

>> HARTMETALL-FRÄSSTIFTE, ZYLINDER, OHNE STIRNVERZÄHNUNG

Unterschiedliche Zahnungen:



1A Aluminium
Aluminium
Aluminio



1 DIN C

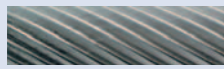


2

Nähere Informationen zu den einzelnen Zahnungen siehe Seite 34.

TUNGSTEN CARBIDE ROTARY BURRS, CYLINDRICAL, WITHOUT FRONT CUT

Different cuts:



3 DIN MY



4 Diamant
Diamond
Diamante



5 DIN F

Detailed information about the different cuts see on page 34.

FRESE ROTATIVE IN METALLO DURO, CILINDRICHE, SENZA TAGLIO IN TESTA

Dentature diverse:

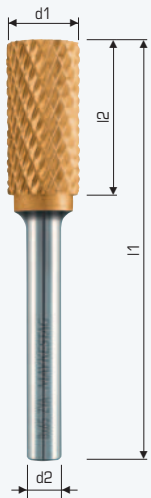


6 DIN MX

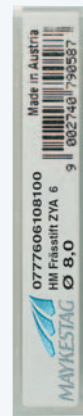
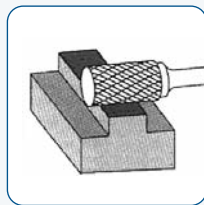


TiN **6** DIN MX

Informazioni più dettagliate circa le diverse dentature vedi pagina 34.



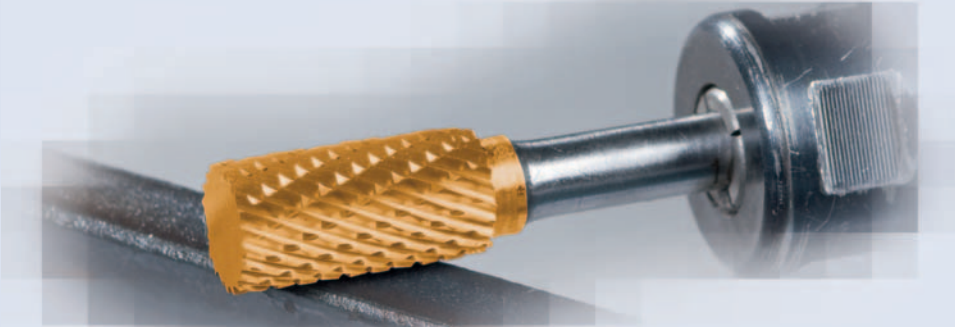
ZYA



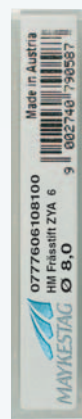
Schnittwertempfehlung
Recommended cutting conditions
Valori di taglio consigliati

→ Seite | Page | Pagina **V/35-37**

| | | | | 1A | 1 | 2 | 3 | | | | |
|-----|----|-----------|----|-----------------------|--------------|-----------------------|--------------|-----------------------|--------------|-----------------------|--------------|
| d1 | d2 | l1 | l2 | Code 7778 Art.-Nr. | € | Code 7771 Art.-Nr. | € | Code 7772 Art.-Nr. | € | Code 7773 Art.-Nr. | € |
| mm | mm | mm | mm | | | | | | | | |
| 2 | 3 | 38 | 10 | | | | | | | 0 7773031021 00 | 6,97 |
| 2,5 | 3 | 38 | 12 | | | | | | | | |
| 3 | 3 | 38 | 14 | | | | | | | 0 7773031031 00 | 6,77 |
| 3 | 3 | 50 | 14 | | | | | | | 0 7773032031 00 | 7,98 |
| 3 | 3 | 65 | 14 | | | | | | | 0 7773033031 00 | 7,88 |
| 4 | 3 | 40 | 10 | | | | | | | 0 7773031041 00 | 10,47 |
| 4 | 6 | 50 | 14 | | | | | | | 0 7773061041 00 | 14,67 |
| 5 | 3 | 42 | 12 | | | | | | | 0 7773031051 00 | 10,97 |
| 6 | 3 | 43 | 13 | | | | | | | 0 7773031061 00 | 11,87 |
| 6 | 6 | 50 | 16 | 0 7778061061 00 | 16,76 | | | | | 0 7773061061 00 | 14,67 |
| 8 | 6 | 65 | 20 | | | 0 7771061081 00 | 19,62 | 0 7772061081 00 | 17,87 | 0 7773061081 00 | 17,87 |
| 10 | 6 | 65 | 20 | 0 7778061101 00 | 24,13 | 0 7771061101 00 | 22,04 | 0 7772061101 00 | 19,94 | 0 7773061101 00 | 19,94 |
| 12 | 6 | 70 | 25 | 0 7778061121 00 | 34,03 | 0 7771061121 00 | 30,92 | 0 7772061121 00 | 28,35 | 0 7773061121 00 | 28,35 |
| 12 | 8 | 70 | 25 | | | | | | | 0 7773081121 00 | 28,35 |
| 16 | 6 | 70 | 25 | | | | | | | 0 7773061161 00 | 36,70 |
| 16 | 8 | 70 | 25 | 0 7778081161 00 | 44,00 | | | | | 0 7773081161 00 | 36,70 |
| 20 | 6 | 70 | 25 | | | | | | | 0 7773061201 00 | 57,67 |



* Einzelverpackung mit SB-Aufhänger
Single packing with tag
Imballo singolo con gancio



Schnittwertempfehlung
Recommended cutting conditions
Valori di taglio consigliati

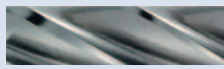
→ Seite | Page | Pagina W/35-37

NEU | NEW | NUOVO
TiN

| | | | | 4 | | 5 | | 6 | | 6 | |
|-----|----|----|----|-----------------|-------|-----------|---|------------------|-------|-----------------|-------|
| d1 | d2 | l1 | l2 | Code 7774 | € | Code 7775 | € | Code 7776 | € | Code 7777 | € |
| mm | mm | mm | mm | Art.-Nr. | | Art.-Nr. | | Art.-Nr. | | Art.-Nr. | |
| 2 | 3 | 38 | 10 | 0 7774031021 00 | 8,36 | | | | | | |
| 2,5 | 3 | 38 | 12 | | | | | 0 7776031251 00 | 7,67 | | |
| 3 | 3 | 38 | 14 | 0 7774031031 00 | 8,13 | | | 0 7776031031 00 | 7,45 | 0 7777031031 00 | 8,94 |
| 3 | 3 | 50 | 14 | 0 7774032031 00 | 8,87 | | | 0 7776032031 00 | 8,13 | | |
| 3 | 3 | 65 | 14 | | | | | 0 7776033031 00 | 8,67 | | |
| 4 | 3 | 40 | 10 | | | | | 0 7776031041 00 | 11,58 | | |
| 4 | 6 | 50 | 14 | 0 7774061041 00 | 17,61 | | | 0 7776061041 00 | 16,25 | | |
| 5 | 3 | 42 | 12 | | | | | | | | |
| 6 | 3 | 43 | 13 | 0 7774031061 00 | 14,26 | | | 0 7776031061 00 | 13,06 | | |
| 6 | 6 | 50 | 16 | 0 7774061061 00 | 17,61 | | | 0 7776061061 00* | 16,25 | 0 7777061061 00 | 19,50 |
| 8 | 6 | 65 | 20 | 0 7774061081 00 | 21,45 | | | 0 7776061081 00 | 19,62 | 0 7777061081 00 | 23,54 |
| 10 | 6 | 65 | 20 | 0 7774061101 00 | 24,13 | | | 0 7776061101 00* | 22,04 | 0 7777061101 00 | 26,45 |
| 12 | 6 | 70 | 25 | 0 7774061121 00 | 34,03 | | | 0 7776061121 00* | 30,92 | 0 7777061121 00 | 37,10 |
| 12 | 8 | 70 | 25 | 0 7774081121 00 | 34,03 | | | 0 7776081121 00 | 30,92 | | |
| 16 | 6 | 70 | 25 | 0 7774061161 00 | 44,00 | | | 0 7776061161 00 | 40,29 | | |
| 16 | 8 | 70 | 25 | 0 7774081161 00 | 44,00 | | | 0 7776081161 00 | 40,29 | | |
| 20 | 6 | 70 | 25 | | | | | 0 7776061201 00 | 63,35 | | |

>> HARTMETALL-FRÄSSTIFTE, ZYLINDER, MIT STIRNVERZÄHNUNG

Unterschiedliche Zahnungen:



1A Aluminium
Aluminium
Aluminio



1 DIN C

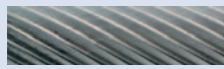


2

Nähere Informationen zu den einzelnen Zahnungen siehe Seite 34.

TUNGSTEN CARBIDE ROTARY BURRS, CYLINDRICAL, WITH FRONT CUT

Different cuts:



3 DIN MY



4 Diamant
Diamond
Diamante



5 DIN F

Detailed information about the different cuts see on page 34.

FRESE ROTATIVE IN METALLO DURO, CILINDRICHE, TAGLIO IN TESTA

Dentature diverse:

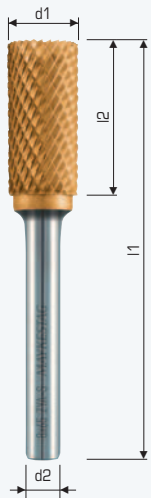


6 DIN MX

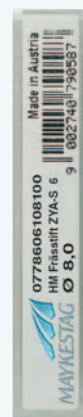
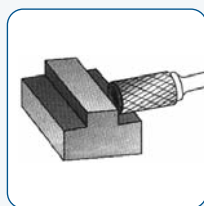


TiN **6** DIN MX

Informazioni più dettagliate circa le diverse dentature vedi pagina 34.



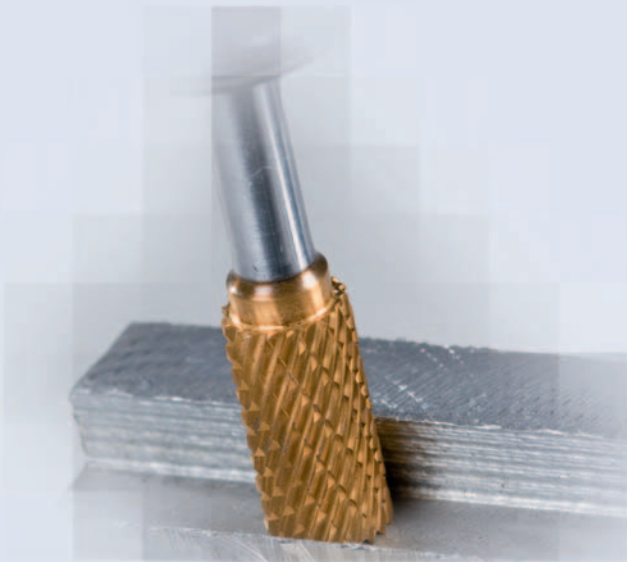
ZYA-S



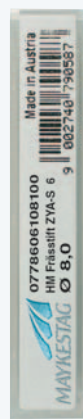
Schnittwertempfehlung
Recommended cutting conditions
Valori di taglio consigliati

→ Seite | Page | Pagina **V/35-37**

| | | | | 1A | | 1 | | 2 | | 3 | |
|-----|----|----|----|------------------|-------|-----------------|-------|-----------------|-------|-----------------|-------|
| d1 | d2 | l1 | l2 | Code 7788 | € | Code 7781 | € | Code 7782 | € | Code 7783 | € |
| mm | mm | mm | mm | Art.-Nr. | | Art.-Nr. | | Art.-Nr. | | Art.-Nr. | |
| 2 | 3 | 38 | 10 | | | | | | | 0 7783031021 00 | 9,22 |
| 2 | 3 | 50 | 10 | | | | | | | | |
| 2,5 | 3 | 38 | 12 | | | | | | | 0 7783031251 00 | 7,68 |
| 2,5 | 3 | 50 | 12 | | | | | | | 0 7783032251 00 | 8,78 |
| 2,5 | 3 | 65 | 12 | | | | | | | | |
| 2,5 | 3 | 75 | 12 | | | | | | | | |
| 3 | 3 | 38 | 14 | | | | | | | 0 7783031031 00 | 7,45 |
| 3 | 3 | 50 | 14 | | | | | | | | |
| 3 | 3 | 65 | 14 | | | | | | | | |
| 3 | 3 | 75 | 14 | | | | | | | | |
| 4 | 6 | 50 | 14 | | | | | | | 0 7783061041 00 | 16,25 |
| 6 | 3 | 43 | 13 | | | | | | | | |
| 6 | 6 | 50 | 16 | | | | | 0 7782061061 00 | 16,25 | 0 7783061061 00 | 16,25 |
| 8 | 6 | 65 | 20 | | | | | 0 7782061081 00 | 19,62 | 0 7783061081 00 | 19,62 |
| 10 | 6 | 65 | 20 | 0 7788061101 00 | 26,73 | 0 7781061101 00 | 24,13 | 0 7782061101 00 | 22,04 | 0 7783061101 00 | 22,04 |
| 12 | 6 | 70 | 25 | 0 7788061121 00* | 37,22 | 0 7781061121 00 | 34,03 | 0 7782061121 00 | 30,92 | 0 7783061121 00 | 30,92 |
| 12 | 8 | 70 | 25 | 0 7788081121 00 | 37,22 | | | | | | |
| 16 | 6 | 70 | 25 | | | 0 7781061161 00 | 44,49 | 0 7782061161 00 | 40,29 | 0 7783061161 00 | 40,29 |
| 16 | 8 | 70 | 25 | 0 7788081161 00 | 48,71 | | | | | 0 7783081161 00 | 40,29 |
| 20 | 8 | 70 | 25 | 0 7788081201 00 | 76,51 | | | | | 0 7783081201 00 | 63,35 |



* Einzelverpackung mit SB-Aufhänger
Single packing with tag
Imballo singolo con gancio



Schnittwertempfehlung
Recommended cutting conditions
Valori di taglio consigliati

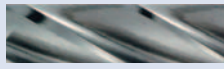
→ Seite | Page | Pagina W/35-37

NEU | NEW | NUOVO
TiN

| | | | | 4 | | 5 | | 6 | | 6 | |
|-----|----|----|----|-----------------|-------|-----------|---|------------------|-------|-----------------|-------|
| d1 | d2 | l1 | l2 | Code 7784 | € | Code 7785 | € | Code 7786 | € | Code 7787 | € |
| mm | mm | mm | mm | Art.-Nr. | | Art.-Nr. | | Art.-Nr. | | Art.-Nr. | |
| 2 | 3 | 38 | 10 | 0 7784031021 00 | 9,22 | | | | | | |
| 2 | 3 | 50 | 10 | 0 7784032021 00 | 10,54 | | | | | | |
| 2,5 | 3 | 38 | 12 | | | | | | | | |
| 2,5 | 3 | 50 | 12 | 0 7784032251 00 | 10,54 | | | | | | |
| 2,5 | 3 | 65 | 12 | 0 7784033251 00 | 10,97 | | | | | | |
| 2,5 | 3 | 75 | 12 | 0 7784034251 00 | 11,99 | | | | | | |
| 3 | 3 | 38 | 14 | 0 7784031031 00 | 8,94 | | | 0 7786031031 00 | 8,20 | 0 7787031031 00 | 9,84 |
| 3 | 3 | 50 | 14 | 0 7784032031 00 | 10,00 | | | | | | |
| 3 | 3 | 65 | 14 | 0 7784033031 00 | 10,65 | | | | | | |
| 3 | 3 | 75 | 14 | 0 7784034031 00 | 11,36 | | | | | | |
| 4 | 6 | 50 | 14 | 0 7784061041 00 | 19,50 | | | 0 7786061041 00 | 17,87 | | |
| 6 | 3 | 43 | 13 | 0 7784031061 00 | 15,66 | | | 0 7786031061 00 | 14,37 | | |
| 6 | 6 | 50 | 16 | 0 7784061061 00 | 18,86 | | | 0 7786061061 00* | 17,87 | 0 7787061061 00 | 21,44 |
| 8 | 6 | 65 | 20 | 0 7784061081 00 | 23,53 | | | 0 7786061081 00 | 21,61 | 0 7787061081 00 | 25,93 |
| 10 | 6 | 65 | 20 | 0 7784061101 00 | 26,73 | | | 0 7786061101 00* | 24,13 | 0 7787061101 00 | 28,96 |
| 12 | 6 | 70 | 25 | 0 7784061121 00 | 37,22 | | | 0 7786061121 00* | 34,03 | 0 7787061121 00 | 40,84 |
| 12 | 8 | 70 | 25 | | | | | 0 7786081121 00 | 34,03 | | |
| 16 | 6 | 70 | 25 | 0 7784061161 00 | 48,71 | | | 0 7786061161 00 | 44,49 | | |
| 16 | 8 | 70 | 25 | 0 7784081161 00 | 48,71 | | | 0 7786081161 00 | 44,49 | | |
| 20 | 8 | 70 | 25 | 0 7784081201 00 | 76,01 | | | | | | |

>> HARTMETALL-FRÄSSTIFTE, WALZENRUND

Unterschiedliche Zahnungen:



1A Aluminium
Aluminium
Aluminio



1 DIN C



2

Nähere Informationen zu den einzelnen Zahnungen siehe Seite 34.

TUNGSTEN CARBIDE ROTARY BURRS, BALL NOSE

Different cuts:



3 DIN MY



4 Diamant
Diamond
Diamante



5 DIN F

Detailed information about the different cuts see on page 34.

FRESE ROTATIVE IN METALLO DURO, CILINDRICA SFERICA

Dentature diverse:

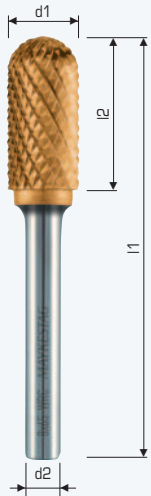


6 DIN MX

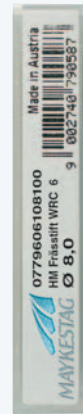
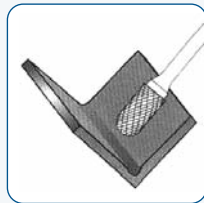


TiN **6** DIN MX

Informazioni più dettagliate circa le diverse dentature vedi pagina 34.



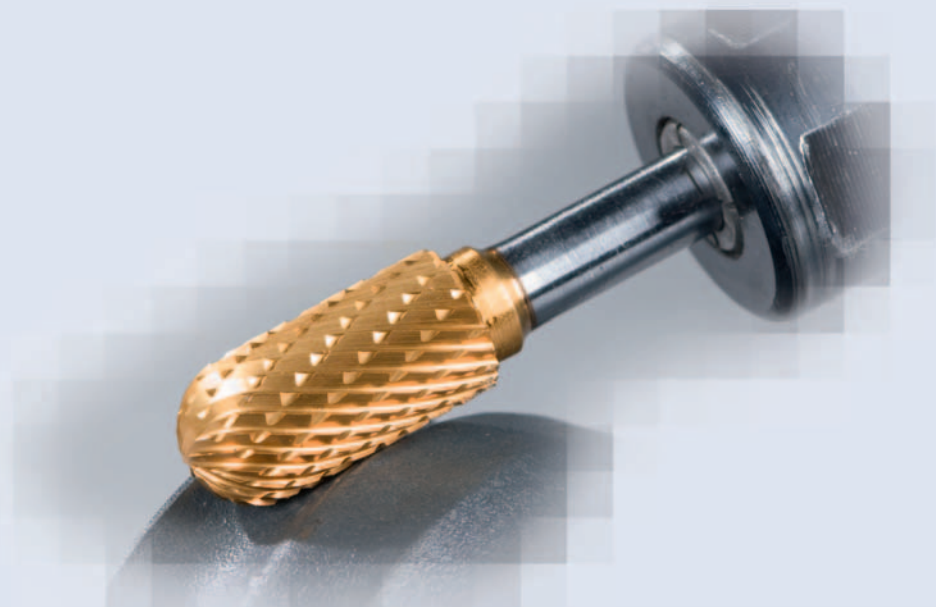
WRC



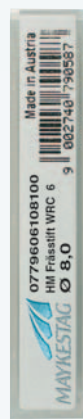
Schnittwertempfehlung
Recommended cutting conditions
Valori di taglio consigliati

→ Seite | Page | Pagina **V/35-37**

| | | | | 1A | 1 | 2 | 3 | | | | |
|----------|----------|----------|----------|-----------------------|----------|-----------------------|----------|-----------------------|-------|-----------------------|-------|
| d1 mm | d2 mm | l1 mm | l2 mm | Code 7798 Art.-Nr. | € | Code 7791 Art.-Nr. | € | Code 7792 Art.-Nr. | € | Code 7793 Art.-Nr. | € |
| 3 | 3 | 38 | 14 | | | | | 0 7792031031 00 | 8,36 | 0 7793031031 00 | 8,36 |
| 3 | 3 | 50 | 14 | | | | | | | 0 7793032031 00 | 9,47 |
| 4 | 3 | 40 | 10 | | | | | | | 0 7793031041 00 | 11,58 |
| 4 | 6 | 50 | 14 | | | | | | | 0 7793061041 00 | 15,77 |
| 5 | 3 | 42 | 12 | | | | | | | 0 7793031051 00 | 12,08 |
| 6 | 3 | 43 | 14 | | | | | | | 0 7793031061 00 | 13,06 |
| 6 | 6 | 50 | 16 | | | 0 7791061061 00 | 17,27 | 0 7792061061 00 | 15,77 | 0 7793061061 00 | 15,77 |
| 6 | 6 | 150 | 16 | | | | | | | 0 7793062061 00 | 20,95 |
| 8 | 6 | 65 | 20 | 0 7798061081 00 | 23,53 | 0 7791061081 00 | 21,45 | 0 7792061081 00 | 19,37 | 0 7793061081 00 | 19,37 |
| 10 | 6 | 65 | 20 | 0 7798061101 00 | 27,23 | 0 7791061101 00 | 25,16 | 0 7792061101 00 | 22,54 | 0 7793061101 00 | 22,54 |
| 10 | 6 | 150 | 20 | | | | | | | | |
| 12 | 6 | 70 | 25 | 0 7798061121 00 | 37,71 | 0 7791061121 00 | 34,64 | 0 7792061121 00 | 31,43 | 0 7793061121 00 | 31,43 |
| 12 | 6 | 150 | 25 | | | | | | | | |
| 12 | 8 | 70 | 25 | 0 7798081121 00 | 37,71 | 0 7791081121 00 | 34,64 | | | 0 7793081121 00 | 31,43 |
| 16 | 6 | 70 | 25 | 0 7798061161 00 | 49,29 | 0 7791061161 00 | 45,10 | 0 7792061161 00 | 40,91 | 0 7793061161 00 | 40,91 |
| 16 | 8 | 70 | 25 | | | | | | | 0 7793081161 00 | 40,91 |
| 20 | 6 | 70 | 25 | | | | | | | | |
| 20 | 8 | 70 | 25 | | | | | | | | |



* Einzelverpackung mit SB-Aufhänger
Single packing with tag
Imballo singolo con gancio



Schnittwertempfehlung
Recommended cutting conditions
Valori di taglio consigliati

→ Seite | Page | Pagina W/35-37

NEU | NEW | NUOVO
TiN

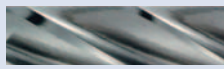
| | | | | 4 | | 5 | | 6 | | 6 | |
|----|----|-----|----|-----------------|-------|-----------------|-------|------------------|-------|-----------------|-------|
| d1 | d2 | l1 | l2 | Code 7794 | € | Code 7795 | € | Code 7796 | € | Code 7797 | € |
| mm | mm | mm | mm | Art.-Nr. | | Art.-Nr. | | Art.-Nr. | | Art.-Nr. | |
| 3 | 3 | 38 | 14 | 0 7794031031 00 | 10,47 | 0 7795031031 00 | 8,36 | 0 7796031031 00 | 9,47 | 0 7797031031 00 | 11,36 |
| 3 | 3 | 50 | 14 | | | | | | | | |
| 4 | 3 | 40 | 10 | 0 7794031041 00 | 14,16 | | | 0 7796031041 00 | 13,06 | | |
| 4 | 6 | 50 | 14 | 0 7794061041 00 | 18,86 | | | 0 7796061041 00 | 17,27 | | |
| 5 | 3 | 42 | 12 | 0 7794031051 00 | 14,67 | | | | | | |
| 6 | 3 | 43 | 14 | 0 7794031061 00 | 15,77 | | | 0 7796031061 00 | 14,67 | | |
| 6 | 6 | 50 | 16 | 0 7794061061 00 | 18,86 | | | 0 7796061061 00* | 17,27 | 0 7797061061 00 | 20,72 |
| 6 | 6 | 150 | 16 | 0 7794062061 00 | 25,16 | | | 0 7796062061 00 | 23,05 | | |
| 8 | 6 | 65 | 20 | 0 7794061081 00 | 23,53 | | | 0 7796061081 00 | 21,45 | 0 7797061081 00 | 25,74 |
| 10 | 6 | 65 | 20 | 0 7794061101 00 | 27,23 | 0 7795061101 00 | 22,54 | 0 7796061101 00* | 25,16 | 0 7797061101 00 | 30,19 |
| 10 | 6 | 150 | 20 | 0 7794062101 00 | 33,52 | | | | | | |
| 12 | 6 | 70 | 25 | 0 7794061121 00 | 37,71 | | | 0 7796061121 00* | 34,64 | 0 7797061121 00 | 41,57 |
| 12 | 6 | 150 | 25 | 0 7794062121 00 | 44,00 | | | | | | |
| 12 | 8 | 70 | 25 | | | | | 0 7796081121 00 | 34,64 | | |
| 16 | 6 | 70 | 25 | 0 7794061161 00 | 49,29 | | | 0 7796061161 00 | 42,80 | | |
| 16 | 8 | 70 | 25 | 0 7794081161 00 | 49,29 | | | | | | |
| 20 | 6 | 70 | 25 | 0 7794061201 00 | 74,24 | | | | | | |
| 20 | 8 | 70 | 25 | 0 7794081201 00 | 74,24 | | | | | | |

>> HARTMETALL-FRÄSSTIFTE, SPITZBOGEN

TUNGSTEN CARBIDE ROTARY BURRS, ARC POINTED NOSE

FRESE ROTATIVE IN METALLO DURO, A LANCIA

Unterschiedliche Zahnungen:



1A Aluminium
Aluminium
Aluminio



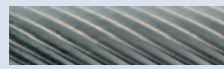
1 DIN C



2

Nähere Informationen zu den einzelnen Zahnungen siehe Seite 34.

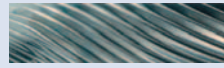
Different cuts:



3 DIN MY



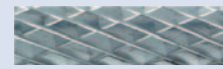
4 Diamant
Diamond
Diamante



5 DIN F

Detailed information about the different cuts see on page 34.

Dentature diverse:

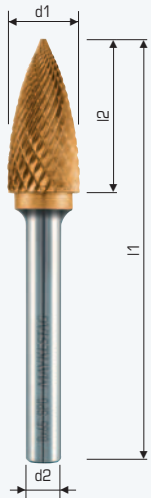


6 DIN MX

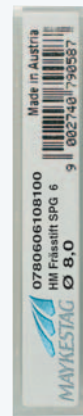
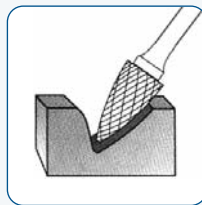


TiN **6** DIN MX

Informazioni più dettagliate circa le diverse dentature vedi pagina 34.



SPG



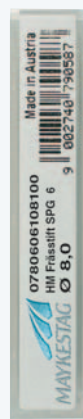
Schnittwertempfehlung
Recommended cutting conditions
Valori di taglio consigliati

→ Seite | Page | Pagina **V/35-37**

| | | | | 1A | | 1 | | 2 | | 3 | |
|----|----|----|----|-----------------|-------|-----------------|-------|-----------------|-------|-----------------|-------|
| d1 | d2 | l1 | l2 | Code 7808 | € | Code 7801 | € | Code 7802 | € | Code 7803 | € |
| mm | mm | mm | mm | Art.-Nr. | | Art.-Nr. | | Art.-Nr. | | Art.-Nr. | |
| 3 | 3 | 38 | 12 | | | | | | | 0 7803031031 00 | 8,36 |
| 3 | 3 | 50 | 12 | | | | | | | 0 7803032031 00 | 9,47 |
| 4 | 3 | 40 | 10 | | | | | | | 0 7803031041 00 | 11,58 |
| 4 | 6 | 50 | 14 | | | | | | | 0 7803061041 00 | 15,77 |
| 5 | 3 | 42 | 12 | | | | | | | 0 7803031051 00 | 12,08 |
| 6 | 3 | 43 | 13 | | | | | | | 0 7803031061 00 | 13,06 |
| 6 | 6 | 50 | 16 | | | | | 0 7802061061 00 | 15,77 | 0 7803061061 00 | 15,77 |
| 8 | 6 | 65 | 20 | | | 0 7801061081 00 | 19,94 | 0 7802061081 00 | 17,87 | 0 7803061081 00 | 17,87 |
| 10 | 6 | 65 | 20 | 0 7808061101 00 | 25,16 | 0 7801061101 00 | 23,05 | 0 7802061101 00 | 20,95 | 0 7803061101 00 | 20,95 |
| 12 | 6 | 70 | 25 | 0 7808061121 00 | 31,43 | 0 7801061121 00 | 28,84 | 0 7802061121 00 | 26,24 | 0 7803061121 00 | 26,24 |
| 12 | 8 | 70 | 25 | | | | | | | 0 7803081121 00 | 26,24 |
| 16 | 6 | 75 | 30 | 0 7808061161 00 | 44,00 | 0 7801061161 00 | 40,29 | 0 7802061161 00 | 36,70 | 0 7803061161 00 | 36,70 |
| 16 | 8 | 75 | 30 | 0 7808081161 00 | 44,00 | | | | | 0 7803081161 00 | 36,70 |



* Einzelverpackung mit SB-Aufhänger
Single packing with tag
Imballo singolo con gancio



Schnittwertempfehlung
Recommended cutting conditions
Valori di taglio consigliati

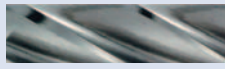
→ Seite | Page | Pagina W/35-37



| | | | | 4 | | 5 | | 6 | | 6 | |
|----|----|----|----|-----------------|-------|-----------|---|------------------|-------|-----------------|-------|
| d1 | d2 | l1 | l2 | Code 7804 | € | Code 7805 | € | Code 7806 | € | Code 7807 | € |
| mm | mm | mm | mm | Art.-Nr. | | Art.-Nr. | | Art.-Nr. | | Art.-Nr. | |
| 3 | 3 | 38 | 12 | 0 7804031031 00 | 10,47 | | | 0 7806031031 00 | 9,47 | 0 7807031031 00 | 11,36 |
| 3 | 3 | 50 | 12 | 0 7804032031 00 | 11,36 | | | | | | |
| 4 | 3 | 40 | 10 | | | | | | | | |
| 4 | 6 | 50 | 14 | | | | | 0 7806061041 00 | 17,27 | | |
| 5 | 3 | 42 | 12 | | | | | 0 7806031051 00 | 13,67 | | |
| 6 | 3 | 43 | 13 | 0 7804031061 00 | 15,77 | | | | | | |
| 6 | 6 | 50 | 16 | 0 7804061061 00 | 18,86 | | | 0 7806061061 00* | 17,27 | 0 7807061061 00 | 20,72 |
| 8 | 6 | 65 | 20 | 0 7804061081 00 | 21,45 | | | 0 7806061081 00 | 19,94 | 0 7807061081 00 | 23,93 |
| 10 | 6 | 65 | 20 | 0 7804061101 00 | 25,16 | | | 0 7806061101 00* | 23,05 | 0 7807061101 00 | 27,66 |
| 12 | 6 | 70 | 25 | 0 7804061121 00 | 31,43 | | | 0 7806061121 00* | 28,84 | 0 7807061121 00 | 34,61 |
| 12 | 8 | 70 | 25 | 0 7804081121 00 | 31,43 | | | 0 7806081121 00 | 28,84 | | |
| 16 | 6 | 75 | 30 | 0 7804061161 00 | 44,00 | | | 0 7806061161 00 | 40,29 | | |
| 16 | 8 | 75 | 30 | 0 7804081161 00 | 44,00 | | | 0 7806081161 00 | 40,29 | | |

>> HARTMETALL-FRÄSSTIFTE, WINKEL, OHNE STIRNVERZÄHNUNG

Unterschiedliche Zahnungen:



1A Aluminium
Aluminium
Aluminio



1 DIN C



2

Nähere Informationen zu den einzelnen Zahnungen siehe Seite 34.

TUNGSTEN CARBIDE ROTARY BURRS, INVERTED CONE, WITHOUT FRONT CUT

Different cuts:



3 DIN MY



4 Diamant
Diamond
Diamante



5 DIN F

Detailed information about the different cuts see on page 34.

FRESE ROTATIVE IN METALLO DURO, TRONCO CONICA, SENZA TAGLIO IN TESTA

Dentature diverse:

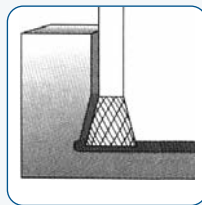


6 DIN MX



TiN **6** DIN MX

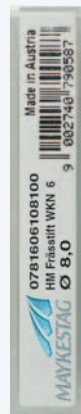
Informazioni più dettagliate circa le diverse dentature vedi pagina 34.



Schnittwertempfehlung
Recommended cutting conditions
Valori di taglio consigliati

→ Seite | Page | Pagina V/35-37

| d1 mm | d2 mm | l1 mm | l2 mm | 1A Code 7818 Art.-Nr. | € | 1 Code 7811 Art.-Nr. | € | 2 Code 7812 Art.-Nr. | € | 3 Code 7813 Art.-Nr. | € |
|----------|----------|----------|----------|------------------------------------|---|-----------------------------------|---|-----------------------------------|---|-----------------------------------|--------------|
| 3 | 3 | 38 | 3 | | | | | | | 0 7813031031 00 | 8,36 |
| 4 | 3 | 34 | 4 | | | | | | | | |
| 5 | 3 | 35 | 5 | | | | | | | 0 7813031051 00 | 12,08 |
| 6 | 3 | 36 | 6 | | | | | | | 0 7813031061 00 | 13,06 |
| 6 | 6 | 50 | 6 | | | | | | | 0 7813061061 00 | 14,67 |
| 8 | 6 | 53 | 8 | | | | | | | 0 7813061081 00 | 15,77 |
| 10 | 6 | 55 | 10 | | | | | | | | |
| 12 | 6 | 57 | 12 | | | | | | | 0 7813061121 00 | 23,53 |



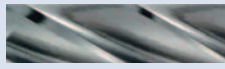
Schnittwertempfehlung
Recommended cutting conditions
Valori di taglio consigliati

→ Seite | Page | Pagina W/35-37

| | | | | 4 | | 5 | | 6 | | 6 | |
|----|----|----|----|-----------------|-------|-----------|---|-----------------|-------|-----------|---|
| d1 | d2 | l1 | l2 | Code 7814 | € | Code 7815 | € | Code 7816 | € | Code 7817 | € |
| mm | mm | mm | mm | Art.-Nr. | | Art.-Nr. | | Art.-Nr. | | Art.-Nr. | |
| 3 | 3 | 38 | 3 | 0 7814031031 00 | 10,47 | | | 0 7816031031 00 | 9,47 | | |
| 4 | 3 | 34 | 4 | | | | | 0 7816031041 00 | 13,06 | | |
| 5 | 3 | 35 | 5 | | | | | | | | |
| 6 | 3 | 36 | 6 | | | | | | | | |
| 6 | 6 | 50 | 6 | 0 7814061061 00 | 17,87 | | | | | | |
| 8 | 6 | 53 | 8 | | | | | 0 7816061081 00 | 17,27 | | |
| 10 | 6 | 55 | 10 | 0 7814061101 00 | 21,45 | | | 0 7816061101 00 | 19,94 | | |
| 12 | 6 | 57 | 12 | 0 7814061121 00 | 27,74 | | | 0 7816061121 00 | 26,24 | | |

>> HARTMETALL-FRÄSSTIFTE, SPITZKEGEL

Unterschiedliche Zahnungen:



1A Aluminium
Aluminium
Aluminio



1 DIN C



2

Nähere Informationen zu den einzelnen Zahnungen siehe Seite 34.

TUNGSTEN CARBIDE ROTARY BURRS, CONICAL POINTED NOSE

Different cuts:



3 DIN MY



4 Diamant
Diamond
Diamante



5 DIN F

Detailed information about the different cuts see on page 34.

FRESE ROTATIVE IN METALLO DURO, CONICA

Dentature diverse:

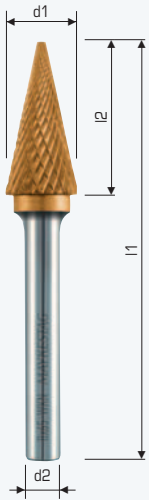


6 DIN MX

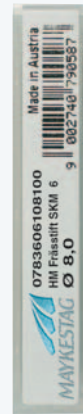
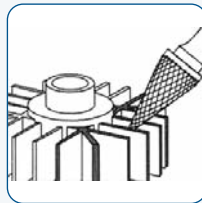


TiN **6** DIN MX

Informazioni più dettagliate circa le diverse dentature vedi pagina 34.



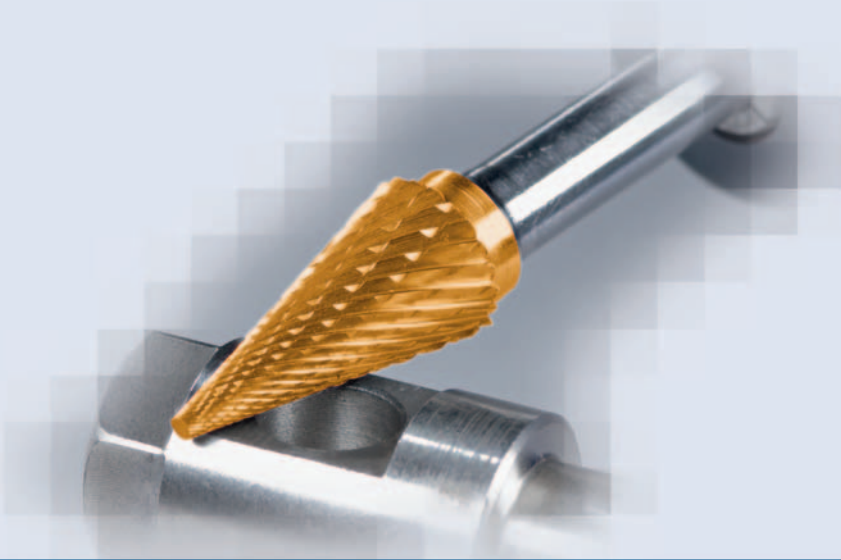
SKM



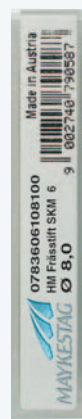
Schnittwertempfehlung
Recommended cutting conditions
Valori di taglio consigliati

→ Seite | Page | Pagina **V/35-37**

| | | | | 1A | 1 | 2 | 3 | | | | |
|-----------|----------|-----------|----|-----------------|--------------|-----------|----------|-----------------|--------------|-----------------|--------------|
| d1 | d2 | l1 | l2 | Code 7838 | € | Code 7831 | € | Code 7832 | € | Code 7833 | € |
| mm | mm | mm | mm | Art.-Nr. | | Art.-Nr. | | Art.-Nr. | | Art.-Nr. | |
| 3 | 3 | 38 | 12 | | | | | | | 0 7833031031 00 | 8,36 |
| 3 | 3 | 50 | 12 | | | | | | | 0 7833032031 00 | 9,47 |
| 4 | 3 | 40 | 10 | | | | | | | 0 7833031041 00 | 11,58 |
| 4 | 6 | 50 | 12 | | | | | | | | |
| 5 | 3 | 42 | 12 | | | | | | | | |
| 6 | 3 | 43 | 13 | | | | | | | 0 7833031061 00 | 13,06 |
| 6 | 6 | 50 | 16 | | | | | 0 7832061061 00 | 15,77 | 0 7833061061 00 | 15,77 |
| 8 | 6 | 63 | 18 | | | | | 0 7832061081 00 | 16,76 | 0 7833061081 00 | 16,76 |
| 10 | 6 | 65 | 20 | | | | | 0 7832061101 00 | 18,86 | 0 7833061101 00 | 18,86 |
| 12 | 6 | 70 | 25 | 0 7838061121 00 | 30,43 | | | 0 7832061121 00 | 25,16 | 0 7833061121 00 | 25,16 |
| 16 | 6 | 70 | 25 | | | | | 0 7832061161 00 | 34,03 | 0 7833061161 00 | 34,03 |
| 16 | 8 | 70 | 25 | | | | | | | 0 7833081161 00 | 34,03 |
| 20 | 6 | 70 | 25 | | | | | | | 0 7833061201 00 | 52,39 |
| 20 | 8 | 70 | 25 | | | | | | | 0 7833081201 00 | 52,39 |



* Einzelverpackung mit SB-Aufhänger
Single packing with tag
Imballo singolo con gancio



Schnittwertempfehlung
Recommended cutting conditions
Valori di taglio consigliati

→ Seite | Page | Pagina W/35-37

NEU | NEW | NUOVO
TiN

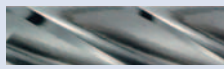
| | | | | 4 | | 5 | | 6 | | 6 | |
|----|----|----|----|-----------------|-------|-----------------|-------|------------------|-------|-----------------|-------|
| d1 | d2 | l1 | l2 | Code 7834 | € | Code 7835 | € | Code 7836 | € | Code 7837 | € |
| mm | mm | mm | mm | Art.-Nr. | | Art.-Nr. | | Art.-Nr. | | Art.-Nr. | |
| 3 | 3 | 38 | 12 | 0 7834031031 00 | 10,47 | 0 7835031031 00 | 8,36 | 0 7836031031 00 | 9,47 | 0 7837031031 00 | 11,36 |
| 3 | 3 | 50 | 12 | | | | | | | | |
| 4 | 3 | 40 | 10 | | | | | | | | |
| 4 | 6 | 50 | 12 | 0 7834061041 00 | 18,86 | | | | | | |
| 5 | 3 | 42 | 12 | 0 7834031051 00 | 14,48 | | | | | | |
| 6 | 3 | 43 | 13 | 0 7834031061 00 | 15,77 | | | 0 7836031061 00 | 14,67 | | |
| 6 | 6 | 50 | 16 | 0 7834061061 00 | 18,86 | 0 7835061061 00 | 15,77 | 0 7836061061 00* | 17,27 | 0 7837061061 00 | 20,72 |
| 8 | 6 | 63 | 18 | 0 7834061081 00 | 20,46 | | | 0 7836061081 00 | 18,36 | 0 7837061081 00 | 22,03 |
| 10 | 6 | 65 | 20 | 0 7834061101 00 | 23,05 | | | 0 7836061101 00* | 20,46 | 0 7837061101 00 | 24,55 |
| 12 | 6 | 70 | 25 | 0 7834061121 00 | 30,43 | | | 0 7836061121 00* | 27,74 | 0 7837061121 00 | 33,29 |
| 16 | 6 | 70 | 25 | 0 7834061161 00 | 40,91 | | | 0 7836061161 00 | 37,71 | | |
| 16 | 8 | 70 | 25 | 0 7834081161 00 | 40,91 | | | | | | |
| 20 | 6 | 70 | 25 | | | | | | | | |
| 20 | 8 | 70 | 25 | | | | | | | | |

>> **HARTMETALL-FRÄSSTIFTE,
KONUS 90°**

**TUNGSTEN CARBIDE ROTARY
BURRS, CONE 90°**

**FRESE ROTATIVE IN METALLO
DURO, CONICA 90°**

Unterschiedliche Zahnungen:



1A Aluminium
Aluminium
Aluminio



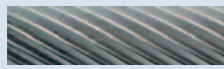
1 DIN C



2

Nähere Informationen zu den einzelnen Zahnungen siehe Seite 34.

Different cuts:



3 DIN MY



4 Diamant
Diamond
Diamante



5 DIN F

Detailed information about the different cuts see on page 34.

Dentature diverse:

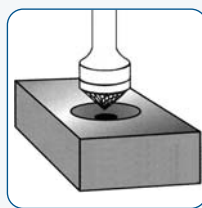


6 DIN MX



TiN **6** DIN MX

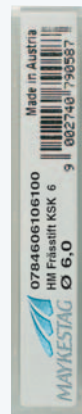
Informazioni più dettagliate circa le diverse dentature vedi pagina 34.



Schnittwertempfehlung
Recommended cutting conditions
Valori di taglio consigliati

→ Seite | Page | Pagina **V/35-37**

| | | | | 1A | 1 | 2 | 3 |
|-----------|----|----|----|-----------|----------|-----------|------------------------------|
| d1 | d2 | l1 | l2 | Code 7848 | € | Code 7841 | € |
| mm | mm | mm | mm | Art.-Nr. | | Art.-Nr. | |
| 3 | 3 | 38 | 2 | | | | 0 7843031031 00 8,36 |
| 4 | 6 | 50 | 3 | | | | 0 7843061041 00 12,58 |
| 5 | 3 | 34 | 4 | | | | 0 7843031051 00 12,08 |
| 6 | 6 | 50 | 5 | | | | 0 7843061061 00 12,58 |
| 8 | 6 | 53 | 8 | | | | 0 7843061081 00 13,67 |
| 10 | 6 | 55 | 10 | | | | 0 7843061101 00 15,77 |
| 12 | 6 | 57 | 12 | | | | 0 7843061121 00 20,95 |
| 16 | 6 | 61 | 16 | | | | 0 7843061161 00 26,24 |
| 20 | 6 | 65 | 20 | | | | 0 7843061201 00 36,70 |



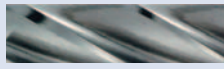
Schnittwertempfehlung
Recommended cutting conditions
Valori di taglio consigliati

→ Seite | Page | Pagina W/35-37

| | | | | 4 | | 5 | | 6 | | 6 | |
|----|----|----|----|-----------|---|-----------|---|-----------------|-------|-----------|---|
| d1 | d2 | l1 | l2 | Code 7844 | € | Code 7845 | € | Code 7846 | € | Code 7847 | € |
| mm | mm | mm | mm | Art.-Nr. | | Art.-Nr. | | Art.-Nr. | | Art.-Nr. | |
| 3 | 3 | 38 | 2 | | | | | 0 7846031031 00 | 9,47 | | |
| 4 | 6 | 50 | 3 | | | | | | | | |
| 5 | 3 | 34 | 4 | | | | | | | | |
| 6 | 6 | 50 | 5 | | | | | 0 7846061061 00 | 14,16 | | |
| 8 | 6 | 53 | 8 | | | | | | | | |
| 10 | 6 | 55 | 10 | | | | | 0 7846061101 00 | 17,27 | | |
| 12 | 6 | 57 | 12 | | | | | 0 7846061121 00 | 23,05 | | |
| 16 | 6 | 61 | 16 | | | | | 0 7846061161 00 | 28,84 | | |
| 20 | 6 | 65 | 20 | | | | | | | | |

>> HARTMETALL-FRÄSSTIFTE, KONUS 60°

Unterschiedliche Zahnungen:



1A Aluminium
Aluminium
Aluminio



1 DIN C

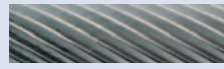


2

Nähere Informationen zu den einzelnen Zahnungen siehe Seite 34.

TUNGSTEN CARBIDE ROTARY BURRS, CONE 60°

Different cuts:



3 DIN MY



4 Diamant
Diamond
Diamante



5 DIN F

Detailed information about the different cuts see on page 34.

FRESE ROTATIVE IN METALLO DURO, CONICA 60°

Dentature diverse:



6 DIN MX

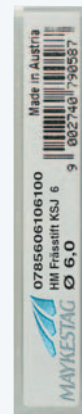
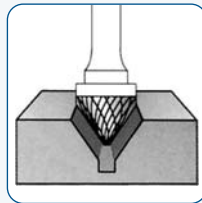


TiN **6** DIN MX

Informazioni più dettagliate circa le diverse dentature vedi pagina 34.



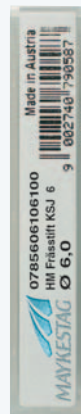
KSJ



Schnittwertempfehlung
Recommended cutting conditions
Valori di taglio consigliati

→ Seite | Page | Pagina **V/35-37**

| d1 mm | d2 mm | l1 mm | l2 mm | Code 7858 Art.-Nr. | € | Code 7851 Art.-Nr. | € | Code 7852 Art.-Nr. | € | Code 7853 Art.-Nr. | € |
|----------|----------|----------|----------|-----------------------|---|-----------------------|---|-----------------------|--------------|-----------------------|--------------|
| 3 | 3 | 38 | 3 | | | | | | | 0 7853031031 00 | 8,36 |
| 4 | 6 | 50 | 4 | | | | | | | 0 7853061041 00 | 12,58 |
| 6 | 3 | 36 | 6 | | | | | | | 0 7853031061 00 | 13,06 |
| 6 | 6 | 50 | 6 | | | | | | | 0 7853061061 00 | 12,58 |
| 8 | 6 | 53 | 8 | | | | | 0 7852061081 00 | 13,67 | | |
| 10 | 6 | 55 | 10 | | | | | | | 0 7853061101 00 | 15,77 |
| 12 | 6 | 57 | 12 | | | | | | | 0 7853061121 00 | 20,95 |
| 16 | 6 | 61 | 16 | | | | | | | 0 7853061161 00 | 26,24 |



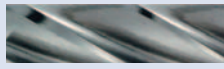
Schnittwertempfehlung
Recommended cutting conditions
Valori di taglio consigliati

→ Seite | Page | Pagina W/35-37

| | | | | 4 | | 5 | | 6 | | 6 | |
|----|----|----|----|-----------|---|-----------|---|-----------------|-------|-----------|---|
| d1 | d2 | l1 | l2 | Code 7854 | € | Code 7855 | € | Code 7856 | € | Code 7857 | € |
| mm | mm | mm | mm | Art.-Nr. | | Art.-Nr. | | Art.-Nr. | | Art.-Nr. | |
| 3 | 3 | 38 | 3 | | | | | | | | |
| 4 | 6 | 50 | 4 | | | | | | | | |
| 6 | 3 | 36 | 6 | | | | | | | | |
| 6 | 6 | 50 | 6 | | | | | 0 7856061061 00 | 14,16 | | |
| 8 | 6 | 53 | 8 | | | | | | | | |
| 10 | 6 | 55 | 10 | | | | | | | | |
| 12 | 6 | 57 | 12 | | | | | 0 7856061121 00 | 23,05 | | |
| 16 | 6 | 61 | 16 | | | | | 0 7856061161 00 | 28,84 | | |

>> HARTMETALL-FRÄSSTIFTE, TROPFEN

Unterschiedliche Zahnungen:



1A Aluminium
Aluminium
Aluminio



1 DIN C



2

Nähere Informationen zu den einzelnen Zahnungen siehe Seite 34.

TUNGSTEN CARBIDE ROTARY BURRS, OVAL

Different cuts:



3 DIN MY



4 Diamant
Diamond
Diamante

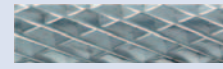


5 DIN F

Detailed information about the different cuts see on page 34.

FRESE ROTATIVE IN METALLO DURO, OVALE

Dentature diverse:



6 DIN MX

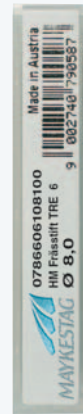
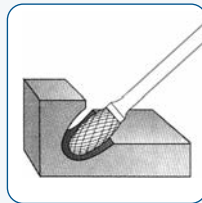


TiN **6** DIN MX

Informazioni più dettagliate circa le diverse dentature vedi pagina 34.



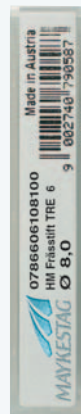
TRE



Schnittwertempfehlung
Recommended cutting conditions
Valori di taglio consigliati

→ Seite | Page | Pagina **V/35-37**

| | | | | 1A | 1 | 2 | 3 | | | | |
|----|----|----|----|-----------------------|--------------|-----------------------|--------------|-----------------------|--------------|-----------------------|--------------|
| d1 | d2 | l1 | l2 | Code 7868 Art.-Nr. | € | Code 7861 Art.-Nr. | € | Code 7862 Art.-Nr. | € | Code 7863 Art.-Nr. | € |
| mm | mm | mm | mm | | | | | | | | |
| 3 | 3 | 38 | 6 | | | | | | | 0 7863031031 00 | 8,36 |
| 4 | 3 | 36 | 6 | | | | | | | 0 7863031041 00 | 11,58 |
| 4 | 6 | 50 | 6 | | | | | | | | |
| 5 | 3 | 38 | 8 | | | | | | | 0 7863031051 00 | 12,08 |
| 6 | 3 | 40 | 10 | | | | | | | 0 7863031061 00 | 13,06 |
| 6 | 6 | 50 | 10 | | | | | | | 0 7863061061 00 | 15,77 |
| 8 | 6 | 58 | 13 | | | | | 0 7862061081 00 | 17,87 | 0 7863061081 00 | 17,87 |
| 10 | 6 | 61 | 16 | 0 7868061101 00 | 25,16 | | | | | 0 7863061101 00 | 20,95 |
| 12 | 6 | 65 | 20 | | | 0 7861061121 00 | 28,84 | 0 7862061121 00 | 26,24 | 0 7863061121 00 | 26,24 |
| 16 | 6 | 70 | 25 | | | 0 7861061161 00 | 40,29 | 0 7862061161 00 | 36,70 | 0 7863061161 00 | 36,70 |
| 16 | 8 | 70 | 25 | | | | | | | 0 7863081161 00 | 36,70 |



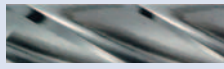
Schnittwertempfehlung
Recommended cutting conditions
Valori di taglio consigliati

→ Seite | Page | Pagina W/35-37

| | | | | 4 | | 5 | | 6 | | 6 | |
|----|----|----|----|-----------------|-------|-----------|---|-----------------|-------|-----------|---|
| d1 | d2 | l1 | l2 | Code 7864 | € | Code 7865 | € | Code 7866 | € | Code 7867 | € |
| mm | mm | mm | mm | Art.-Nr. | | Art.-Nr. | | Art.-Nr. | | Art.-Nr. | |
| 3 | 3 | 38 | 6 | 0 7864031031 00 | 10,47 | | | 0 7866031031 00 | 9,47 | | |
| 4 | 3 | 36 | 6 | | | | | 0 7866031041 00 | 12,58 | | |
| 4 | 6 | 50 | 6 | 0 7864061041 00 | 18,86 | | | 0 7866061041 00 | 17,27 | | |
| 5 | 3 | 38 | 8 | | | | | | | | |
| 6 | 3 | 40 | 10 | 0 7864031061 00 | 15,63 | | | 0 7866031061 00 | 14,67 | | |
| 6 | 6 | 50 | 10 | 0 7864061061 00 | 18,86 | | | 0 7866061061 00 | 17,27 | | |
| 8 | 6 | 58 | 13 | 0 7864061081 00 | 21,45 | | | 0 7866061081 00 | 19,94 | | |
| 10 | 6 | 61 | 16 | 0 7864061101 00 | 25,16 | | | 0 7866061101 00 | 23,05 | | |
| 12 | 6 | 65 | 20 | 0 7864061121 00 | 31,43 | | | 0 7866061121 00 | 28,84 | | |
| 16 | 6 | 70 | 25 | 0 7864061161 00 | 44,00 | | | 0 7866061161 00 | 40,29 | | |
| 16 | 8 | 70 | 25 | 0 7864081161 00 | 44,00 | | | | | | |

>> HARTMETALL-FRÄSSTIFTE, KUGEL

Unterschiedliche Zahnungen:



1A Aluminium
Aluminium
Aluminio



1 DIN C



2

Nähere Informationen zu den einzelnen Zahnungen siehe Seite 34.

TUNGSTEN CARBIDE ROTARY BURRS, SPHERICAL

Different cuts:



3 DIN MY



4 Diamant
Diamond
Diamante



5 DIN F

Detailed information about the different cuts see on page 34.

FRESE ROTATIVE IN METALLO DURO, SFERICA

Dentature diverse:



6 DIN MX

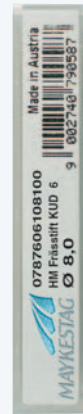
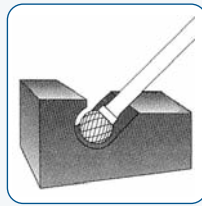


TiN **6** DIN MX

Informazioni più dettagliate circa le diverse dentature vedi pagina 34.



KUD



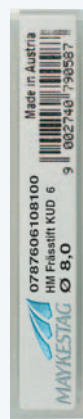
Schnittwertempfehlung
Recommended cutting conditions
Valori di taglio consigliati

→ Seite | Page | Pagina **V/35-37**

| | | | | 1A | 1 | 2 | 3 | | | | |
|-----|----|------------|-----|-----------------------|--------------|-----------------------|--------------|-----------------------|--------------|-----------------------|--------------|
| d1 | d2 | l1 | l2 | Code 7878 Art.-Nr. | € | Code 7871 Art.-Nr. | € | Code 7872 Art.-Nr. | € | Code 7873 Art.-Nr. | € |
| mm | mm | mm | mm | | | | | | | | |
| 2,5 | 3 | 38 | 2 | | | | | | | 0 7873031251 00 | 8,88 |
| 3 | 3 | 38 | 2,5 | | | | | | | 0 7873031031 00 | 8,36 |
| 4 | 3 | 33 | 3 | | | | | | | 0 7873031041 00 | 11,58 |
| 4 | 6 | 50 | 3 | | | | | | | 0 7873061041 00 | 15,77 |
| 5 | 3 | 34 | 4 | | | | | | | 0 7873031051 00 | 12,08 |
| 6 | 3 | 35 | 5 | | | | | | | 0 7873031061 00 | 13,06 |
| 6 | 6 | 50 | 5 | | | 0 7871061061 00 | 17,27 | 0 7872061061 00 | 15,77 | 0 7873061061 00 | 15,77 |
| 8 | 6 | 52 | 7 | | | 0 7871061081 00 | 19,94 | 0 7872061081 00 | 17,87 | 0 7873061081 00 | 17,87 |
| 10 | 6 | 54 | 9 | 0 7878061101 00 | 24,13 | 0 7871061101 00 | 22,04 | 0 7872061101 00 | 19,94 | 0 7873061101 00 | 19,94 |
| 10 | 6 | 150 | 9 | | | | | | | | |
| 12 | 6 | 55 | 10 | 0 7878061121 00 | 30,43 | 0 7871061121 00 | 27,74 | 0 7872061121 00 | 25,16 | 0 7873061121 00 | 25,16 |
| 12 | 6 | 150 | 10 | | | | | | | | |
| 12 | 8 | 55 | 10 | | | | | | | 0 7873081121 00 | 25,16 |
| 16 | 6 | 59 | 14 | 0 7878061161 00 | 42,99 | | | 0 7872061161 00 | 35,62 | 0 7873061161 00 | 35,62 |
| 16 | 8 | 59 | 14 | | | | | | | 0 7873081161 00 | 35,62 |
| 20 | 6 | 63 | 18 | 0 7878061201 00 | 61,87 | | | | | 0 7873061201 00 | 51,40 |



* Einzelverpackung mit SB-Aufhänger
 Single packing with tag
 Imballo singolo con gancio



Schnittwertempfehlung
 Recommended cutting conditions
 Valori di taglio consigliati

→ Seite | Page | Pagina W/35-37

NEU | NEW | NUOVO
TiN

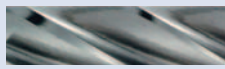
| | | | | 4 | | 5 | | 6 | | 6 | |
|-----|----|-----|-----|-----------------|-------|-----------------|-------|------------------|-------|-----------------|-------|
| d1 | d2 | l1 | l2 | Code 7874 | € | Code 7875 | € | Code 7876 | € | Code 7877 | € |
| mm | mm | mm | mm | Art.-Nr. | | Art.-Nr. | | Art.-Nr. | | Art.-Nr. | |
| 2,5 | 3 | 38 | 2 | | | | | 0 7876031251 00 | 10,00 | 0 7877031251 00 | 12,00 |
| 3 | 3 | 38 | 2,5 | 0 7874031031 00 | 10,47 | | | 0 7876031031 00 | 9,47 | 0 7877031031 00 | 11,36 |
| 4 | 3 | 33 | 3 | 0 7874031041 00 | 14,16 | | | | | | |
| 4 | 6 | 50 | 3 | 0 7874061041 00 | 18,86 | | | 0 7876061041 00 | 17,27 | | |
| 5 | 3 | 34 | 4 | 0 7874031051 00 | 14,48 | | | 0 7876031051 00 | 13,67 | | |
| 6 | 3 | 35 | 5 | 0 7874031061 00 | 15,77 | | | 0 7876031061 00 | 14,67 | | |
| 6 | 6 | 50 | 5 | 0 7874061061 00 | 18,86 | | | 0 7876061061 00 | 17,27 | 0 7877061061 00 | 20,72 |
| 8 | 6 | 52 | 7 | 0 7874061081 00 | 21,45 | | | 0 7876061081 00 | 19,94 | 0 7877061081 00 | 23,93 |
| 10 | 6 | 54 | 9 | 0 7874061101 00 | 24,13 | | | 0 7876061101 00* | 22,04 | 0 7877061101 00 | 26,45 |
| 10 | 6 | 150 | 9 | 0 7874062101 00 | 30,43 | | | 0 7876062101 00 | 27,74 | | |
| 12 | 6 | 55 | 10 | 0 7874061121 00 | 30,43 | 0 7875061121 00 | 25,16 | 0 7876061121 00* | 27,74 | 0 7877061121 00 | 33,29 |
| 12 | 6 | 150 | 10 | 0 7874062121 00 | 36,70 | | | 0 7876062121 00 | 33,52 | | |
| 12 | 8 | 55 | 10 | 0 7874081121 00 | 30,43 | | | | | | |
| 16 | 6 | 59 | 14 | 0 7874061161 00 | 42,99 | | | 0 7876061161 00 | 39,31 | | |
| 16 | 8 | 59 | 14 | | | | | | | | |
| 20 | 6 | 63 | 18 | 0 7874061201 00 | 61,87 | | | 0 7876061201 00 | 57,06 | | |

>> HARTMETALL-FRÄSSTIFTE, RUNDBOGEN

TUNGSTEN CARBIDE ROTARY BURRS, ARC ROUND NOSE

FRESE ROTATIVE IN METALLO DURO, A LANCIA RAGGIATA

Unterschiedliche Zahnungen:



1A Aluminium
Aluminium
Aluminio



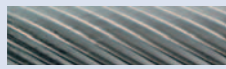
1 DIN C



2

Nähere Informationen zu den einzelnen Zahnungen siehe Seite 34.

Different cuts:



3 DIN MY



4 Diamant
Diamond
Diamante



5 DIN F

Detailed information about the different cuts see on page 34.

Dentature diverse:

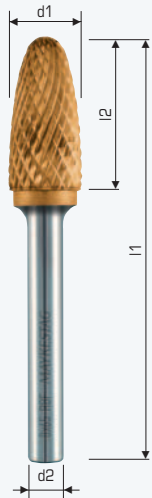


6 DIN MX

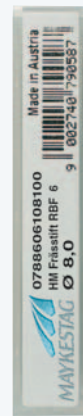
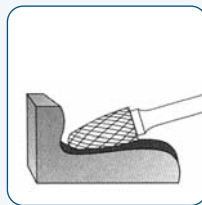


TiN **6** DIN MX

Informazioni più dettagliate circa le diverse dentature vedi pagina 34.



RBF



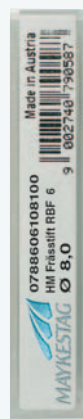
Schnittwertempfehlung
Recommended cutting conditions
Valori di taglio consigliati

→ Seite | Page | Pagina **V/35-37**

| | | | | 1A | | 1 | | 2 | | 3 | |
|----|----|-----|----|-----------------|--------------|-----------------|--------------|-----------------|--------------|-----------------|--------------|
| d1 | d2 | l1 | l2 | Code 7888 | € | Code 7881 | € | Code 7882 | € | Code 7883 | € |
| mm | mm | mm | mm | Art.-Nr. | | Art.-Nr. | | Art.-Nr. | | Art.-Nr. | |
| 3 | 3 | 38 | 12 | | | | | | | 0 7883031031 00 | 8,36 |
| 4 | 3 | 40 | 10 | | | | | | | 0 7883031041 00 | 11,58 |
| 4 | 6 | 50 | 14 | | | | | | | | |
| 6 | 3 | 43 | 13 | | | | | | | 0 7883031061 00 | 13,06 |
| 6 | 6 | 50 | 18 | | | | | 0 7882061061 00 | 16,76 | 0 7883061061 00 | 16,76 |
| 6 | 6 | 150 | 18 | | | | | | | | |
| 8 | 6 | 63 | 18 | | | | | 0 7882061081 00 | 18,86 | 0 7883061081 00 | 18,86 |
| 10 | 6 | 65 | 20 | 0 7888061101 00 | 27,23 | 0 7881061101 00 | 25,16 | 0 7882061101 00 | 22,54 | 0 7883061101 00 | 22,54 |
| 10 | 6 | 150 | 20 | | | | | | | | |
| 12 | 6 | 70 | 25 | 0 7888061121 00 | 33,02 | 0 7881061121 00 | 30,43 | 0 7882061121 00 | 27,23 | 0 7883061121 00 | 27,23 |
| 12 | 6 | 150 | 25 | | | | | | | | |
| 12 | 8 | 70 | 25 | 0 7888081121 00 | 33,02 | | | | | | |
| 16 | 6 | 75 | 30 | 0 7888061161 00 | 46,59 | 0 7881061161 00 | 42,99 | 0 7882061161 00 | 38,81 | 0 7883061161 00 | 38,81 |
| 16 | 8 | 75 | 30 | 0 7888081161 00 | 46,59 | | | | | 0 7883081161 00 | 38,81 |
| 20 | 6 | 75 | 30 | | | | | | | 0 7883061201 00 | 70,73 |
| 20 | 8 | 75 | 30 | | | | | | | | |



* Einzelverpackung mit SB-Aufhänger
Single packing with tag
Imballo singolo con gancio



Schnittwertempfehlung
Recommended cutting conditions
Valori di taglio consigliati

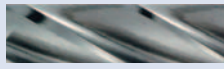
→ Seite | Page | Pagina W/35-37

NEU | NEW | NUOVO
TiN

| | | | | 4 | | 5 | | 6 | | 6 | |
|----|----|-----|----|-----------------|-------|-----------|---|------------------|-------|-----------------|-------|
| d1 | d2 | l1 | l2 | Code 7884 | € | Code 7885 | € | Code 7886 | € | Code 7887 | € |
| mm | mm | mm | mm | Art.-Nr. | | Art.-Nr. | | Art.-Nr. | | Art.-Nr. | |
| 3 | 3 | 38 | 12 | 0 7884031031 00 | 10,47 | | | 0 7886031031 00 | 9,47 | 0 7887031031 00 | 11,36 |
| 4 | 3 | 40 | 10 | | | | | | | | |
| 4 | 6 | 50 | 14 | | | | | 0 7886061041 00 | 18,86 | | |
| 6 | 3 | 43 | 13 | 0 7884031061 00 | 15,77 | | | 0 7886031061 00 | 14,67 | | |
| 6 | 6 | 50 | 18 | 0 7884061061 00 | 20,46 | | | 0 7886061061 00* | 18,86 | 0 7887061061 00 | 22,63 |
| 6 | 6 | 150 | 18 | 0 7884062061 00 | 26,73 | | | | | | |
| 8 | 6 | 63 | 18 | 0 7884061081 00 | 23,05 | | | 0 7886061081 00 | 20,95 | 0 7887061081 00 | 25,14 |
| 10 | 6 | 65 | 20 | 0 7884061101 00 | 27,23 | | | 0 7886061101 00* | 25,16 | 0 7887061101 00 | 30,19 |
| 10 | 6 | 150 | 20 | 0 7884062101 00 | 33,52 | | | | | | |
| 12 | 6 | 70 | 25 | 0 7884061121 00 | 33,02 | | | 0 7886061121 00* | 30,43 | 0 7887061121 00 | 36,52 |
| 12 | 6 | 150 | 25 | 0 7884062121 00 | 39,31 | | | | | | |
| 12 | 8 | 70 | 25 | | | | | 0 7886081121 00 | 30,43 | | |
| 16 | 6 | 75 | 30 | 0 7884061161 00 | 46,59 | | | 0 7886061161 00 | 42,99 | | |
| 16 | 8 | 75 | 30 | 0 7884081161 00 | 46,59 | | | | | | |
| 20 | 6 | 75 | 30 | 0 7884061201 00 | 84,94 | | | 0 7886061201 00 | 78,05 | | |
| 20 | 8 | 75 | 30 | 0 7884081201 00 | 84,94 | | | | | | |

>> HARTMETALL-FRÄSSTIFTE, RUNDKEGEL

Unterschiedliche Zahnungen:



1A Aluminium
Aluminium
Aluminio



1 DIN C



2

Nähere Informationen zu den einzelnen Zahnungen siehe Seite 34.

TUNGSTEN CARBIDE ROTARY BURRS, CONICAL ROUND NOSE

Different cuts:



3 DIN MY



4 Diamant
Diamond
Diamante



5 DIN F

Detailed information about the different cuts see on page 34.

FRESE ROTATIVE IN METALLO DURO, CONICA RAGGIATA

Dentature diverse:

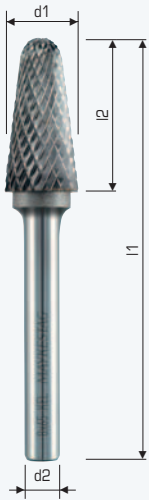


6 DIN MX

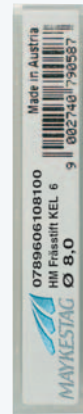
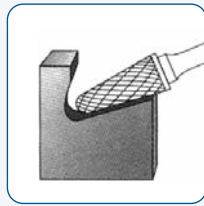


TiN **6** DIN MX

Informazioni più dettagliate circa le diverse dentature vedi pagina 34.



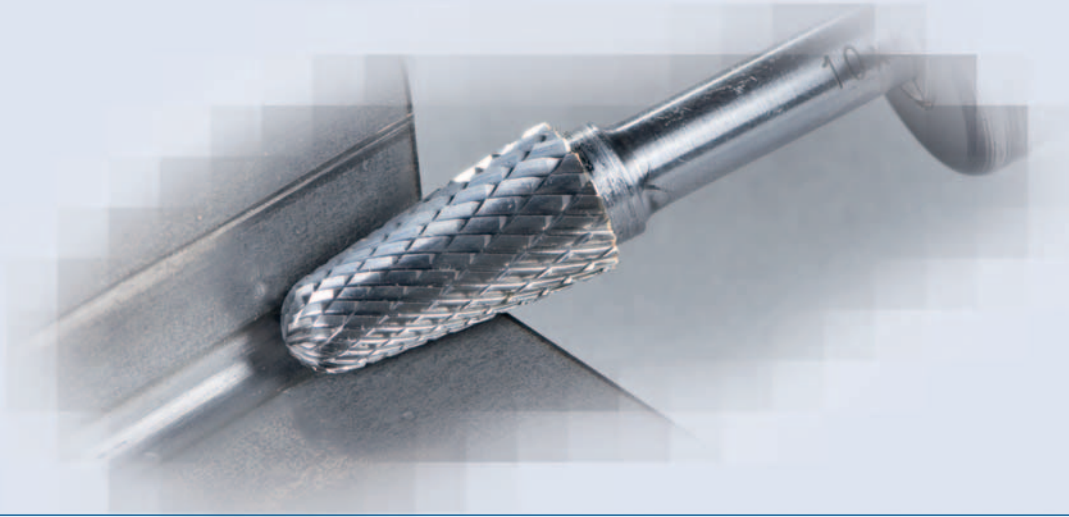
KEL



Schnittwertempfehlung
Recommended cutting conditions
Valori di taglio consigliati

→ Seite | Page | Pagina **V/35-37**

| | | | | 1A | 1 | 2 | 3 | | | | |
|----|----|----|----|-----------------|--------------|-----------------|--------------|-----------------|--------------|-----------------|--------------|
| d1 | d2 | l1 | l2 | Code 7898 | € | Code 7891 | € | Code 7892 | € | Code 7893 | € |
| mm | mm | mm | mm | Art.-Nr. | | Art.-Nr. | | Art.-Nr. | | Art.-Nr. | |
| 3 | 3 | 38 | 14 | | | | | | | 0 7893031031 00 | 8,36 |
| 4 | 3 | 44 | 14 | | | | | | | 0 7893031041 00 | 11,58 |
| 4 | 6 | 50 | 16 | | | | | | | | |
| 5 | 3 | 46 | 16 | | | | | | | 0 7893031051 00 | 12,08 |
| 6 | 3 | 48 | 18 | | | | | | | 0 7893031061 00 | 13,06 |
| 6 | 6 | 50 | 20 | | | | | 0 7892061061 00 | 17,27 | 0 7893061061 00 | 17,27 |
| 8 | 6 | 65 | 20 | | | | | 0 7892061081 00 | 20,95 | 0 7893061081 00 | 20,95 |
| 10 | 6 | 65 | 20 | 0 7898061101 00 | 30,43 | 0 7891061101 00 | 27,74 | 0 7892061101 00 | 25,16 | 0 7893061101 00 | 25,16 |
| 12 | 6 | 70 | 25 | 0 7898061121 00 | 37,71 | 0 7891061121 00 | 34,64 | 0 7892061121 00 | 31,43 | 0 7893061121 00 | 31,43 |
| 12 | 8 | 70 | 25 | 0 7898081121 00 | 37,71 | | | | | 0 7893081121 00 | 31,43 |
| 16 | 6 | 75 | 30 | 0 7898061161 00 | 56,57 | 0 7891061161 00 | 51,88 | 0 7892061161 00 | 47,19 | 0 7893061161 00 | 47,19 |
| 16 | 8 | 75 | 30 | 0 7898081161 00 | 56,57 | | | | | 0 7893081161 00 | 47,19 |



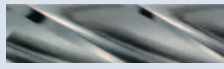
Schnittwertempfehlung
Recommended cutting conditions
Valori di taglio consigliati

→ Seite | Page | Pagina W/35-37

| | | | | 4 | | 5 | | 6 | | 6 | |
|----|----|----|----|-----------------|-------|-----------|---|-----------------|-------|-----------|---|
| d1 | d2 | l1 | l2 | Code 7894 | € | Code 7895 | € | Code 7896 | € | Code 7897 | € |
| mm | mm | mm | mm | Art.-Nr. | | Art.-Nr. | | Art.-Nr. | | Art.-Nr. | |
| 3 | 3 | 38 | 14 | 0 7894031031 00 | 10,47 | | | 0 7896031031 00 | 9,47 | | |
| 4 | 3 | 44 | 14 | | | | | 0 7896031041 00 | 13,06 | | |
| 4 | 6 | 50 | 16 | | | | | 0 7896061041 00 | 19,37 | | |
| 5 | 3 | 46 | 16 | | | | | | | | |
| 6 | 3 | 48 | 18 | 0 7894031061 00 | 15,77 | | | | | | |
| 6 | 6 | 50 | 20 | 0 7894061061 00 | 20,95 | | | 0 7896061061 00 | 19,37 | | |
| 8 | 6 | 65 | 20 | 0 7894061081 00 | 25,16 | | | 0 7896061081 00 | 23,05 | | |
| 10 | 6 | 65 | 20 | 0 7894061101 00 | 30,43 | | | 0 7896061101 00 | 27,74 | | |
| 12 | 6 | 70 | 25 | 0 7894061121 00 | 37,71 | | | 0 7896061121 00 | 34,64 | | |
| 12 | 8 | 70 | 25 | | | | | 0 7896081121 00 | 34,64 | | |
| 16 | 6 | 75 | 30 | 0 7894061161 00 | 56,57 | | | 0 7896061161 00 | 51,88 | | |
| 16 | 8 | 75 | 30 | | | | | | | | |

>> HARTMETALL-FRÄSSTIFTE, FLAMME

Unterschiedliche Zahnungen:



1A Aluminium
Aluminium
Aluminio



1 DIN C



2

Nähere Informationen zu den einzelnen
Zahnungen siehe Seite 34.

TUNGSTEN CARBIDE ROTARY BURRS, FLAME

Different cuts:



3 DIN MY



4 Diamant
Diamond
Diamante



5 DIN F

Detailed information about the different cuts
see on page 34.

FRESE ROTATIVE IN METALLO DURO, FIAMMA

Dentature diverse:

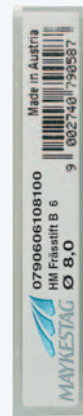
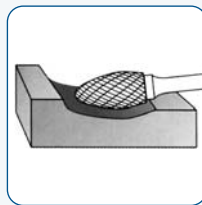
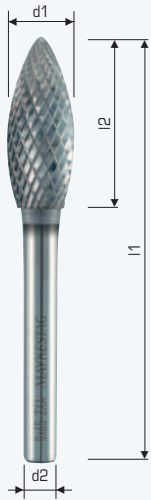


6 DIN MX



TiN **6** DIN MX

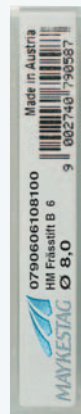
Informazioni più dettagliate circa le diverse
dentature vedi pagina 34.



Schnittwertempfehlung
Recommended cutting conditions
Valori di taglio consigliati

→ Seite | Page | Pagina V/35-37

| d1 mm | d2 mm | l1 mm | l2 mm | 1A | 1 | 2 | 3 | | | | |
|----------|----------|----------|----------|-----------------------|----------|-----------------------|----------|-----------------------|---|-----------------------|--------------|
| | | | | Code 7908 Art.-Nr. | € | Code 7901 Art.-Nr. | € | Code 7902 Art.-Nr. | € | Code 7903 Art.-Nr. | € |
| 6 | 6 | 57 | 20 | | | | | | | | |
| 8 | 6 | 65 | 20 | | | | | | | 0 7903061081 00 | 20,95 |
| 10 | 6 | 70 | 25 | | | | | | | 0 7903061101 00 | 25,16 |
| 12 | 6 | 75 | 30 | | | | | | | 0 7903061121 00 | 31,43 |
| 12 | 8 | 75 | 30 | | | | | | | | |
| 16 | 6 | 77 | 32 | | | | | | | | |



Schnittwertempfehlung
Recommended cutting conditions
Valori di taglio consigliati

→ Seite | Page | Pagina W/35-37

| | | | | 4 | | 5 | | 6 | | 6 | |
|----|----|----|----|-----------------|--------------|-----------|---|-----------------|--------------|-----------|---|
| d1 | d2 | l1 | l2 | Code 7904 | € | Code 7905 | € | Code 7906 | € | Code 7907 | € |
| mm | mm | mm | mm | Art.-Nr. | | Art.-Nr. | | Art.-Nr. | | Art.-Nr. | |
| 6 | 6 | 57 | 20 | | | | | 0 7906061061 00 | 19,37 | | |
| 8 | 6 | 65 | 20 | 0 7904061081 00 | 25,16 | | | 0 7906061081 00 | 23,05 | | |
| 10 | 6 | 70 | 25 | 0 7904061101 00 | 30,43 | | | 0 7906061101 00 | 27,74 | | |
| 12 | 6 | 75 | 30 | 0 7904061121 00 | 37,71 | | | 0 7906061121 00 | 34,64 | | |
| 12 | 8 | 75 | 30 | 0 7904081121 00 | 37,71 | | | | | | |
| 16 | 6 | 77 | 32 | 0 7904061161 00 | 56,57 | | | 0 7906061161 00 | 51,88 | | |

>> BESCHREIBUNG DER VERZÄHNUNGEN

DESCRIPTION OF CUTS

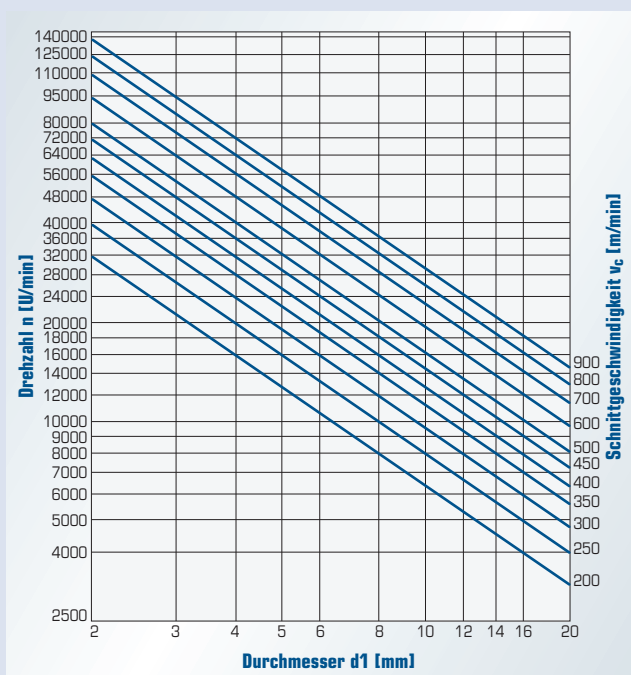
DESCRIZIONE DELLE DENTATURE

| | | | |
|--|---|---|--|
|  |  |  |  |
| <p>Zahnung 1A (Aluminium): Für Aluminium und Aluminiumlegierungen sowie Kunststoffe.</p> | <p>Zahnung 1 (DIN C): Zum Entgraten nicht gehärteter Stähle, Leichtmetalle, Legierungen und Hartgummi.</p> | <p>Zahnung 2: Für Stähle hoher Festigkeit, Inox, Stahlguss, Schweißnähte und Messing.</p> | <p>Zahnung 3 (DIN MY): Für allgemeine Arbeiten wie Entgraten, Fasen, Kantenbrechen mit sauberer Oberfläche. Für Stähle mit hoher Festigkeit, Schweißnähte.</p> |
| <p> Cut 1A (aluminium): Suitable for aluminium and aluminium alloys as well as plastics.</p> | <p>Cut 1 (DIN C): Suitable for deburring non-hardened steels, soft steels, alloys and hard plastics.</p> | <p>Cut 2: Suitable for steels with high tensile strength, inox, cast steels, welding seams and brass.</p> | <p>Cut 3 (DIN MY): For general purposes such as deburring, chamfering and smoothing edges with clean surface. Suitable for steels with high tensile strength and welding seams.</p> |
| <p> Dentatura 1A (alluminio): Per sgrossatura alluminio, leghe di alluminio, plastica.</p> | <p>Dentatura 1 (DIN C): Sgrossatura di acciai non temprati, metalli leggeri, leghe, gomma dura.</p> | <p>Dentatura 2: Adatte per acciai ad alta resistenza, acciai inox, acciaio fuso, cordoni di saldatura, ottone.</p> | <p>Dentatura 3 (DIN MY): Per lavorazioni universali di sgrossatura, smussatura, spianatura degli spigoli, con ottima finitura della superficie. Adatte per acciai ad alta resistenza, cordoni di saldature.</p> |
|  |  |  | |
| <p> Zahnung 4 (Diamant): Hohe Oberflächengüte für gehärtete Stähle, Schweißnähte hoher Festigkeit.</p> | <p>Zahnung 5 (DIN F): Beste Oberflächen für Stähle mit hoher Festigkeit.</p> | <p>Zahnung 6 (DIN MX): Mit dieser Universalverzahnung werden auch bei härtesten Werkstoffen und Schweißnähten glatte Oberflächen erzielt, ideal für den Werkzeug- und Formenbau.</p> | |
| <p> Cut 4 (diamond): Suitable for hardened steels with excellent surface quality and welding seams with high tensile strength.</p> | <p>Cut 5 (DIN F): Superb surfaces for steels with high tensile strength.</p> | <p>Cut 6 (DIN MX): With this universal cutting profile even hardest materials and welding seams can be machined with best finishing quality. Ideal for the tool and mould industry.</p> | |
| <p> Dentatura 4 (diamante): Ottima finitura delle superficie su acciai temprati, e saldature alta resistenza.</p> | <p>Dentatura 5 (DIN F): Ottima finitura su acciai ad elevata resistenza.</p> | <p>Dentatura 6 (DIN MX): Questa dentatura universale permette di ottenere delle superfici ottimali anche su acciai e saldature ad alta resistenza; ideale per acciai da utensili e acciai da stampi.</p> | |



>> ANWENDUNG DER ZAHNUNGEN, SCHNITTWERTEMPFEHLUNG

| Werkstoffgruppen | | | Bearbeitung | Zahnung | Schnittgeschwindigkeit v_c (m/min) | |
|---------------------------------------|--|---|------------------|------------------|--------------------------------------|---------|
| Stahl- und Stahlgusswerkstoffe | ungehärtete, nicht vergütete Stähle < 1.200 N/mm ² (< 35 HRC) | Baustähle, Kohlenstoffstähle, Werkzeugstähle, unlegierte Stähle, Einsatzstähle, Stahlguss | Grobe Zerspanung | 1 | 600-900 | |
| | | | | 2 | 500-700 | |
| | | | | 6 TiN | 450-600 | |
| | | | | 6 | 450-600 | |
| | gehärtete, vergütete Stähle > 1.200 N/mm ² (> 35 HRC) | Werkzeugstähle, Vergütungsstähle, legierte Stähle, Stahlguss | Grobe Zerspanung | 3, 4, 5 | 500-600 | |
| | | | | 2 | 250-350 | |
| | | | | 6 TiN | 250-350 | |
| | | | | 6 | 250-350 | |
| | | Feine Zerspanung | 3, 4, 5 | 350-450 | | |
| | | | 3, 4, 5 | 350-450 | | |
| | | | 3, 4, 5 | 350-450 | | |
| | | | 3, 4, 5 | 350-450 | | |
| Inox | rost- und säurebeständige Stähle | austenitisch und ferritisch | Grobe Zerspanung | 1 | 300-450 | |
| | | | | 2 | 300-400 | |
| | | | | 6 TiN | 250-350 | |
| | | | | 6 | 250-350 | |
| | | | | Feine Zerspanung | 3, 4, 5 | 350-450 |
| | | | | | 3, 4, 5 | 350-450 |
| | | | | | 3, 4, 5 | 350-450 |
| | | | | | 3, 4, 5 | 350-450 |
| NE-Metalle | weiche NE-Metalle | Alu-Legierungen, Messing, Zink, Kupfer | Grobe Zerspanung | 1A | 600-900 | |
| | | | | 1 | 600-900 | |
| | | | | 2 | 500-700 | |
| | | | | 6 TiN | 400-600 | |
| | | Feine Zerspanung | 2 | 800-900 | | |
| | | | 2 | 250-350 | | |
| | | | 6, 6 TiN | 250-450 | | |
| | | | 3, 4 | 350-450 | | |
| | harte NE-Metalle | Titan, Titanlegierungen, Bronze, Alu-Legierungen mit hohem Si-Anteil | Grobe Zerspanung | 1, 2 | 300-450 | |
| | | | | 6 | 300-450 | |
| | | | | 3, 4, 5 | 350-500 | |
| | | | | 3, 4, 5 | 350-500 | |
| hochwarmfeste Werkstoffe | Nickelbasislegierungen, Ni-Co Legierungen | Grobe Zerspanung | 1, 2 | 300-450 | | |
| | | | 6 | 300-450 | | |
| | | | 3, 4, 5 | 350-500 | | |
| | | | 3, 4, 5 | 350-500 | | |
| Gusseisenwerkstoffe | | Grauguss, Sphäroguss | Grobe Zerspanung | 6 TiN | 600-800 | |
| | | | | 2 | 500-700 | |
| | | | | 3 | 450-600 | |
| | | | | 6 | 450-600 | |
| | | | | Feine Zerspanung | 3, 4, 5 | 500-600 |
| | | | | | 3, 4, 5 | 500-600 |
| | | | | | 3, 4, 5 | 500-600 |
| | | | | | 3, 4, 5 | 500-600 |
| Kunststoffe | | faserverstärkte Kunststoffe, thermoplastische Kunststoffe, Hartgummi | Grobe Zerspanung | 1A | 500-900 | |
| | | | | 6 TiN | 500-900 | |
| | | | | Feine Zerspanung | 1, 2 | 500-900 |
| | | | | | 1, 2 | 500-900 |



Einsatzempfehlungen:

Verwenden Sie nach Möglichkeit die Höchstwerte.

Ausnahmen:

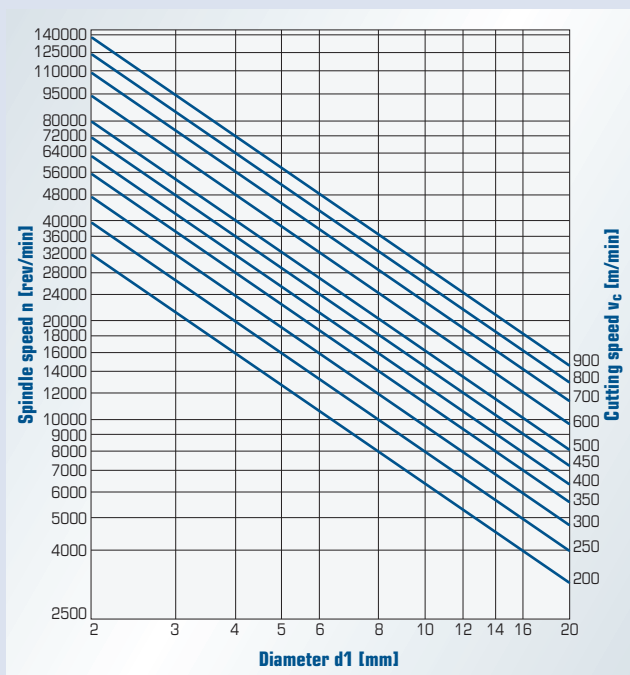
- Senkarbeiten mit allseitiger Umschlingung des Frässtiftes, Drehzahl < 3000 U/min möglich.
- Stationärer Einsatz, Drehzahl < 3000 U/min möglich.
- Werkstoffe mit schlechter Wärmeleitfähigkeit, Drehzahl senken, um Blaufärbung des Frässtiftes zu vermeiden.

Sicherheitshinweise:

Augenschutz benutzen! Je härter der Werkstoff, desto feiner die Zahnung wählen. Nur schlagfreie Spannfutter verwenden!

>> APPLICATION OF DIFFERENT CUTS, RECOMMENDED CUTTING CONDITIONS

| Material groups | | | Machining | Cut | Cutting speed v_c (m/min) | |
|--|--|---|------------------|---------------------------|--------------------------------------|---|
| Steels and cast steels | non-hardened, non heat treatable steels < 1.200 N/mm ² (< 35 HRC) | Structural steels, carbon steels, tool steels, unalloyed steels, case hardening steels, cast steels | Rough cutting | 1 | 600–900 | |
| | | | | 2 | 500–700 | |
| | | | | 6 TiN | 450–600 | |
| | hardened, heat treatable steels > 1.200 N/mm ² (> 35 HRC) | Tool steels, heat treatable steels, alloyed steels, cast steels | Fine cutting | 3, 4, 5 | 500–600 | |
| | | | | 2 | 250–350 | |
| | | | | 6 TiN | 250–350 | |
| Inox | stainless and acid-resistant steels | austenitic and ferritic | Rough cutting | 1 | 300–450 | |
| | | | | 2 | 300–400 | |
| | | | | 6 TiN | 250–350 | |
| | soft non-ferrous metals | Alu-alloys, brass, zinc, copper | Fine cutting | 6 | 250–350 | |
| | | | | 3, 4, 5 | 350–450 | |
| | | | | Non-ferrous metals | hard non-ferrous metals | Titanium and Ti-alloys, bronze, Alu-alloys with high Si-content |
| 1 | 600–900 | | | | | |
| 2 | 500–700 | | | | | |
| high-temperature materials | Ni-alloys, Ni-Co alloys | Fine cutting | 6 TiN | | 400–600 | |
| | | | 2 | | 800–900 | |
| | | | Cast iron | | Grey cast iron, spheroidal cast iron | Rough cutting |
| 1, 2 | 300–450 | | | | | |
| 6 | 300–450 | | | | | |
| fibre-reinforced plastics, thermoplastics, hard plastics | Fine cutting | 3, 4, 5 | | 350–500 | | |
| | | Plastics | | Rough cutting | 6 TiN | 600–800 |
| | | | | | 2 | 500–700 |
| 3 | 450–600 | | | | | |
| 6 | 450–600 | | | | | |
| | Fine cutting | | 3, 4, 5 | 500–600 | | |
| | | | Fine cutting | 3, 4, 5 | 500–600 | |
| 6 TiN | | 500–900 | | | | |
| | 1, 2 | 500–900 | | | | |



Hints for use:

If possible use the highest values.

Exceptions:

- Counterboring with totally engagement of the rotary burr, recommended spindle speed < 3000 rpm.
- Stationary use, recommended spindle speed < 3000 rpm.
- Materials with bad heat conductivity, reduce spindle speed to avoid superheating of the rotary burr.

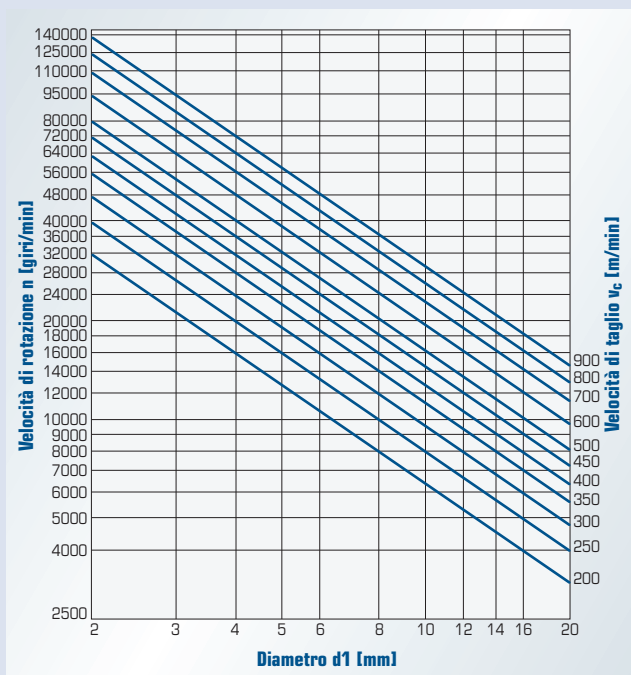
Safety hints:

Use eye-protection! The harder the material use the more finely tooth. Use only chucks free from chatter!



>> IMPIEGO FUNZIONE DENTATURA, VELOCITÀ DI TAGLIO CONSIGLIATE

| Materiali | | | Lavorazione | Dentatura | Velocità di taglio v _c (m/min) | |
|------------------------------|--|---|-------------|-------------|---|---------|
| Acciaio, acciaio fuso | Acciai non temprati, non bonificati < 1.200 N/mm ² (< 35 HRC) | Acciai da costruzione, acciai al carbonio, acciai da stampi, acciai non legati, acciai da cementazione, acciai fusi | Sgrossatura | 1 | 600-900 | |
| | | | | 2 | 500-700 | |
| | | | | 6 TiN | 450-600 | |
| | Acciai temprati, bonificati > 1.200 N/mm ² (> 35 HRC) | Acciai da utensili, acciai bonificati, acciai legati, acciai fusi | Sgrossatura | 6 | 450-600 | |
| | | | | 3, 4, 5 | 500-600 | |
| | | | | 2 | 250-350 | |
| Finitura | Sgrossatura | 6 TiN | 250-350 | | | |
| | | 6 | 250-350 | | | |
| | | 3, 4, 5 | 350-450 | | | |
| Acciaio inox | Acciai inossidabili e acciai resistenti agli acidi | Acciai austenitici, acciai ferritici | Sgrossatura | 1 | 300-450 | |
| | | | | 2 | 300-400 | |
| | | | | 6 TiN | 250-350 | |
| | | | | 6 | 250-350 | |
| | | | Finitura | Sgrossatura | 3, 4, 5 | 350-450 |
| | | | | | 2 | 800-900 |
| Materiali non ferrosi | Materiali non ferrosi dolci | Leghe alluminio, ottone, zinco, rame | Sgrossatura | 1A | 600-900 | |
| | | | | 1 | 600-900 | |
| | | | | 2 | 500-700 | |
| | Materiali non ferrosi duri | Titanio, leghe Titanio, bronzo, leghe alluminio con alto tenore SI | Sgrossatura | 6 TiN | 400-600 | |
| | | | | 2 | 250-350 | |
| | | | | 3, 4 | 350-450 | |
| | Materiali resistenti al calore | Leghe base nickel, leghe Ni-Co | Sgrossatura | 6 | 250-450 | |
| | | | | 1, 2 | 300-450 | |
| | | | | 3, 4, 5 | 300-450 | |
| Ghisa | | Ghisa grigia, ghisa sferoidale | Sgrossatura | 6 TiN | 600-800 | |
| | | | | 2 | 500-700 | |
| | | | | 3 | 450-600 | |
| | | | | 6 | 450-600 | |
| | | | Finitura | Sgrossatura | 3, 4, 5 | 500-600 |
| | | | | | 1, 2 | 500-900 |
| Plastica | | Plastica a fibre rinforzate, termoplastica, gomma dura | Sgrossatura | 6 TiN | 500-900 | |
| | | | | 1, 2 | 500-900 | |
| | | | Finitura | Sgrossatura | 1, 2 | 500-900 |



Impiego:

Usare, se possibile, i valori più alti.

Eccezioni:

- Lavori di allargatura su tutto il perimetro possibile nr di giri < 3000.
- Lavorazione fissa, possibile nr di giri < 3000.
- Materiali a cattiva conduzione termica, ridurre il nr dei giri per evitare che la fresa diventi blu.

Norme di sicurezza:

Usare occhiali di protezione! Per materiali molto tenaci scegliere una dentatura fine non impiegare mandrini a percussione.