16.5 | 9.525 | 3.18 | - | - | 1.2 | 1.2 | | | |
| 1603PPTR | | | | | | | | | | | | | | | | 16.5 | 9.525 | 3.18 | - | - | 1.2 | 1.0 | | | |
| 1603PPTR-RH | | | | | | | | | | | | | | | | 16.5 | 9.525 | 3.18 | - | - | 1.2 | 1.0 | | | |
| 1603PDER-RH | | | | | | | | | | | ● | | | | | 16.5 | 9.525 | 3.18 | 0.8 | - | 1.5 | - | | | |
| 1603PDSR-RH | | | | | | | | | | | ● | | | | | 16.5 | 9.525 | 3.18 | 0.8 | - | 1.5 | - | | | |
| 1603PDR-S20 | | | | | | | | | | | | | | | | 16.5 | 9.525 | 3.18 | - | - | 1.2 | 0.7 | | | |
| 1603PDR-RN | | | | | | | | | | | | | | | | 16.5 | 9.525 | 3.18 | - | - | 1.5 | 1.1 | | | |
| 2204PDR | | | ● | ● | | | | | | | | | | | | 22.0 | 12.7 | 4.76 | - | - | 1.4 | 0.7 | | | |
| 2204PDR-RH | | | | | | | | | | | | | | | | 22.0 | 12.7 | 4.76 | - | - | 1.4 | 0.7 | | | |
| 2204PDR-RN | | | | | | | | | | | | | | | | 22.0 | 12.7 | 4.76 | - | - | 1.42 | 0.52 | | | |
| 2204PDR-G | | | | | | | | | | | | | | ● | | 22.0 | 12.7 | 4.76 | - | - | 1.4 | 0.7 | | | |
| 2204PDL | | | | | | | | | | | | | | | | 22.0 | 12.7 | 4.76 | - | - | 1.4 | 0.7 | | | |
| 2204PDSR | | | | | | ● | | | | | | | | | | 22.0 | 12.7 | 4.76 | - | - | 1.4 | 0.7 | | | |
| 2204PDTR | | | | | | | | | | | | | | | | 22.0 | 12.7 | 4.76 | - | - | 1.4 | 0.7 | | | |
| 2204PPN | | | | | | | | | | | | | | | | 22.0 | 12.7 | 4.76 | - | - | 1.2 | 1.2 | | | |
| 2204PPTN | | | | | | | | | | | | | | | | 22.0 | 12.7 | 4.76 | - | - | 1.2 | 1.2 | | | |
| 2204PDR-RH | | | | | | | | | | | | | | | | 22.0 | 12.7 | 4.76 | 0.8 | - | 1.8 | - | | | |
| 2204PDER-RH | | | | | | | | | | | ● | | | | | 22.0 | 12.7 | 4.76 | 0.8 | - | 1.8 | - | | | |
| 2204PDSR-RH | | | | | | | | | | | ● | | | | | 22.0 | 12.7 | 4.76 | 0.8 | - | 1.8 | - | | | |
| 2204PDR-S20 | | | | | | | | | | | | | | ● | | 22.0 | 12.7 | 4.76 | - | - | 1.4 | 0.7 | | | |

※ In this page, TPC(K)N □□□□P-N is for FC·HC and □□□□P-R is for Cutter (face).

● : Stock item

