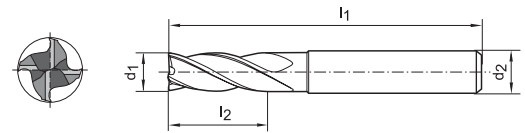
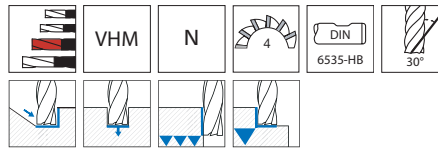


Schaftfräser

Ausführung: Mit Zentrumschnitt, zum Bohren geeignet.

Anwendung: Einsetzbar zum Umfangsfräsen sowie für die universelle Bearbeitung. Auch zum Besäumen und Schlichtfräsen verwendbar.



2341
AITiN+ **fortis**



1178
TiAlN **format**
professional quality



2470
Fire **GUHRING**

1178 Hinweis: Nachfolgeartikel von Bestellnummer 2378.

TiAlN
NEU

| Einsatz | STAHL | | | INOX | | | GUSS | | SOND.-LEG. | NE-METALLE | | | | GEHÄRTETER STAHL | | | Bestell-Nr. |
|------------------------|----------------------------|-----------------------------|-----------------------------|----------------------|-------------------|--------|------------|-----|----------------------------------|----------------|----------------|----------------------------|---------------------------------|------------------|-------------|-------------|-------------|
| | < 700 N/mm ² | < 1000 N/mm ² | < 1400 N/mm ² | ferrit./ martens. | austeni- tisch | Duplex | GG/ GTS | GGG | Titan > 850 N/mm ² | Alu < 8% Si | Alu > 8% Si | Kupfer/ Kupfer- Leg. | Graphit/ GFK/CFK/ Duropl. | < 55 HRC | < 60 HRC | > 60 HRC | |
| V _c [m/min] | 120 | 100 | 60 | 80 | 60 | – | 90 | 70 | – | 270 | 190 | 150 | – | – | – | – | 2341 |
| | 45 | 40 | 35 | – | – | – | 80 | 80 | – | 120 | – | 60 | – | – | – | – | 1178 |
| | 115 | 92 | 74 | 50 | 40 | 32 | 120 | 96 | 40 | 150 | 120 | 80 | – | 30 | – | – | 2470 |

| Ø d ₁ = h10 mm | Schneidenlänge l ₂ mm | | | Gesamtlänge l ₁ mm | | | Schaft-Ø d ₂ = h6 mm | f _z mm | STAHL | 2341 | 1178 | 2470 | Bestell-Nr. |
|---------------------------------|-------------------------------------|------|------|----------------------------------|------|------|---------------------------------------|----------------------|--------------------------|--------|--------|--------|-------------|
| | 2341 | 1178 | 2470 | 2341 | 1178 | 2470 | | | < 1400 N/mm ² | AITiN+ | TiAlN | Fire | |
| | | | | | | | | | | € | € | € | |
| 2 | 4 | – | 7 | 50 | – | 57 | 6 | 0,006 | 9,90 | – | – | 33,80 | ...0200 |
| 3 | 6 | 8 | 8 | 50 | 57 | 57 | 6 | 0,01 | 9,90 | 23,00 | – | 33,80 | ...0300 |
| 4 | 8 | 11 | 11 | 50 | 57 | 57 | 6 | 0,02 | 10,35 | 23,90 | – | 33,00 | ...0400 |
| 5 | 8 | 13 | 13 | 50 | 57 | 57 | 6 | 0,02 | 12,95 | 23,90 | – | 33,00 | ...0500 |
| 6 | 12 | 13 | 13 | 57 | 57 | 57 | 6 | 0,025 | 15,05 | 23,90 | – | 36,70 | ...0600 |
| 7 | – | 16 | 16 | – | 63 | 63 | 8 | 0,032 | – | – | 28,20 | 43,10 | ...0700 |
| 8 | 19 | 19 | 19 | 63 | 63 | 63 | 8 | 0,032 | 19,50 | 29,00 | – | 43,10 | ...0800 |
| 9 | – | 19 | 19 | – | 72 | 72 | 10 | 0,039 | – | – | 43,20 | 55,70 | ...0900 |
| 10 | 22 | 22 | 22 | 72 | 72 | 72 | 10 | 0,034 | 30,80 | 44,30 | – | 68,10 | ...1000 |
| 12 | 26 | 26 | 26 | 83 | 83 | 83 | 12 | 0,048 | 38,80 | 64,30 | – | 92,20 | ...1200 |
| 14 | – | 26 | 26 | – | 83 | 83 | 14 | 0,058 | – | – | 94,20 | 118,50 | ...1400 |
| 16 | 32 | 32 | 32 | 92 | 92 | 92 | 16 | 0,058 | 54,80 | 113,50 | – | 157,00 | ...1600 |
| 18 | – | 32 | 32 | – | 92 | 92 | 18 | 0,073 | – | – | 155,50 | 199,00 | ...1800 |
| 20 | 38 | 38 | 38 | 104 | 104 | 104 | 20 | 0,073 | 97,50 | 182,00 | – | 248,00 | ...2000 |
| | | | | | | | | | (W033) | (W212) | (W220) | | |