# STC End Mills Set
# SuperF-UT Z


| Z | WN | VHM | Al-TiN+ | h10 | R | HB | 48° | HPC |
|---|---|---|---|---|---|---|---|---|

| P | M | K | N | S | H |
|---|---|---|---|---|---|
| ● | ● | | | ● | |

- Particulary stable thanks to re-inforced core
- Universal application
- Up to 1400N/mm²
- Micro-corner protection
- Centre cutting
- Unequal flute spacing
- HPC machining of tough, low- and high-alloyed steels and difficult to machine special materials

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# F-UT Z and ZS

HPC

| Material | Hardness / tensile strength | Cutting width ae | $v_c$ [m/min] | Feed fz [mm/z] with nom. Ø | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 3 | 6 | 8 | 10 | 12 | 16 | 20 | 25 |
| **P** Struct. + free-cutting steels, unalloyed heat-treat. + case hard. steels<br>1.0486 P275N, 1.0345, P235GH, 1.0050, 1.8937, 1.0718 11SMnPb30, 1.1178 C30E, 1.0503 C45, 1.2307 29CrMoV9 | up to 850 N/mm² | 0.3xD | 280 | 0.015 | 0.040 | 0.050 | 0.060 | 0.070 | 0.100 | 0.120 | 0.140 |
| **P** Free-cutting steels, unalloyed case hardened steels, nitriding steels<br>1.0727 46 S20, 1.0726 60 S20, 1.0757 46SPb20, 1.0601 C60, 1.1221 C60E, 1.7043 38Cr4, 1.5752 15NiCr13, 1.7131 16MnCr5 | 850-1,200 N/mm² | 0.25xD | 180 | 0.015 | 0.030 | 0.050 | 0.060 | 0.070 | 0.100 | 0.100 | 0.130 |
| **P** Alloyed heat-treatable, tool and high speed steels<br>1.2379 X155CrVMo12-1, 1.3243 S 6-5-2-5, 1.3343 S 6-5-2, 1.5026 55Si7, 1.7176 55Cr3, 1.8159 51CrV4 | 850-1,400 N/mm² | 0.25xD | 180 | 0.015 | 0.030 | 0.050 | 0.060 | 0.070 | 0.100 | 0.100 | 0.130 |
| **M** Stainless steel<br>1.4104 X14CrMoS17, 1.4105 X6CrMoS17, 1.4305 X10CrNiS18-9<br>USA = 303, 410, 420F, 430, 430F | up to 750 N/mm² | 0.2xD | 150 | 0.015 | 0.030 | 0.040 | 0.050 | 0.060 | 0.070 | 0.090 | 0.120 |
| **M** Stainless steel<br>1.4301X5CrNi18-10, 1.4303 X5CrNi18-12 1.4310 XCrNi18-8<br>USA = 304, 304L, 420 | 750-850 N/mm² | 0.15xD | 100 | 0.015 | 0.030 | 0.040 | 0.050 | 0.060 | 0.070 | 0.090 | 0.120 |
| **M** Stainless steel<br>1.4438 X2CrNiMo18-15-4, 1.4404 X2CrNiMo17-12-2, 1.4571 X6CrNiTi18-10 | up to 850 N/mm² | 0.15xD | 100 | 0.015 | 0.030 | 0.040 | 0.050 | 0.060 | 0.070 | 0.090 | 0.120 |
| **S** Special alloys (nickel based "Ni")<br>Nimonic, Inconel, Monel, Hastelloy | above 1,300 N/mm² | 0.15xD | 130 | 0.016 | 0.025 | 0.035 | 0.050 | 0.060 | 0.080 | 0.100 | 0.120 |
| **T** Titanium alloys ("Ti")<br>3.7024 Ti99,5, 3.7114 TiAl5Sn2,5, 3.7124 TiCu2<br>3.7154 TiAl6Zr5, 3.7164 TiAl6V4, 3.7184 TiAl4Mo4Sn2,5 | up to 1,300 N/mm² | 0.15xD | 130 | 0.016 | 0.025 | 0.035 | 0.050 | 0.060 | 0.080 | 0.100 | 0.120 |

Slotting possible upto $a_p$ 0,8xD with Type F-UT Z (with 30% reduced $v_c$ and $f_z$)


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