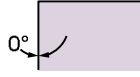


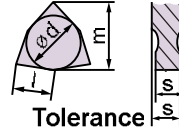
W N M G



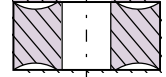
Shape



Clearance Angle



Tolerance
 $s \pm 0.13$
 For $l = 06$, $d \pm 0.05$ $m \pm 0.08$
 For $l = 08$, $d \pm 0.08$ $m \pm 0.13$



Fixing Chip breaker

* Available from Q2-2013

| Insert Designation | Grade | l | s | r | Catalog Nr. |
|--------------------|---------|---|------|-----|-------------|
| WNMG 060404 NN | LT 1000 | 6 | 4.76 | 0.4 | T0001949 |
| WNMG 060408 NN | LT 1000 | 6 | 4.76 | 0.8 | T0001950 |
| WNMG 060408 NX* | LT 1000 | 6 | 4.76 | 0.8 | T0003014 |
| WNMG 080404 NN | LT 1000 | 8 | 4.76 | 0.4 | T0001951 |
| WNMG 080408 NN | LT 1000 | 8 | 4.76 | 0.8 | T0001952 |
| WNMG 080408 NM | LT 1000 | 8 | 4.76 | 0.8 | T0001969 |
| WNMG 080408 NX | LT 1000 | 8 | 4.76 | 0.8 | T0002742 |
| WNMG 080412 NN | LT 1000 | 8 | 4.76 | 1.2 | T0001953 |

Application Guide **NN** All purpose Chipbreaker **NX** All purpose Chipbreaker **NM** Steel and Cast Iron

Finishing Medium Roughing / Interrupted cut

| | | | |
|----------------|---|---|---|
| WNMG 060404 NN | 😊 | 😐 | 😞 |
| WNMG 060408 NN | 😐 | 😊 | 😐 |
| WNMG 060408 NX | 😊 | 😊 | 😐 |
| WNMG 080404 NN | 😊 | 😐 | 😞 |
| WNMG 080408 NN | 😐 | 😊 | 😊 |
| WNMG 080408 NM | 😞 | 😊 | 😊 |
| WNMG 080408 NX | 😐 | 😊 | 😊 |
| WNMG 080412 NN | 😞 | 😐 | 😊 |

- 😊 = Good
- 😐 = Acceptable
- 😞 = Not recommended

Finishing:
 d.o.c. = 0.30 - 1.50 mm
 fn = 0.08 - 0.20 mm/rev

Medium:
 d.o.c. = 0.70 - 4.50 mm
 fn = 0.15 - 0.45 mm/rev

Roughing:
 d.o.c. = 3.00 - 7.00 mm
 fn = 0.35 - 0.70 mm/rev

Stainless Steel
 $\uparrow V_c$

$\uparrow V_c \Rightarrow$
Productivity

80° Trigon shape inserts, with 6 cutting edges. Suitable for all-purpose Turning, Facing and Boring operations.

Machine Recommendations Guide. Details on page 10

WNMG 080408 NN LT 10 & LT 1000

| Material Group | Gr. N° | VDI Group | Material Examples* | Hardness | D.O.C. [mm] | | Feed [mm/rev] | | Amax [mm²] | V _c [m/min] | | Optimal cutting conditions | | | | |
|------------------------|---------------------|------------|---|----------------------|-------------|------|---------------|------|------------|------------------------|------|----------------------------|------|----------------|------|-----|
| | | | | | min | max | min | max | | min | max | D.O.C. | Feed | V _c | | |
| Steel | Non-alloyed | 1 | C35, Ck45, 1020, 1045, 1060, 28Mn6 | 125 HB | 0.5 | 3.5 | 0.21 | 0.50 | 1.80 | 180 | 330 | 2.4 | 0.35 | 240 | | |
| | | 2 | | 190 HB | | 3.5 | | 0.50 | | | 280 | | | 220 | | |
| | | 3 | | 250 HB | | 3.5 | | 0.45 | | | 250 | | | 200 | | |
| | Low alloyed | 2 | 42CrMo4, St50, Ck60, 4140, 4340, 100Cr6 | 180 HB | 0.5 | 3.5 | 0.21 | 0.45 | 1.20 | 120 | 280 | 2.4 | 0.32 | 200 | | |
| | | | | 230 HB | | 2.8 | | 0.45 | | | 250 | | | 180 | | |
| | | | | 280 HB | | 2.8 | | 0.18 | | | 0.40 | | | 210 | 150 | |
| | | | | 350 HB | | 2.5 | | 0.18 | | | 0.40 | | | 180 | 130 | |
| | High alloyed | 3 | X40CrMoV5, H13, M42, D3, S6-5-2, 12Ni19 | 220 HB | 0.5 | 2.8 | 0.18 | 0.40 | 1.20 | 70 | 190 | 2.0 | 0.30 | 140 | | |
| | | | | 280 HB | | 2.8 | | 0.40 | | | 150 | | | 120 | | |
| | | | | 320 HB | | 2.1 | | 0.35 | | | 0.80 | | | 130 | 100 | |
| | | | | 350 HB | | 2.1 | | 0.35 | | | 0.80 | | | 110 | 90 | |
| | Stainless Steel | Austenitic | 4 | 304, 316, X5CrNi18-9 | 180 HB | 0.5 | 3.5 | 0.20 | 0.40 | 1.20 | 170 | 270 | 2.4 | 0.25 | 190 | |
| 240 HB | | | | | 3.5 | | 0.40 | | 1.00 | | 160 | 220 | | | 0.22 | 170 |
| Duplex | | 5 | X2CrNiN23-4, S31500 | 290 HB | 0.5 | 2.8 | 0.18 | 0.35 | 0.80 | 80 | 150 | 2.0 | 0.28 | 100 | | |
| | | | | 310 HB | | 2.8 | | 0.35 | | 0.80 | 70 | | | 140 | 90 | |
| Ferritic & Martensitic | | 6 | 410, X6Cr17, 17-4 PH, 430 | 200 HB | 0.5 | 3.5 | 0.22 | 0.40 | 1.00 | 170 | 250 | 2.4 | 0.32 | 190 | | |
| | | | | 42 HRC | | 2.8 | | 0.40 | | 1.00 | 120 | | | 190 | 2.0 | 130 |
| Cast Iron | Grey | 7 | GG20, GG40, EN-GJL-250, No30B | 150 HB | 0.5 | 3.5 | 0.15 | 0.60 | 2.00 | 170 | 250 | 2.4 | 0.35 | 200 | | |
| | | | | 200 HB | | 3.5 | | 0.60 | | 1.80 | 160 | | | 230 | 180 | |
| | | | | 250 HB | | 3.5 | | 0.55 | | 1.80 | 150 | | | 210 | 160 | |
| | Malleable & Nodular | 8 | GGG40, GGG70, 50005 | 150 HB | 0.5 | 3.5 | 0.15 | 0.50 | 1.50 | 250 | 120 | 2.4 | 0.30 | 180 | | |
| | | | | 200 HB | | 3.5 | | 0.50 | | 1.30 | | | | 230 | 160 | |
| | | | | 250 HB | | 3.5 | | 0.50 | | 1.20 | | | | 190 | 140 | |
| High Temp. Alloys | Fe, Ni & Co based | 9 | 31,32 Incoloy 800 | 0.5 | 2.1 | 0.20 | 0.35 | 0.70 | 25 | 45 | 1.6 | 0.28 | 32 | | | |
| | | | 33 Inconel 700 | | 2.1 | | 0.35 | | 25 | 45 | | | 30 | | | |
| | | | 34 Stellite 21 | | 2.1 | | 0.35 | | 23 | 40 | | | 28 | | | |
| | Ti based | 10 | TiAl6V4 | 0.5 | 2.8 | 0.20 | 0.40 | 0.80 | 45 | 65 | 1.6 | 0.33 | 55 | | | |
| 37 T40 | 2.1 | 0.35 | 0.70 | | 35 | | 55 | | 0.30 | 45 | | | | | | |
| Hardened Mat. | Steel | 11 | X100CrMo13, | 0.5 | 1.8 | 0.11 | 0.30 | 0.60 | 50 | 100 | 1.6 | 0.25 | 80 | | | |
| | | | 440C, | | 1.5 | | 0.25 | | 0.40 | 40 | | | 90 | 1.2 | 0.20 | 70 |
| | | | G-X260NiCr42 | | 1.5 | | 0.20 | | 0.30 | 40 | | | 80 | 0.8 | 0.18 | 60 |
| | Chilled Cast Iron | 40 | Ni-Hard 2 | 0.5 | 1.5 | 0.11 | 0.25 | 0.40 | 40 | 60 | 1.2 | 0.18 | 50 | | | |
| | White Cast Iron | 41 | G-X300CrMo15 | 0.5 | 1.5 | 0.11 | 0.20 | 0.30 | 30 | 50 | 0.8 | 0.15 | 40 | | | |
| NF | Al (>8%Si) | 12 | 25 | AISi12 | 130 HB | 0.5 | 4.2 | 0.20 | 0.60 | 1.80 | 200 | 400 | 2.4 | 0.40 | 280 | |