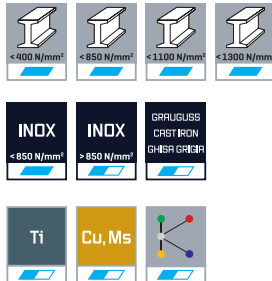


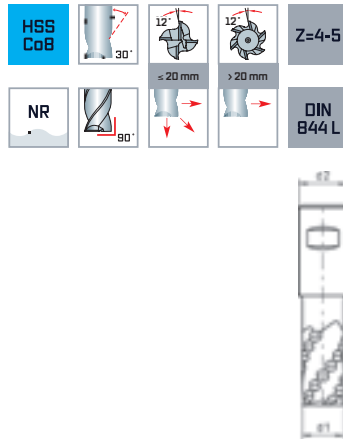
**D Schaftfräser**  
lang, DIN 844 L

**Einsatzbereich:**  
Empfohlen zum Fräsen von schwer zerspanbaren Werkstoffen mit hoher Festigkeit bis 1.300 N/mm<sup>2</sup> sowie für Titan und Titanlegierungen.



**E End mills**  
lang series, DIN 844 L

**Range of application:**  
Recommended for milling in heavy duty materials with high tensile strength up to 1.300 N/mm<sup>2</sup> as well as in titanium and titanium-alloyed materials.



**I Frese cilindriche frontali**  
serie lunga, DIN 844 L

**Impiego:**  
Adatte per lavorazioni di acciai di difficile lavorabilità ad elevata resistenza fino a R = 1.300 N/mm<sup>2</sup>, Titanio, leghe di Titanio.



d1 <sub>k12</sub> mm	d2 <sub>h6</sub> mm	l1 mm	l2 mm	Z	Code 2076 Art.-Nr.
10	10	95	45	4	0 2076010001 00
12	12	110	53	4	0 2076012001 00
16	16	123	63	4	0 2076016001 00
18	16	123	63	4	0 2076018001 00
20	20	141	75	4	0 2076020001 00

d1 <sub>k12</sub> mm	d2 <sub>h6</sub> mm	l1 mm	l2 mm	Z	Code 2076 Art.-Nr.
22	20	141	75	5	0 2076022001 00
24	25	166	90	5	0 2076024001 00
25	25	166	90	5	0 2076025001 00
30	25	166	90	5	0 2076030001 00

**D Schaftfräser**  
extra kurz,  
zentrumschneidend

**Einsatzbereich:**  
Großer Anwendungsbereich bei Werkstoffen mit mittlerer bis hoher Festigkeit (ca. 900–1.400 N/mm<sup>2</sup>), z.B. Einsatz-, Vergütungsstähle, Werkzeugstahl legiert, vergütet, NE-Metalle, hochwärmefeste Werkstoffe sowie Gusseisen und Gusslegierungen.



**E Stub end mills**  
extra short series,  
centre cutting

**Range of application:**  
Wide range of applications on materials of medium strength up to high tensile strength (~ 900–1.400 N/mm<sup>2</sup>), for example case-hardening, heat-treatable steels, alloyed tool steel; hardened and tempered non-ferrous metals, high temperature materials, also cast iron and alloyed cast iron.



**I Frese cilindriche frontali**  
serie extra corta,  
tagliante al centro

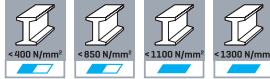
**Impiego:**  
Fresatura generale adatte per lavorazioni di acciai sia a media che ad elevata resistenza (ca. 900 – fino a 1400 N/mm<sup>2</sup>) ad es. acciai da cementazione, acciai da utensili legati bonificati, metalli non ferrosi, metalli resistenti al calore, ghisa, leghe di ghisa.



**D** Schaftfräser  
lang, DIN 844 L

**Einsatzbereich:**

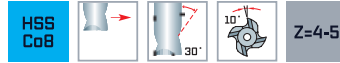
Großer Anwendungsbereich bei Werkstoffen mit mittlerer bis hoher Festigkeit (ca. 900–1.400 N/mm<sup>2</sup>), z.B. Einsatz-, Vergütungsstähle, Werkzeugstahl legiert, vergütet, NE-Metalle, hochwärmefeste Werkstoffe sowie Gusseisen und Gusslegierungen.



**E** End mills  
long series, DIN 844 L

**Range of application:**

Wide range of applications on materials of medium strength up to high tensile strength (~ 900–1.400 N/mm<sup>2</sup>), for example case-hardening, heat-treatable steels, alloyed tool steel; hardened and tempered non-ferrous metals, high temperature materials, also cast iron and alloyed cast iron.



**I** Frese cilindriche frontali  
serie lunga, DIN 844 L

**Impiego:**

Fresatura generale adatte per lavorazioni di acciai sia a media che ad elevata resistenza (ca. 900 – fino a 1400 N/mm<sup>2</sup>) ad es. acciai da cementazione, acciai da utensili legati bonificati, metalli non ferrosi, metalli resistenti al calore, ghisa, leghe di ghisa.

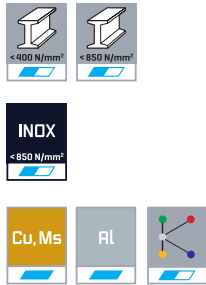


ALUNIT®

d1 <sub>k12</sub> mm	d2 <sub>h6</sub> mm	l1 mm	l2 mm	Z	Code 2087 Art.-Nr.
10	10	95	45	4	0 2087010001 00
12	12	110	53	4	0 2087012001 00
14	12	110	53	4	0 2087014001 00
16	16	123	63	4	0 2087016001 00
18	16	123	63	4	0 2087018001 00
20	20	141	75	4	0 2087020001 00
25	25	166	90	5	0 2087025001 00

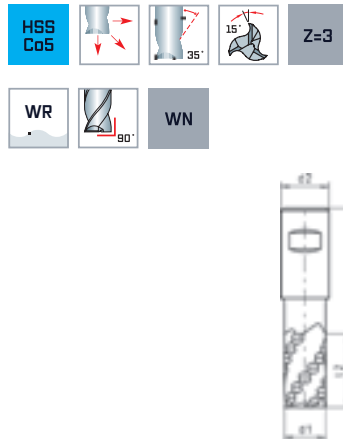
**D Schaftfräser**  
lang, dreischneider,  
zentrumschneidend

**Einsatzbereich:**  
Empfohlen zum Fräsen von weichen bis zähen, langspanenden Werkstoffen wie Al- und Cu-Legierungen sowie Thermoplaste.



**E End mills**  
long series, three flutes,  
centre cutting

**Range of application:**  
Recommended for milling in soft as well as in tough, long chipping materials such as Al- and Cu-alloys as well as in thermo plastics.



**I Frese cilindriche frontali**  
serie lunga, 3 taglienti,  
tagliente al centro

**Impiego:**  
Adatte per lavorazioni di acciai teneri, tenaci, a truciolo lungo, leghe alluminio, leghe rame, materiali termoplastici.

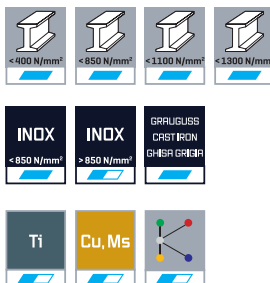


d1 <sub>k12</sub> mm	d2 <sub>h6</sub> mm	l1 mm	l2 mm	Z	Code 2104 Art.-Nr.
10	10	85	35	3	0 2104010001 00
12	12	100	42	3	0 2104012001 00
16	16	112	52	3	0 2104016001 00

d1 <sub>k12</sub> mm	d2 <sub>h6</sub> mm	l1 mm	l2 mm	Z	Code 2104 Art.-Nr.
18	16	112	52	3	0 2104018001 00
20	20	126	60	3	0 2104020001 00
25	25	148	72	3	0 2104025001 00

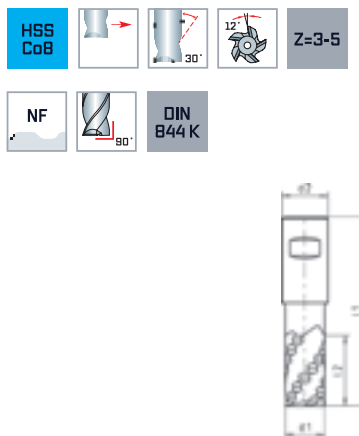
**D Schaftfräser**  
kurz, DIN 844 K

**Einsatzbereich:**  
Empfohlen zum Fräsen von schwer zerspanbaren Werkstoffen mit hoher Festigkeit bis 1.300 N/mm<sup>2</sup> sowie für Titan und Titanlegierungen.



**E End mills**  
short series, DIN 844 K

**Range of application:**  
Recommended for milling in heavy duty materials with high tensile strength up to 1.300 N/mm<sup>2</sup> as well as in titanium and titanium-alloyed materials.



**I Frese cilindriche frontali**  
serie corta, DIN 844 K

**Impiego:**  
Adatte per lavorazioni di acciai di difficile lavorabilità ad elevata resistenza fino a R = 1.300 N/mm<sup>2</sup>, Titanio, leghe di Titanio.



d1 <sub>k12</sub> mm	d2 <sub>h6</sub> mm	l1 mm	l2 mm	Z	Code 2156 Art.-Nr.
5	6	57	13	3	0 2156005001 00
6	6	57	13	3	0 2156006001 00