

WM-Satz-M-Nr.2-TIN

tool maker set



| applications - materials | | cutting speed vc in m/min | | |
|--|----------------------------|------------------------------|-------------|------|
| | | min. | recommended | max. |
| P1.1 Construction steels, Free-cutting steels, etc. | $\leq 600 \text{ N/mm}^2$ | 1 | 2 | 3 |
| P2.1 Construction steels, Cementation steels, Steel castings, etc. | $\leq 800 \text{ N/mm}^2$ | 1 | 2 | 3 |
| P3.1 Cementation steels, Heat-treatable steels, Cold work steels, etc. | $\leq 1000 \text{ N/mm}^2$ | 1 | 2 | 3 |
| P4.1 Heat-treatable steels, Cold work steels, Nitriding steels, etc. | $\leq 1200 \text{ N/mm}^2$ | 1 | 2 | 3 |
| P5.1 High-alloyed steels, Cold work steels, Hot work steels, etc. | $\leq 1400 \text{ N/mm}^2$ | 1 | 2 | 3 |
| M1.1 Ferritic, martensitic | $\leq 950 \text{ N/mm}^2$ | 1 | 2 | 3 |
| M2.1 Austenitic | $\leq 950 \text{ N/mm}^2$ | 1 | 2 | 3 |
| M3.1 Austenitic-ferritic (Duplex) | $\leq 1100 \text{ N/mm}^2$ | 1 | 2 | 3 |
| M4.1 Austenitic-ferritic heat-resistant (Super Duplex) | $\leq 1250 \text{ N/mm}^2$ | 1 | 2 | 3 |
| K1.1 Cast iron with lamellar graphite (GJL) | 100-250 N/mm ² | 1 | 2 | 3 |
| K1.2 Cast iron with lamellar graphite (GJL) | 250-450 N/mm ² | 1 | 2 | 3 |
| K2.1 Cast iron with nodular graphite (GJS) | 350-500 N/mm ² | 1 | 2 | 3 |
| K2.2 Cast iron with nodular graphite (GJS) | 500-900 N/mm ² | 1 | 2 | 3 |
| K3.1 Cast iron with vermicular graphite (GJV) | 300-400 N/mm ² | 1 | 2 | 3 |
| K3.2 Cast iron with vermicular graphite (GJV) | 400-500 N/mm ² | 1 | 2 | 3 |
| K4.1 Malleable cast iron (GTMW, GTMB) | 250-500 N/mm ² | 1 | 2 | 3 |
| K4.2 Malleable cast iron (GTMW, GTMB) | 500-800 N/mm ² | 1 | 2 | 3 |

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|--|------------------------------|------------------------------|-------------|------|
| | | min. | recommended | max. |
| N1.1 Aluminium wrought alloys | $\leq 200 \text{ N/mm}^2$ | 1 | 2 | 3 |
| N1.2 Aluminium wrought alloys | $\leq 350 \text{ N/mm}^2$ | 1 | 2 | 3 |
| N1.3 Aluminium wrought alloys | $\leq 550 \text{ N/mm}^2$ | 1 | 2 | 3 |
| N1.4 Aluminium cast alloys | Si $\leq 7\%$ | 1 | 2 | 3 |
| N1.5 Aluminium cast alloys | $7\% < \text{Si} \leq 12\%$ | 1 | 2 | 3 |
| N1.6 Aluminium cast alloys | $12\% < \text{Si} \leq 17\%$ | 1 | 2 | 3 |
| N2.1 Pure copper, low-alloyed copper | $\leq 400 \text{ N/mm}^2$ | 1 | 2 | 3 |
| N2.2 Copper-zinc alloys (brass, long-chipping) | $\leq 550 \text{ N/mm}^2$ | 1 | 2 | 3 |
| N2.3 Copper-zinc alloys (brass, short-chipping) | $\leq 550 \text{ N/mm}^2$ | 1 | 2 | 3 |
| N2.4 Copper-aluminium alloys (alu bronze, long-chipping) | $\leq 800 \text{ N/mm}^2$ | 1 | 2 | 3 |
| N2.5 Copper-tin alloys (tin bronze, long-chipping) | $\leq 700 \text{ N/mm}^2$ | 1 | 2 | 3 |
| N2.6 Copper-tin alloys (tin bronze, short-chipping) | $\leq 400 \text{ N/mm}^2$ | 1 | 2 | 3 |
| N2.7 Special copper alloys | $\leq 600 \text{ N/mm}^2$ | 1 | 2 | 3 |
| S2.1 Pure nickel | $\leq 600 \text{ N/mm}^2$ | 1 | 2 | 3 |
| S2.2 Nickel-base alloys | $\leq 1000 \text{ N/mm}^2$ | 1 | 2 | 3 |
| S2.3 Nickel-base alloys | $\leq 1600 \text{ N/mm}^2$ | 1 | 2 | 3 |
| S2.4 Cobalt-base alloys | $\leq 1000 \text{ N/mm}^2$ | 1 | 2 | 3 |
| S2.5 Cobalt-base alloys | $\leq 1600 \text{ N/mm}^2$ | 1 | 2 | 3 |
| S2.6 Iron-base alloys | $\leq 1500 \text{ N/mm}^2$ | 1 | 2 | 3 |