

VNMG 160404-Alu

Machining Conditions

| Aluminium | Group No. | Material Examples* | Brinell hardness HB | d.o.c [mm] | | feed [mm/rev] | | A max [mm ²] | V _c [m/min] | | Optimal cutting conditions | |
|--------------|-----------|--------------------|---------------------|---|-----|---------------|------|--------------------------|------------------------|-------|----------------------------|------|
| | | | | min | max | min | max | | min | max | d.o.c | feed |
| Si < 4% | 13 | AlMgSi 1 | ---- | 0.25 | 6.0 | 0.12 | 0.30 | 1.5 | 400 | 1'200 | 0.5 to 3 | 0.23 |
| 4% < Si < 8% | 13 | AlSi 6 Cu 4 | ---- | | | 0.10 | 0.25 | 1.2 | 250 | 600 | | |
| Si > 8% | 14 | AlSi 12 | ---- | Recommended to use VNMG 160404 NN - LT-10 | | | | | | | | |

Cutting conditions for VNMG 160404 NN for high Si Aluminium

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|---------|----|---------|------|------|-----|------|------|------|-----|-----|------------|------|
| Si > 8% | 14 | AlSi 12 | ---- | 0.50 | 5.0 | 0.10 | 0.30 | 0.80 | 200 | 400 | 0.5 to 1.2 | 0.15 |
|---------|----|---------|------|------|-----|------|------|------|-----|-----|------------|------|

VNMG 160408-Alu

| Aluminium | Group No. | Material Examples* | Brinell hardness HB | d.o.c [mm] | | feed [mm/rev] | | A max [mm ²] | V _c [m/min] | | Optimal cutting conditions | |
|--------------|-----------|--------------------|---------------------|---|-----|---------------|------|--------------------------|------------------------|-------|----------------------------|------|
| | | | | min | max | min | max | | min | max | d.o.c | feed |
| Si < 4% | 13 | AlMgSi 1 | ---- | 0.25 | 6.0 | 0.12 | 0.60 | 2.0 | 400 | 1'200 | 0.5 to 3 | 0.32 |
| 4% < Si < 8% | 13 | AlSi 6 Cu 4 | ---- | | | 0.10 | 0.45 | 1.6 | 250 | 600 | | |
| Si > 8% | 14 | AlSi 12 | ---- | Recommended to use VNMG 160408 NN - LT-10 | | | | | | | | |

Cutting conditions for VNMG 160408 NN for high Si Aluminium

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|---------|----|---------|------|------|-----|------|------|------|-----|-----|------------|------|
| Si > 8% | 14 | AlSi 12 | ---- | 0.50 | 5.0 | 0.18 | 0.45 | 1.50 | 200 | 400 | 1.0 to 3.0 | 0.25 |
|---------|----|---------|------|------|-----|------|------|------|-----|-----|------------|------|

*For all material types and standards, see pages 240 to 245.