

*sutton*<sup>®</sup>



# MILLING HSS

- Solutions for slotting, finishing, roughing and profiling
- 8% Co & PM grades of HSS • Short and long series
- General purpose and application specific geometries

# Milling HSS Finder

ISO	VDI	Material Group	Sutton	Page
P	A	Steel	N	370
M	R	Stainless Steel	VA	
K	F	Cast Iron	GG	
N	N	Non-Ferrous Metals, Aluminiums & Coppers	Al W	
S	S	Titaniums & Super Alloys	Ti Ni	
H	H	Hard Materials (≥ 45 HRC)	H	







^ VDI 3323 material groups can also be determined by referring to the material cross reference listing in the application guide at the back of this catalogue.

Catalogue Code  
 Type of Cut: **Slotting**  
 Finishing  
 Universal  
 Roughing  
 Material  
 Surface Finish  
 Sutton Designation  
 Standard  
 Shank Tolerance

370	370	371	371	372	372
E179	E180	E183	E184	E191	E192
●	●	●	●	●	●
				●	●
HSS Co.8		HSS Co.8		HSS Co.8	
BrT		TiAlN		BrT	
N		N		N	
DIN 327		DIN 844L		DIN 844K	
h6		h6		h6	

ISO	VDI <sup>A</sup> 3323	Material	Condition	HB	N/mm <sup>2</sup>	370	370	371	371	372	372	
P	1	Steel - Non-alloy, cast & free cutting	- 0.15% C	A	125	440	●	●	●	●	●	●
	2		- 0.45% C	A	190	640	●	●	●	●	●	●
	3			QT	250	840	○	○	○	○	○	○
	4		- 0.75% C	A	270	910	○	●	○	●	○	●
	5			QT	300	1010	○	○	○	○	○	○
	6	Steel - Low alloy & cast < 5% of alloying elements		A	180	610	●	●	●	●	●	●
	7		QT	275	930	○	○	○	○	○	○	
	8		QT	300	1010	○	○	○	○	○	○	
	9		QT	350	1180		○	○	○	○	○	
	10	Steel - High alloy, cast & tool		A	200	680	○	●	○	●	○	●
	11		HT	325	1100		○	○	○	○	○	
	12		Steel - Corrosion resistant & cast	Ferritic / Martensitic	A	200	680		○	○	○	○
	13	Martensitic		QT	240	810	○	○	○	○	○	
M	14.1	Stainless Steel	Austenitic	AH	180	610		○	○	○	○	
	14.2		Duplex		230	780		○	○	○	○	
	14.3		Precipitation Hardening		300	780		○	○	○	○	
K	15	Cast Iron - Grey (GG)	Ferritic / Pearlitic		180	610	○	●	○	○	●	
	16		Pearlitic		260	880	○	○	○	○	○	
	17	Cast Iron - Nodular (GGG)	Ferritic		160	570	○	●	○	○	●	
	18		Pearlitic		250	840	○	●	○	○	○	
	19		Cast Iron - Malleable	Ferritic		130	460	○	○	○	○	○
20		Pearlitic		230	780	○	○	○	○	○		
N	21	Aluminum & Magnesium - wrought alloy	Non Heat Treatable		60	210	●	○	●	○	●	○
	22		Heat Treatable	AH	100	360	●	○	●	○	●	○
	23	Aluminum & Magnesium - cast alloy ≤12% Si	Non Heat Treatable		75	270	○	○	○	○	○	○
	24		Heat Treatable	AH	90	320	○	○	○	○	○	○
	25	Al & Mg - cast alloy >12% Si	Non Heat Treatable		130	460	○	○	○	○	○	
	26	Copper & Cu alloys (Brass/Bronze)	Free cutting, Pb > 1%		110	390	○	○	○	○	○	○
	27		Brass (CuZn, CuSnZn)		90	320	○	○	○	○	○	○
	28		Bronze (CuSn)		100	360	○	○	○	○	○	○
	29	Non-metallic - Thermosetting & fiber-reinforced plastics										
	30	Non-metallic - Hard rubber, wood etc.										
S	31	High temp. alloys	Fe based	A	200	680						
	32			AH	280	950						
	33		Ni / Co based	A	250	840						
	34			AH	350	1180						
	35			C	320	1080						
	36	Titanium & Ti alloys	CP Titanium		400 MPa							
	37.1			Alpha alloys		860 MPa						
	37.2		Alpha / Beta alloys	A	960 MPa							
	37.3			AH	1170 MPa							
	37.4		Beta alloys	A	830 MPa							
37.5	AH	1400 MPa										
H	38.1	Hardened steel		HT	45 HRC							
	38.2		HT	55 HRC								
	39.1		HT	58 HRC								
	39.2		HT	62 HRC								
	40	Cast Iron	Chilled	C	400	1350						
41			HT	55 HRC								

Condition: A (Annealed), AH (Age Hardened), C (Cast), HT (Hardened & Tempered), QT (Quenched & Tempered)

373	374	375	376	376	377		
							
E202	E206	E151	E251	E255	E252		
•	•	•	•	•	•		
•	•	•	•	•	•		
HSS Co.8	HSS Co.8	SPM	SPM	SPM	SPM		Slotting Finishing Universal Roughing
TiAlN	TiAlN	TiAlN	AlCrN	AlCrN	AlCrN		
N	N	UNI	VA	VA	VA		
DIN 844K	DIN 844L	DIN 844K	DIN 844K	DIN 844K	DIN 844L		
h6	h6	h6	h6	h6	h6		
						VDI 3323	ISO
•	•	○	○	○	○	1	P
•	•	○	○	○	○	2	
•	•	○	○	○	○	3	
•	•	○	○	○	○	4	
•	•	•	•	•	•	5	
•	•	○	○	○	○	6	
•	•	○	•	•	•	7	
•	•	•	•	•	•	8	
○	○	•	•	•	•	9	
•	•	○	•	•	•	10	
○	○	•	○	○	○	11	
○	○	○	○	○	○	12	
○	○	•	•	•	•	13	
•	•	○	•	•	•	14.1	M
•	•	○	•	•	•	14.2	
○	○	○	○	○	○	14.3	
•	•	•	•	•	•	15	K
○	○	○	○	○	○	16	
•	•	•	•	•	•	17	
○	○	○	○	○	○	18	
○	○	•	○	○	○	19	
○	○	○	○	○	○	20	
○	○	○	○	○	○	21	N
○	○	○	○	○	○	22	
○	○	○	○	○	○	23	
○	○	○	○	○	○	24	
•	•	○	○	○	○	25	
•	•	○	○	○	○	26	
○	○	○	○	○	○	27	
•	•	○	○	○	○	28	
○	○	○	○	○	○	29	
○	○	○	○	○	○	30	
○	○	○	○	○	○	31	S
○	○	○	○	○	○	32	
○	○	○	○	○	○	33	
○	○	○	○	○	○	34	
○	○	○	○	○	○	35	
○	○	○	○	○	○	36	
○	○	○	○	○	○	37.1	
○	○	○	○	○	○	37.2	
○	○	○	○	○	○	37.3	
○	○	○	○	○	○	37.4	
○	○	○	○	○	○	37.5	
○	○	○	○	○	○	38.1	H
○	○	○	○	○	○	38.2	
○	○	○	○	○	○	39.1	
○	○	○	○	○	○	39.2	
○	○	○	○	○	○	40	
○	○	○	○	○	○	41	



- For precision milling of slots & cavities
- Suitable for materials up to 1000 N/mm<sup>2</sup>
- For soft steels & non-ferrous material
- TiAlN for longer tool life

### Fraises 2 dents, R30°

- Pour la réalisation de rainures et de poches
- Convient aux matériaux jusqu'à 1000 N/mm<sup>2</sup>
- Pour aciers doux et non-ferreux
- Revêtement TiAlN pour une meilleure durée de vie



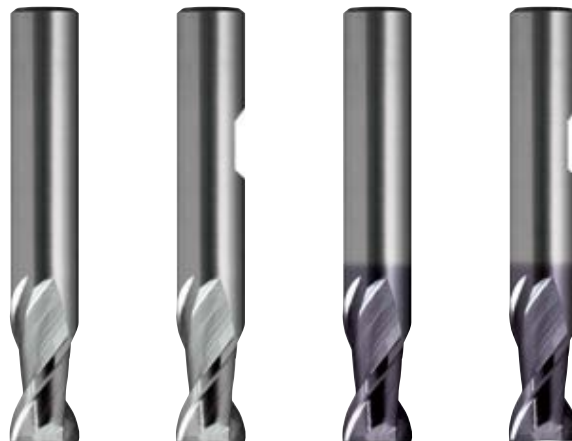
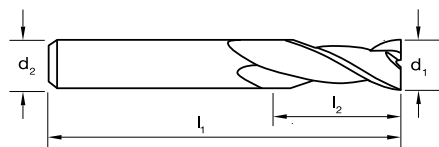
### Frese Metallo Duro 2 Taglienti, R30 N, Corta

- Fresatura di cave ad alta precisione
- Ideale per materiali fino a 1000 N/mm<sup>2</sup>
- Geometria ottimizzata per materiali morbidi & non ferrosi
- TiAlN per Ottimizzare vita utensile



### Fresas, 2 ranuras, R30 N, Corta

- Para fresado de precisión de ranuras y cavidades
- Adecuado para materiales hasta 1000 N/mm<sup>2</sup>
- Para aceros blandos y materiales no ferrosos.
- TiAlN para una mayor vida útil de la herramienta



Catalogue Code	E179	E181	E180	E182
Discount Group	B0606	B0606	B0608	B0608
Material	HSS Co.8	HSS Co.8	HSS Co.8	HSS Co.8
Surface Finish	BrT	BrT	TiAlN	TiAlN
Sutton Designation	N	N	N	N
Geometry	R30	R30	R30	R30
Shank Form (DIN 1835)	A	B	A	B
Shank Tolerance	h6	h6	h6	h6

Vc Page #: 443 →

Size Ref.	d <sub>1</sub> (e8)	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	z	Item #	Item #	Item #	Item #
0100	1.0	47	3	6	2	E179 0100	•	E180 0100	•
0150	1.5	47	3	6	2	E179 0150	•	E180 0150	•
0200	2.0	48	4	6	2	E179 0200	•	E180 0200	•
0250	2.5	49	5	6	2	E179 0250	•	E180 0250	•
0300	3.0	49	5	6	2	E179 0300	•	E180 0300	•
0350	3.5	50	6	6	2	E179 0350	•	E180 0350	•
0400	4.0	51	7	6	2	E179 0400	•	E180 0400	•
0450	4.5	51	7	6	2	E179 0450	•	E180 0450	•
0500	5.0	52	8	6	2	E179 0500	•	E180 0500	•
0550	5.5	52	8	6	2	E179 0550	•	E180 0550	•
0600	6.0	52	8	6	2	E179 0600	•	E180 0600	•
0650	6.5	60	10	10	2	E179 0650	•	E180 0650	•
0700	7.0	60	10	10	2	E179 0700	•	E180 0700	•
0750	7.5	60	10	10	2	E179 0750	•	E180 0750	•
0800	8.0	61	11	10	2	E179 0800	•	E180 0800	•
0850	8.5	61	11	10	2	E179 0850	•	E180 0850	•
0900	9.0	61	11	10	2	E179 0900	•	E180 0900	•
0950	9.5	61	11	10	2	E179 0950	•	E180 0950	•
1000	10.0	63	13	10	2	E179 1000	•	E180 1000	•
1100	11.0	70	13	12	2	E179 1100	•	E180 1100	•
1200	12.0	73	16	12	2	E179 1200	•	E180 1200	•
1300	13.0	73	16	12	2	E179 1300	•	E180 1300	•
1400	14.0	73	16	12	2	E179 1400	•	E180 1400	•
1500	15.0	73	16	12	2	E179 1500	•	E180 1500	•
1600	16.0	79	19	16	2	E179 1600	•	E180 1600	•
1800	18.0	79	19	16	2	E179 1800	•	E180 1800	•
2000	20.0	88	22	20	2	E179 2000	•	E180 2000	•
2200	22.0	88	22	20	2	E179 2200	•		•
2300	23.0	88	22	20	2		•		•
2400	24.0	102	26	25	2		•		•
2500	25.0	102	26	25	2		•		•
3000	30.0	102	26	25	2		•		•
3200	32.0	112	32	32	2		•		•
4000	40.0	130	38	32	2		•		•

ISO	P										M			K				N						S							H																			
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41	
E179 / E181	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
E180 / E182	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

P Steel   
 M Stainless Steel   
 K Cast Iron   
 N Non-Ferrous Metals   
 S Titanium & Super Alloys   
 H Hard Materials

• Optimal ○ Effective



# Endmills 4 Flute, R30 N, Regular



- For precision milling applications
- Suitable for materials up to 1000 N/mm<sup>2</sup>
- TiCN for longer tool life



### Fraises 4 dents, R30°

- Pour les opérations de finitions et de précision
- Convient aux matériaux jusqu'à 1000 N/mm<sup>2</sup>
- TiCN pour une meilleure durée de vie



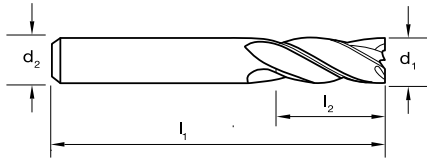
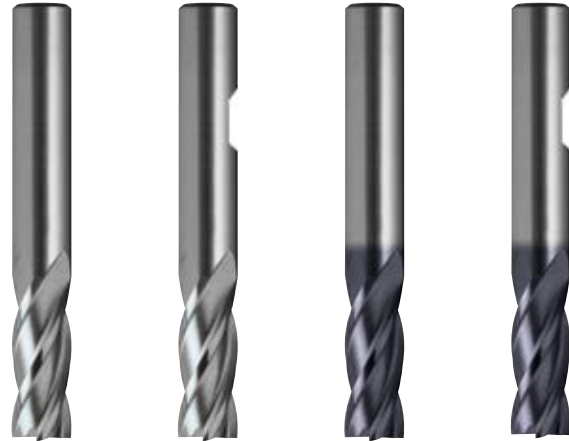
### Frese Metallo Duro 4 Taglienti, R30 N, Media

- Fresatura di cave ad alta precisione
- Ideale per materiali fino a 1000 N/mm<sup>2</sup>
- TiCN per Ottimizzare vita utensile



### Fresas, 4 ranuras, R30 N, Regular

- Para aplicaciones de fresado
- Adecuado para materiales hasta 1000 N/mm<sup>2</sup>
- TiCN para una mayor vida útil de la herramienta



Catalogue Code  
Discount Group  
Material  
Surface Finish  
Sutton Designation  
Geometry  
Shank Form (DIN 1835)  
Shank Tolerance

E191	E193	E192	E194
B0606	B0606	B0608	B0608
HSS Co.8	HSS Co.8	HSS Co.8	HSS Co.8
BrT	BrT	TiAlN	TiAlN
N	N	N	N
R30	R30	R30	R30
A	B	A	B
h6	h6	h6	h6

Vc Page #: 443 →

Size Ref.	d <sub>1</sub> (k10)	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	z	Item #	Item #	Item #	Item #
0200	2.0	51	7	6	4	E191 0200	•	E192 0200	•
0250	2.5	52	8	6	4	E191 0250	•	E192 0250	•
0300	3.0	52	8	6	4	E191 0300	•	E192 0300	E194 0300
0400	4.0	55	11	6	4	E191 0400	•	E192 0400	E194 0400
0500	5.0	57	13	6	4	E191 0500	•	E192 0500	E194 0500
0600	6.0	57	13	6	4	E191 0600	•	E192 0600	E194 0600
0700	7.0	66	16	10	4	E191 0700	•	E192 0700	E194 0700
0800	8.0	69	19	10	4	E191 0800	•	E192 0800	E194 0800
0900	9.0	69	19	10	4	E191 0900	•	E192 0900	E194 0900
1000	10.0	72	22	10	4	E191 1000	•	E192 1000	E194 1000
1100	11.0	79	22	12	4	E191 1100	•	E192 1100	E194 1100
1200	12.0	83	26	12	4	E191 1200	•	E192 1200	E194 1200
1300	13.0	83	26	12	4	E191 1300	•	E192 1300	E194 1300
1400	14.0	83	26	12	4	E191 1400	•	E192 1400	E194 1400
1500	15.0	83	26	12	4	E191 1500	•	E192 1500	E194 1500
1600	16.0	92	32	16	4	E191 1600	•	E192 1600	E194 1600
1700	17.0	92	32	16	4	E191 1700	•	E192 1700	E194 1700
1800	18.0	92	32	16	4	E191 1800	•	E192 1800	E194 1800
2000	20.0	104	38	20	4	E191 2000	•	E192 2000	E194 2000
2100	21.0	104	38	20	6	•	•	E192 2100	E194 2100
2200	22.0	121	45	20	6	•	•	E192 2200	E194 2200
2500	25.0	121	45	25	6	•	•	•	E194 2500
2800	28.0	121	45	25	6	•	•	•	E194 2800
3000	30.0	133	45	25	6	•	•	•	E194 3000
3200	32.0	133	53	32	6	•	•	•	E194 3200
3500	35.0	133	53	32	6	•	•	•	E194 3500
3600	36.0	133	53	32	6	•	•	•	E194 3600
3800	38.0	155	63	40	6	•	•	•	E194 3800
4000	40.0	155	63	40	6	•	•	•	E194 4000
4200	42.0	155	63	40	6	•	•	•	E194 4200
4500	45.0	155	63	40	6	•	•	•	E194 4500
5000	50.0	177	75	40*	6	•	•	•	E194 5000

ISO	P										M			K						N							S							H																	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41		
E191 / E193	●	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
E192 / E194	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metals S Titanium & Super Alloys H Hard Materials

● Optimal ○ Effective

# Roughers NF (semi roughing), R30 N, Regular



- For roughing applications
- NF geometry allows for heavy cuts, with a good surface finish
- Suitable for materials up to 1100 N/mm<sup>2</sup>
- TiAlN for longer tool life



## Fraises de semi-ébauche profil plat NF, R30°

- Pour les opérations de semi-ébauches
- Géométrie NF permettant une surface finie propre
- Convient aux matériaux jusqu'à 1100N/mm<sup>2</sup>
- Revêtement TiAlN pour une meilleure durée de vie



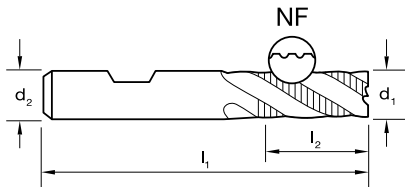
## Rompi Truciolo NF (Semi Sgrossatura), R30 N, Media

- Fresa ideale per lavorazioni di sgrossatura
- Geometria NF permette lavorazioni gravose mantenendo una buona superficie
- Ideale per materiali fino a 1100 N/mm<sup>2</sup>
- TiAlN per Ottimizzare vita utensile



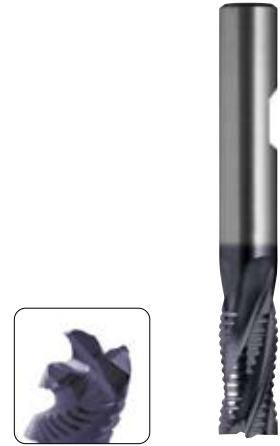
## Fresas Desbaste NF (semi), R30 N, Regular

- Para aplicaciones de desbaste
- La geometría NF permite cortes pesados, con un buen acabado superficial
- Adecuado para materiales hasta 1100 N/mm<sup>2</sup>
- TiAlN para una mayor vida útil de la herramienta



Vc Page #: 444 →

Size Ref.	d <sub>1</sub> (js14)	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	z	Item #
0600	6.0	57	13	6	3	E202 0600
0800	8.0	69	19	10	3	E202 0800
1000	10.0	72	22	10	4	E202 1000
1200	12.0	83	26	12	4	E202 1200
1400	14.0	83	26	12	4	E202 1400
1600	16.0	92	32	16	4	E202 1600
1800	18.0	92	32	16	4	E202 1800
2000	20.0	104	38	20	4	E202 2000
2200	22.0	104	38	20	5	E202 2200
2500	25.0	121	45	25	5	E202 2500
3000	30.0	121	45	25	6	E202 3000



Catalogue Code	E202
Discount Group	B0404
Material	HSS Co.8
Surface Finish	TiAlN
Sutton Designation	N
Geometry	R30 NF
Shank Form (DIN 1835)	B
Shank Tolerance	h6

ISO	P										M					K					N										S										H										
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41		
E202	●	●	●	●	●	●	●	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metals S Titanium & Super Alloys H Hard Materials ● Optimal ○ Effective



- For roughing applications
- NF geometry allows for heavy cuts, with a good surface finish
- Suitable for materials up to 1100 N/mm<sup>2</sup>
- TiAIN for longer tool life



## Fraises de semi-ébauche profil plat NF, R30°, Longue

- Pour les opérations de semi-ébauches
- Géométrie NF permettant une surface finie propre
- Convient aux matériaux jusqu'à 1100N/mm<sup>2</sup>
- Revêtement TiAIN pour une meilleure durée de vie



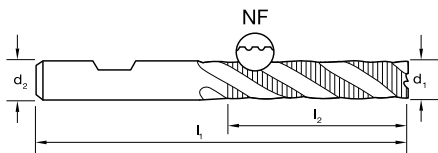
## Rompi Truciolo NF (Semi Sgrossatura), R30 N, Lunga

- Fresa ideale per lavorazioni di sgrossatura
- Geometria NF permette lavorazioni gravose mantenendo una buona superficie
- Ideale per materiali fino a 1100 N/mm<sup>2</sup>
- TiAIN per Ottimizzare vita utensile



## Fresas Desbaste NF (semi), R30 N, Larga

- Para aplicaciones de desbaste
- La geometría NF permite cortes pesados, con un buen acabado superficial
- Adecuado para materiales hasta 1100 N/mm<sup>2</sup>
- TiAIN para una mayor vida útil de la herramienta



Catalogue Code	<b>E206</b>
Discount Group	B0404
Material	<b>HSS Co.8</b>
Surface Finish	<b>TiAIN</b>
Sutton Designation	<b>N</b>
Geometry	R30 NF
Shank Form (DIN 1835)	B
Shank Tolerance	h6

Vc Page #: 444 →

Size Ref.	d <sub>1</sub> (js14)	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	z	Item #
<b>0600</b>	<b>6.0</b>	68	24	6	3	•
<b>0800</b>	<b>8.0</b>	88	38	10	3	•
<b>1000</b>	<b>10.0</b>	95	45	10	4	E206 1000
<b>1200</b>	<b>12.0</b>	110	53	12	4	E206 1200
<b>1400</b>	<b>14.0</b>	110	53	12	4	E206 1400
<b>1600</b>	<b>16.0</b>	123	63	16	4	E206 1600
<b>1800</b>	<b>18.0</b>	123	63	16	4	E206 1800
<b>2000</b>	<b>20.0</b>	141	75	20	4	E206 2000
<b>2200</b>	<b>22.0</b>	141	75	20	5	E206 2200
<b>2500</b>	<b>25.0</b>	166	90	25	5	E206 2500
<b>3000</b>	<b>30.0</b>	166	90	25	6	E206 3000

ISO	P													M			K						N						S					H															
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41
E206	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

**P** Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metals **S** Titanium & Super Alloys **H** Hard Materials ● Optimal ○ Effective







- HSS-SPM
- Unique HR geometry offers stable performance in difficult to machine materials for roughing applications
- Ideal for large volume metal removal



### Fraises d'ébauche SPM, R30° VA-R

- SPM pour une meilleure performance.
- Géométrie unique HR pour meilleure stabilité pendant l'usinage dans les matériaux difficiles et super-alliages
- Adapté aux gros volumes copeaux
- Revêtement AlCrN pour une meilleure durée de vie



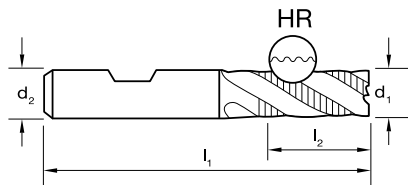
### Rompi Truciolo SPM, R30 VA-R, Media

- HSS-SPM
- Geometria HR unica nell'offrire prestazioni stabili nelle operazioni di sgrossatura
- Ideale per alti volumi di asportazione truciolo



### Fresas Desbaste SPM, R30 VA-R, Regular

- HSS-SPM
- La geometría HR única ofrece un rendimiento estable en materiales difíciles de mecanizar para aplicaciones de desbaste
- Ideal para la extracción de viruta de gran volumen



Vc Page #: 444 →

Size Ref.	d <sub>1</sub> (js14)	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	z	rad	Item #	Item #	
<b>DIN 844K</b>									
0600	6.0	57	13	6	4		E251 0600	•	
0800	8.0	69	19	10	4		E251 0800	•	
1000	10.0	72	22	10	4		E251 1000	•	
1025	10.0	72	22	10	4	2.5	•	E255 1025	
1040	10.0	72	22	10	4	4	•	E255 1040	
1200	12.0	83	26	12	4		E251 1200	•	
1225		83	26	12	4	2.5	•	E255 1225	
1240		83	26	12	4	4	•	E255 1240	
1600	16.0	92	32	16	4		E251 1600	•	
1605		92	32	16	5		E251 1605	•	
1625		92	32	16	5	2.5	•	E255 1625	
1640		92	32	16	5	4	•	E255 1640	
2000	20.0	104	38	20	4		E251 2000	•	
2005		104	38	20	5		E251 2005	•	
2025		104	38	20	5	2.5	•	E255 2025	
2040		104	38	20	5	4	•	E255 2040	
2050		104	38	20	5	5	•	E255 2050	
2060		104	38	20	5	6	•	E255 2060	
2500	25.0	121	45	25	5		E251 2500	•	
2525		121	45	25	5	2.5	•	E255 2525	
2540		121	45	25	5	4	•	E255 2540	
2550		121	45	25	5	5	•	E255 2550	
2560		121	45	25	5	6	•	E255 2560	
3040	30.0	121	45	25	6	4	•	E255 3040	
3200	32.0	133	53	32	6		E251 3200	•	
3240	32.0	133	53	32	6	4	•	E255 3240	



Catalogue Code	E251	E255
Product Group	B0408	B0408
Material	SPM	SPM
Surface Finish	AlCrN	AlCrN
Sutton Designation	VA	VA
Geometry	R30 VA-R	R30 VA-R Corner Rad
Shank Form (DIN 1835)	B	B
Shank Tolerance	h6	h6



ISO	P										M			K						N										S										H									
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41
E251	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
E255	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metals S Titanium & Super Alloys H Hard Materials

● Optimal ○ Effective



