

ENDMILLS



Endmills

Cost effective machining

- Solutions for slotting, finishing, roughing & profiling
 - 8% Co & PM grades of HSS
 - Various shank styles to suit your needs
 - Short & Long Series
- General purpose & Application specific geometries



ISO VDI Material Group

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

^ VDI 3233 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	E100	E101	E102	E103	E187	E188	E232	E240
Type of Cut: Slitting	●	●	●	●	●	●	●	●
Finishing					●	●	●	●
Universal					●	●	●	●
Roughing								
Profiling								
Material	HSS Co.8							
Surface Finish	BrT	TiCN	BrT	TiCN	BrT	TiAlN	BrT	TiAlN
Sutton Designation	N							
Standard	JIS							
Shank Tolerance	DIN 327							
h6								

ISO	VDI [▲] 3233	Material	Condition	HB	N/mm ²								
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	○	○	○	○	○	○	○	○
M	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		A	200	680	○	●	○	●	○	●	○	●
K	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		250	840		○		○		○	
	14.3		Precipitation Hardening		250	840		○		○		○	
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	○	○		○	○	○	○
S	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							
S	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								
H	37.5			AH	1400 MPa								
	38.1	Hardened steel		HT	45 HRC								
	38.2			HT	55 HRC								
	39.1			HT	58 HRC								
	39.2			HT	62 HRC								
H	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)

● Optimal ○ Effective

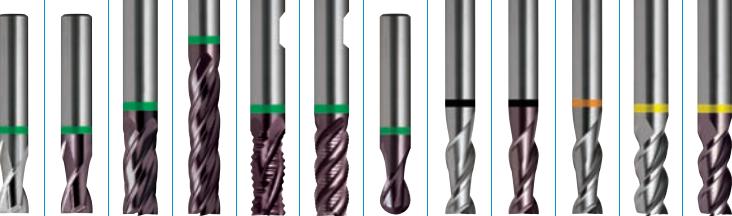
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E125	E126	E127	E128	E201	E202	E205	E206	E140	E141	E148	E149	E144	E145	E113	E114	
●	●	●	●													
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
				●	●	●	●	●	●	●	●	●	●	●	●	
														●	●	
HSS Co.8																
Brt	TiCN	Brt	TiCN	Brt	TiAIN	Brt	TiAIN	Brt	TiCN	Brt	TiCN	Brt	TiCN	Brt	TiCN	
N								WN								
JIS				DIN 844K		DIN 844L		DIN 844K		DIN 844L		JIS		-		
h6																
VDI ^A 3323 ISO																
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	1
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	2
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○	●	○	●	○	●	○	●	○	○	○	○	○	○	○	○	4
○	○	○	○	○	○	●	○	○	○	○	○	○	○	○	○	5
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	6
○	○	○	○	○	○	●	○	○	○	○	○	○	○	○	○	7
○	○	○	○	○	○	●	○	●	○	○	○	○	○	○	○	8
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	9
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	10
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	11
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	12
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	13
○	○	○	○	●	●	○	○	○	○	○	○	○	○	○	○	14.1
○	○	○	○	○	●	●	●	●	●	●	●	●	●	●	●	14.2
○	○	○	○	○	○	●	●	●	●	●	●	●	●	●	●	14.3
○	●	○	●	○	●	○	●	○	○	○	○	○	○	○	○	15
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	16
○	●	○	●	○	●	○	●	○	○	○	○	○	○	○	○	17
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●	○	●	●	○	●	●	○	●	●	●	●	●	●	●	●	21
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	22
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○	○	○	○	●	●	●	●	●	●	●	●	●	●	●	●	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

Page 403 403 404 405 406 407 408 409 409 410 411 411

ISO VDI Material Group

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

^ VDI 3233 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: Slitting

E108 E109 E134 E136 E150 E151 E118 E110 E111 E112 E121 E122

Finishing

● ● ● ● ● ● ● ● ● ● ● ●

Universal

● ● ● ● ● ● ● ● ● ● ● ●

Roughing

● ● ● ● ● ● ● ● ● ● ● ●

Profiling

● ● ● ● ● ● ● ● ● ● ● ●

Material

SPM SPM

Surface Finish

BrT TiAIN BrT TiAIN CrN BrT TiAIN

Sutton Designation

UNI AI Cu W

Standard

DIN 327 DIN 844K DIN 844L DIN 844K DIN 327 DIN 844K

Shank Tolerance

h6

ISO	VDI [▲] 3233	Material	Condition	HB	N/mm ²														
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	○	●	●	●	●	○	●	●						
P	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		A	200	680	○	●	●	●	●	○	○	●						
P	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		250	840	●	○	○	○	○	○	●						
	14.3		Precipitation Hardening		250	840	○	○	○	○	○	○	○						
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	○	○	○	○	○	○	○	○	○	○	○	○	
N	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													
S	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														
S	37.5			AH	1400 MPa														
	38.1	Hardened steel		HT	45 HRC							○							
	38.2			HT	55 HRC														
	39.1			HT	58 HRC														
	39.2			HT	62 HRC														
H	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)

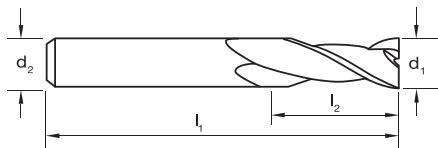
● Optimal ○ Effective

412	412	413	413	414	414	415	416	417	418	419	419	420	420	421	421	422	422	423	424	425	425
E123	E124	E152	E153	E154	E155	E137	E251	E252	E162	E163	E170	E171	E166	E167	E174	E175	E176	E177	E158	E159	
●	●					●													●	●	
●	●							●													
●	●								●												
		●	●	●	●			●		●	●	●	●	●	●	●	●	●	●	●	
SPM										HSS Co		HSS Co.8				SPM					
Brt	TiAIN	Brt	TiAIN	Brt	TiAIN	TiCN	Brt	TiCN	Brt	TiCN	Brt	TiCN	Brt	TiCN	Brt	TiAIN	Brt	TiAIN			
						VA				NH						H		Ti			
DIN 844L	DIN 844K	DIN 844L		DIN 844K	DIN 844L		DIN 327		JIS	DIN 844K	DIN 844L	DIN 844K	DIN 844L	DIN 844K	DIN 844L		DIN 844K				
h6																					
VDI [▲] 3323																					
ISO																					
1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	P	M	K	S	H	
15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	N					
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																					

Slot Drills 2 Flute, R30 N, Regular

sutton tools

- For precision milling of slots & cavities
- Suitable for materials up to 1000 N/mm²
- For soft steels & non-ferrous material
- TiCN for longer tool life



Catalogue Code	E100	E101
Discount Group	B0502	B0516
Material	HSS Co.8	HSS Co.8
Surface Finish	BrT	TiCN
Sutton Designation	N	N
Geometry	R30	R30
Shank Form (DIN 1835)	A	A
Shank Tolerance	h6	h6

Size Ref.	d ₁ (e8)	l ₁	l ₂	d ₂	z	Item #	Item #
0100	1	50	3	6	2	E100 0100	E101 0100
0150	1.5	50	4.5	6	2	E100 0150	E101 0150
0200	2	50	7	6	2	E100 0200	E101 0200
0250	2.5	50	7	6	2	E100 0250	E101 0250
0300	3	50	9	6	2	E100 0300	E101 0300
0350	3.5	60	12	8	2	E100 0350	E101 0350
0400	4	60	12	8	2	E100 0400	E101 0400
0450	4.5	60	15	8	2	E100 0450	E101 0450
0500	5	60	15	8	2	E100 0500	E101 0500
0550	5.5	60	15	8	2	E100 0550	E101 0550
0600	6	60	15	8	2	E100 0600	E101 0600
0650	6.5	65	20	10	2	E100 0650	E101 0650
0700	7	65	20	10	2	E100 0700	E101 0700
0750	7.5	65	20	10	2	E100 0750	E101 0750
0800	8	65	20	10	2	E100 0800	E101 0800
0850	8.5	75	25	10	2	E100 0850	E101 0850
0900	9	75	25	10	2	E100 0900	E101 0900
0950	9.5	75	25	10	2	E100 0950	E101 0950
1000	10	75	25	10	2	E100 1000	E101 1000
1100	11	80	30	12	2	E100 1100	E101 1100
1200	12	80	30	12	2	E100 1200	E101 1200
1300	13	90	35	16	2	E100 1300	E101 1300
1400	14	90	35	16	2	E100 1400	E101 1400
1500	15	95	40	16	2	E100 1500	E101 1500
1600	16	95	40	16	2	E100 1600	E101 1600
1700	17	105	40	20	2	E100 1700	E101 1700
1800	18	105	40	20	2	E100 1800	E101 1800
1900	19	110	45	20	2	E100 1900	E101 1900
2000	20	110	45	20	2	E100 2000	E101 2000
2100	21	110	45	20	2	E100 2100	E101 2100
2200	22	110	45	20	2	E100 2200	E101 2200
2400	24	120	50	25	2	E100 2400	E101 2400
2500	25	120	50	25	2	E100 2500	E101 2500
2800	28	125	55	25	2	E100 2800	E101 2800
3000	30	125	55	25	2	E100 3000	E101 3000
3200	32	145	60	32	2	E100 3200	E101 3200
3500	35	145	60	32	2	E100 3500	E101 3500
4000	40	150	65	32	2	E100 4000	E101 4000
4500	45	155	70	32	2	E100 4500	E101 4500
5000	50	155	70	32	2	E100 5000	E101 5000

ISO	P												M			K			N												S			H																
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	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
E100	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	●			
E101	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		

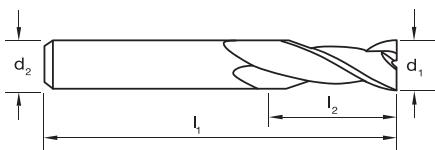
P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metals S Titanium & Super Alloys H Hard Materials

● Optimal ○ Effective

Slot Drills 2 Flute, R30 N, Regular

sutton tools

- For precision milling of slots & cavities
 - Suitable for materials up to 1000 N/mm²
 - For soft steels & non-ferrous material
 - TiCN for longer tool life



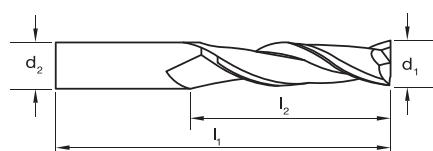
Catalogue Code	E100	E101
Discount Group	B0502	B0516
Material	HSS Co.8	HSS Co.8
Surface Finish	Brt	TiCN
Sutton Designation	N	N
Geometry	R30	R30
Shank Form (DIN 1835)	A	A
Shank Tolerance	b6	b6

Size Ref.	d ₁ (e8)	Shaft Tolerance					Item #	Item #
		I ₁	I ₂	d ₂	z	no		
0159	1/16	1-31/32	1/8	1/4	2		E100 0159	E101 0159
0238	3/32	1-31/32	3/16	1/4	2		E100 0238	E101 0238
0318	1/8	1-31/32	7/32	1/4	2		E100 0318	E101 0318
0397	5/32	2-3/8	5/16	1/4	2		E100 0397	E101 0397
0476	3/16	2-3/8	3/8	1/4	2		E100 0476	E101 0476
0635	1/4	2-9/16	9/16	1/4	2		E100 0635	E101 0635
0794	5/16	2-9/16	9/16	3/8	2		E100 0794	E101 0794
0953	3/8	2-3/4	23/32	3/8	2		E100 0953	E101 0953
1270	1/2	3-17/32	1	1/2	2		E100 1270	E101 1270
1588	5/8	3-3/4	1-3/16	5/8	2		E100 1588	E101 1588
1905	3/4	4-5/16	1-9/16	3/4	2		E100 1905	•
2223	7/8	4-17/32	1-3/4	3/4	2		E100 2223	•
2540	1	4-23/32	2	3/4	2		E100 2540	•

Slot Drills 2 Flute, R30 N, Long

sutton tools

- For long-reach slotting applications
 - Suitable for materials up to 1000 N/mm²
 - For soft steels & non-ferrous material
 - TiCN for longer tool life

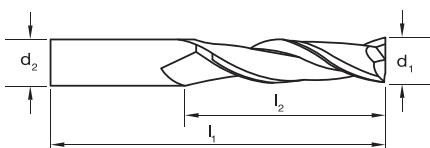


Catalogue Code Discount Group Material Surface Finish Sutton Designation Geometry Shank Form (DIN 1835) Shank Tolerance	E102	E225	E103	E226					
	B0502	B0502	B0516	B0516					
	HSS Co.8	HSS Co.8	HSS Co.8	HSS Co.8					
	BrT	BrT	TiCN	TiCN					
	N	N	N	N					
	R30	R30	R30	R30					
	A	A	A	A					
Size Ref.	d ₁ (e8)	l ₁	l ₂	d ₂	z	Item #	Item #	Item #	Item #
0300	3.0	60	15	6	2	E102 0300		E103 0300	
0350	3.5	60	20	6	2	E102 0350		E103 0350	
0400	4.0	60	20	6	2		E225 0400		E226 0400
0400	4.0	60	20	8	2	E102 0400		E103 0400	
0450	4.5	60	25	6	2	E102 0450		E103 0450	
0500	5.0	65	25	6	2		E225 0500		E226 0500
0500	5.0	65	25	8	2	E102 0500		E103 0500	
0550	5.5	65	25	6	2	E102 0550		E103 0550	
0600	6.0	65	25	6	2		E225 0600		E226 0600
0600	6.0	65	25	8	2	E102 0600		E103 0600	
0650	6.5	80	35	10	2	E102 0650		E103 0650	
0700	7.0	80	35	10	2	E102 0700		E103 0700	
0750	7.5	80	35	10	2	E102 0750		E103 0750	
0800	8.0	80	35	10	2	E102 0800		E103 0800	
0850	8.5	95	45	10	2	E102 0850		E103 0850	
0900	9.0	95	45	10	2	E102 0900		E103 0900	
0950	9.5	95	45	10	2	E102 0950		E103 0950	
1000	10.0	95	45	10	2	E102 1000		E103 1000	
1100	11.0	105	55	12	2	E102 1100		E103 1100	
1200	12.0	105	55	12	2	E102 1200		E103 1200	
1400	14.0	110	55	16	2	E102 1400		E103 1400	
1600	16.0	120	65	16	2	E102 1600		E103 1600	
1800	18.0	130	65	20	2	E102 1800		E103 1800	
2000	20.0	140	75	20	2	E102 2000		E103 2000	
2200	22.0	140	75	20	2	E102 2200		E103 2200	
2400	24.0	160	90	25	2	E102 2400		E103 2400	
2500	25.0	160	90	25	2	E102 2500		E103 2500	
3000	30.0	160	90	25	2	E102 3000		E103 3000	
3200	32.0	190	105	32	2	E102 3200		E103 3200	

Slot Drills 2 Flute, R30 N, Long

sutton tools

- For long-reach slotting applications
 - Suitable for materials up to 1000 N/mm²
 - For soft steels & non-ferrous material



Catalogue Code	E102
Discount Group	B0502
Material	HSS Co.8
Surface Finish	Brt
Sutton Designation	N
Geometry	R30
Shank Form (DIN 1835)	A
Shank Tolerance	b6

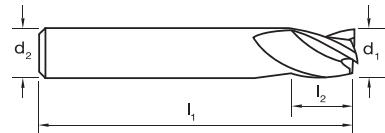
P Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metals **S** Titanium & Super Alloys **H** Hard Materials

● Optimal ○ Effective

Endmills 3 Flute, R30 N, Stub

sutton tools

- Universal use for slotting and finishing with the one tool
 - Suitable for materials up to 1000 N/mm²
 - TiAIN for longer tool life



Catalogue Code	E187	E188
Discount Group	B0606	B0608
Material	HSS Co.8	HSS Co.8
Surface Finish	Brt	TIAIN
Sutton Designation	N	N
Geometry	R30	R30
Shank Form (DIN 1835)	A	A
Shank Tolerance	h6	h6

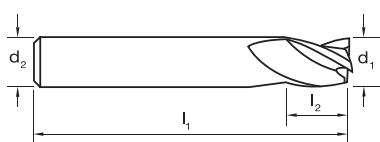
P Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metals **S** Titanium & Super Alloys **H** Hard Materials

Optimal Effective

Endmills 3 Flute, R30 N, Stub, Keyway

sutton tools

- Universal use for slotting and finishing with the one tool
 - Suitable for materials up to 1000 N/mm²
 - TiAlN for longer tool life

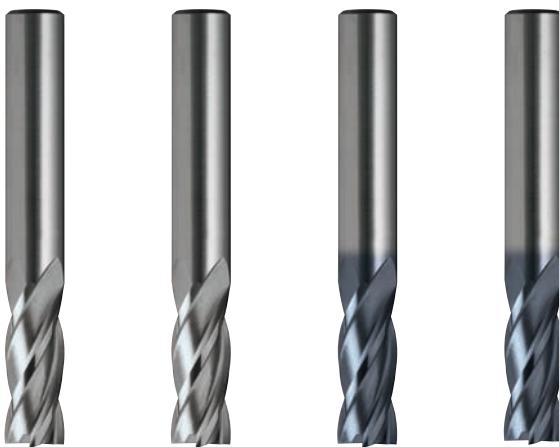
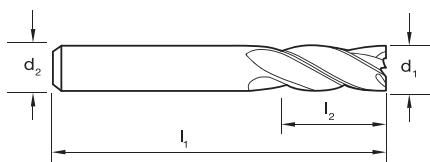


Catalogue Code	E232	E240
Discount Group	B0606	B0608
Material	HSS Co.8	HSS Co.8
Surface Finish	Brt	TIAIN
Sutton Designation	N	N
Geometry	R30	R30
Shank Form (DIN 1835)	A	A
Shank Tolerance	h6	h6

Endmills 4 Flute, R30 N, Regular

sutton tools

- For precision finish milling applications
- Suitable for materials up to 1000 N/mm²
- TiCN for longer tool life



Catalogue Code	E125	E227	E126	E228
Discount Group	B0502	B0502	B0516	B0516
Material	HSS Co.8	HSS Co.8	HSS Co.8	HSS Co.8
Surface Finish	BrT	BrT	TiCN	TiCN
Sutton Designation	N	N	N	N
Geometry	R30	R30	R30	R30
Shank Form (DIN 1835)	A	A	A	A
Shank Tolerance	h6	h6	h6	h6

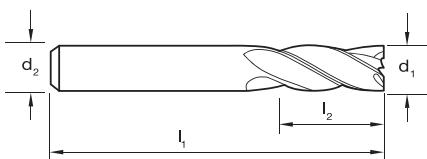
Size Ref.	d ₁ (k9)	l ₁	l ₂	d ₂	z	Item #	Item #	Item #	Item #
0150	1.5	50	3	6	4	E125 0150		E126 0150	
0200	2.0	50	6	6	4	E125 0200		E126 0200	
0250	2.5	50	7	6	4	E125 0250		E126 0250	
0300	3.0	50	9	6	4	E125 0300		E126 0300	
0350	3.5	60	12	6	4		E227 0350		E228 0350
0350	3.5	60	12	8	4	E125 0350		E126 0350	
0400	4.0	60	12	6	4	E125 0400		E126 0400	
0400	4.0	60	12	8	4	E125 0400		E126 0400	
0450	4.5	60	15	6	4	E125 0450		E126 0450	
0450	4.5	60	15	8	4	E125 0450		E126 0450	
0500	5.0	60	15	6	4	E125 0500		E126 0500	
0500	5.0	60	15	8	4	E125 0500		E126 0500	
0550	5.5	60	15	6	4	E125 0550		E126 0550	
0550	5.5	60	15	8	4	E125 0550		E126 0550	
0600	6.0	60	15	6	4	E125 0600		E126 0600	
0600	6.0	60	15	8	4	E125 0600		E126 0600	
0650	6.5	65	20	10	4	E125 0650		E126 0650	
0700	7.0	65	20	10	4	E125 0700		E126 0700	
0750	7.5	65	20	10	4	E125 0750		E126 0750	
0800	8.0	65	20	10	4	E125 0800		E126 0800	
0850	8.5	75	25	10	4	E125 0850		E126 0850	
0900	9.0	75	25	10	4	E125 0900		E126 0900	
0950	9.5	75	25	10	4	E125 0950		E126 0950	
1000	10.0	75	25	10	4	E125 1000		E126 1000	
1050	10.5	80	30	12	4	E125 1050		E126 1050	
1100	11.0	80	30	12	4	E125 1100		E126 1100	
1150	11.5	80	30	12	4	E125 1150		E126 1150	
1200	12.0	80	30	12	4	E125 1200		E126 1200	
1300	13.0	90	35	16	4	E125 1300		E126 1300	
1400	14.0	90	35	16	4	E125 1400		E126 1400	
1500	15.0	95	40	16	4	E125 1500		E126 1500	
1600	16.0	95	40	16	4	E125 1600		E126 1600	
1700	17.0	105	40	20	4	E125 1700		E126 1700	
1800	18.0	105	40	20	4	E125 1800		E126 1800	
1900	19.0	110	45	20	4	E125 1900		E126 1900	
2000	20.0	110	45	20	4	E125 2000		E126 2000	
2200	22.0	110	45	20	4	E125 2200		E126 2200	
2400	24.0	120	50	25	4	E125 2400		E126 2400	
2500	25.0	120	50	25	4	E125 2500		E126 2500	
2600	26.0	120	50	25	4	E125 2600		E126 2600	
2800	28.0	125	55	25	6	E125 2800		E126 2800	
3000	30.0	125	55	25	6	E125 3000		E126 3000	
3200	32.0	145	60	32	6	E125 3200		E126 3200	
3500	35.0	145	60	32	6	E125 3500		E126 3500	
4000	40.0	150	65	32	6	E125 4000		E126 4000	
4500	45.0	155	70	32	6	E125 4500		E126 4500	
5000	50.0	155	70	32	6	E125 5000		E126 5000	

ISO	P												M	K								N												S								H							
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41								
E125	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○			
E126	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			

Endmills 4 Flute, R30 N, Regular

sutton tools

- For precision finish milling applications
 - Suitable for materials up to 1000 N/mm²
 - TiCN for longer tool life



Catalogue Code	E125	E126
Discount Group	B0502	B0516
Material	HSS Co.8	HSS Co.8
Surface Finish	Brt	TiCN
Sutton Designation	N	N
Geometry	R30	R30
Shank Form (DIN 1835)	A	A
Shank Tolerance	b6	b6

Size Ref.	d ₁ (k9)	I ₁	I ₂	d ₂	z	Shaft Tolerance	No	No
0159	1/16	1-31/32	1/4	1/4	4		E125 0159	E126 0159
0238	3/32	1-31/32	9/32	1/4	4		E125 0238	E126 0238
0318	1/8	1-31/32	11/32	1/4	4		E125 0318	E126 0318
0397	5/32	2-11/32	15/32	1/4	4		E125 0397	E126 0397
0476	3/16	2-11/32	19/32	1/4	4		E125 0476	E126 0476
0635	1/4	2-11/32	19/32	1/4	4		E125 0635	E126 0635
0794	5/16	2-9/16	25/32	3/8	4		E125 0794	E126 0794
0953	3/8	2-15/16	31/32	3/8	4		E125 0953	E126 0953
1270	1/2	3-7/32	1-3/8	1/2	4		E125 1270	E126 1270
1588	5/8	3-3/4	1-9/16	5/8	4		E125 1588	E126 1588
1905	3/4	4-5/16	1-3/4	3/4	4		E125 1905	E126 1905
2223	7/8	4-5/16	1-3/4	3/4	4		E125 2223	E126 2223
2540	1	4-23/32	1-31/32	3/4	4		E125 2540	E126 2540
2541	1	4-23/32	1-31/32	1	4		E125 2541	E126 2541

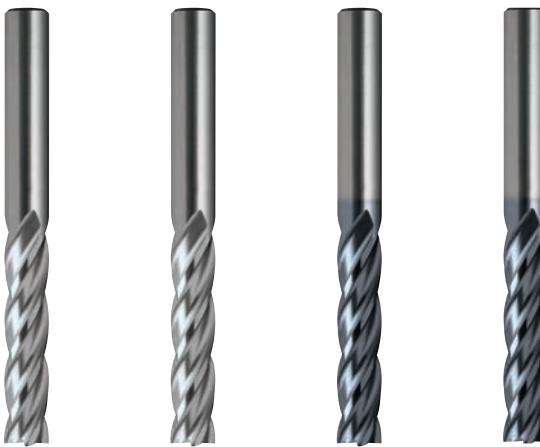
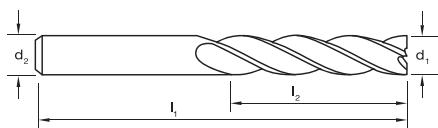
P Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metals **S** Titanium & Super Alloys **H** Hard Materials

● Optimal ○ Effective

Endmills 4 Flute, R30 N, Long

sutton tools

- For precision finish milling applications
- Suitable for materials up to 1000 N/mm²
- TiCN for longer tool life



Catalogue Code	E127	E229	E128	E230					
Discount Group	B0502	B0502	B0516	B0516					
Material	HSS Co.8	HSS Co.8	HSS Co.8	HSS Co.8					
Surface Finish	<i>BrT</i>	<i>BrT</i>	<i>TiCN</i>	<i>TiCN</i>					
Sutton Designation	N	N	N	N					
Geometry	R30	R30	R30	R30					
Shank Form (DIN 1835)	A	A	A	A					
Shank Tolerance	h6	h6	h6	h6					
Size Ref.	d ₁ (k10)	l ₁	l ₂	d ₂	z	Item #	Item #	Item #	Item #
0200	2.0	60	10	6	4	E127 0200		E128 0200	
0250	2.5	60	15	6	4	E127 0250		E128 0250	
0300	3.0	60	15	6	4	E127 0300		E128 0300	
0350	3.5	60	20	6	4	•	E229 0350		E230 0350
0350	3.5	60	20	8	4	E127 0400	E229 0400	E128 0400	E230 0400
0400	4.0	60	20	6	4		E229 0450		E230 0450
0400	4.0	60	20	8	4	E127 0500	E229 0500	E128 0500	E230 0500
0450	4.5	65	25	6	4	•	E229 0550	E230 0550	
0450	4.5	65	25	8	4	E127 0600	E229 0600	E128 0600	E230 0600
0500	5.0	65	25	6	4	E127 0650		E128 0650	
0500	5.0	65	25	8	4	E127 0700		E128 0700	
0550	5.5	65	25	6	4	E127 0750		E128 0750	
0550	5.5	65	25	8	4	E127 0800		E128 0800	
0600	6.0	65	25	6	4	E127 0850		E128 0850	
0600	6.0	65	25	8	4	E127 0900		E128 0900	
0650	6.5	80	35	10	4	E127 0950		E128 0950	
0700	7.0	80	35	10	4	E127 1000		E128 1000	
0750	7.5	80	35	10	4	E127 1100		E128 1100	
0800	8.0	80	35	10	4	E127 1200		E128 1200	
0850	8.5	95	45	10	4	E127 1400		E128 1400	
0900	9.0	95	45	10	4	E127 1600		E128 1600	
0950	9.5	95	45	10	4	E127 1800		E128 1800	
1000	10.0	95	45	10	4	E127 1900		E128 1900	
1100	11.0	105	55	12	4	E127 2000		E128 2000	
1200	12.0	105	55	12	4	E127 2200		E128 2200	
1400	14.0	110	55	16	4	E127 2400		E128 2400	
1600	16.0	120	65	16	4	E127 2500		E128 2500	
1800	18.0	130	65	20	4	E127 3000		E128 3000	
1900	19.0	140	75	20	4	E127 3200		E128 3200	
2000	20.0	140	75	20	4				
2200	22.0	140	75	20	4				
2400	24.0	160	90	25	4				
2500	25.0	160	90	25	4				
3000	30.0	160	90	25	6				
3200	32.0	190	105	32	6				
0159	1/16	2-3/8	3/8	1/4	4	E127 0159		E128 0159	
0238	3/32	2-3/8	3/8	1/4	4	E127 0238		E128 0238	
0318	1/8	2-3/8	19/32	1/4	4	E127 0318		E128 0318	
0397	5/32	2-3/8	25/32	1/4	4	E127 0397		E128 0397	
0476	3/16	2-9/16	31/32	1/4	4	E127 0476		E128 0476	
0635	1/4	2-9/16	31/32	1/4	4	E127 0635		E128 0635	
0794	5/16	3-5/32	1-3/8	3/8	4	E127 0794		E128 0794	
0953	3/8	3-3/4	1-25/32	3/8	4	E127 0953		E128 0953	
1270	1/2	4-5/16	2-5/32	1/2	4	E127 1270		E128 1270	
1588	5/8	4-23/32	2-9/16	5/8	4	E127 1588		E128 1588	
1905	3/4	5-1/2	2-15/16	3/4	4	E127 1905		E128 1905	
2223	7/8	5-1/2	2-15/16	3/4	4	E127 2223		E128 2223	
2540	1	6-5/16	3-17/32	3/4	4	E127 2540		E128 2540	

ISO	P												M	K												N												S												H											
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41																				
E127	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	●																		
E128	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●																	

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

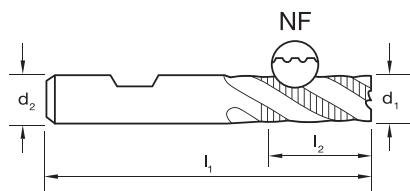
● Optimal ○ Effective

• Available on request as special manufacture. Subject to lead time.

Roughers NF (semi roughing), R30 N, Regular

sutton tools

- For roughing applications
 - NF geometry allows for heavy cuts, with a good surface finish
 - Suitable for materials up to 1100 N/mm²
 - TiAIN for longer tool life



Catalogue Code	E201 B0402	E202 B0404
Discount Group		
Material	HSS Co.8	HSS Co.8
Surface Finish	Brt	TIAIN
Sutton Designation	N	N
Geometry	R30 NF (semi roughing)	R30 NF (semi roughing)
Shank Form (DIN 1835)	B	B
Shank Tolerance	b6	b6

Size Ref.	d ₁ (js14)	Shaft tolerances					Item #	Item #
		I ₁	I ₂	d ₂	z			
0600	6	57	13	6	3		E201 0600	E202 0600
0800	8	69	19	10	3		E201 0800	E202 0800
1000	10	72	22	10	4		E201 1000	E202 1000
1200	12	83	26	12	4		E201 1200	E202 1200
1400	14	83	26	12	4		E201 1400	E202 1400
1600	16	92	32	16	4		E201 1600	E202 1600
1800	18	92	32	16	4		E201 1800	E202 1800
2000	20	104	38	20	4		E201 2000	E202 2000
2200	22	104	38	20	5		E201 2200	E202 2200
2500	25	121	45	25	5		E201 2500	E202 2500
3000	30	121	45	25	6		E201 3000	E202 3000
3200	32	133	53	32	6		•	•
3600	36	133	53	32	6		•	•
4000	40	155	63	40	6		•	•

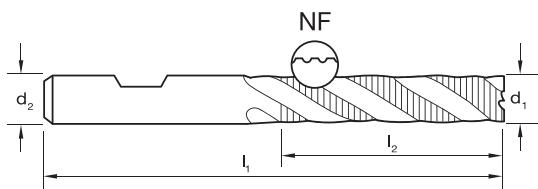
P Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metals **S** Titanium & Super Alloys **H** Hard Materials

● Optimal ○ Effective

Roughers NF (semi roughing), R30 N, Long

sutton tools

- For roughing applications
 - NF geometry allows for heavy cuts, with a good surface finish
 - Suitable for materials up to 1100 N/mm²
 - TiAIN for longer tool life



Catalogue Code	E205	E206
Discount Group	B0402	B0404
Material	HSS Co.8	HSS Co.8
Surface Finish	Brt	TIAIN
Sutton Designation	N	N
Geometry	R30 NF (semi roughing)	R30 NF (semi roughing)
Shank Form (DIN 1835)	B	B
Shank Tolerance	h6	h6

Size Ref.	d ₁ (js14)	I ₁	I ₂	d ₂	z	Shaft tolerance	Item #	Item #
0600	6	68	24	6	3		•	•
0800	8	88	38	10	3		•	•
1000	10	95	45	10	4	E205 1000	E206 1000	
1200	12	110	53	12	4	E205 1200	E206 1200	
1400	14	110	53	12	4	E205 1400	E206 1400	
1600	16	123	63	16	4	E205 1600	E206 1600	
1800	18	123	63	16	4	E205 1800	E206 1800	
2000	20	141	75	20	4	E205 2000	E206 2000	
2200	22	141	75	20	5	E205 2200	E206 2200	
2500	25	166	90	25	5	E205 2500	E206 2500	
3000	30	166	90	25	6	E205 3000	E206 3000	
3200	32	186	106	32	6		•	•
3600	36	186	106	32	6		•	•
4000	40	217	125	40	6		•	•

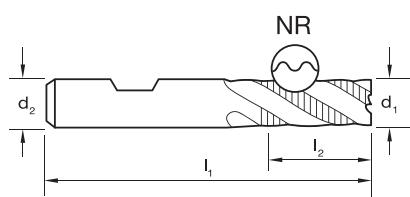
P Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metals **S** Titanium & Super Alloys **H** Hard Materials

● Optimal ○ Effective

Roughers NR (normal), R30 WN, Regular

sutton tools

- For roughing applications
 - NR geometry allows for heavy cuts
 - Suitable for materials up to 1000 N/mm²
 - TiCN for longer tool life



Catalogue Code	E142	E144	E143	E145
Discount Group	B0402	B0402	B0404	B0404
Material	HSS Co.8	HSS Co.8	HSS Co.8	HSS Co.8
Surface Finish	<i>Brt</i>	<i>Brt</i>	<i>TiCN</i>	<i>TiCN</i>
Sutton Designation	WN	WN	WN	WN
Geometry	R30 NR	R30 NR	R30 NR	R30 NR
Shank Form (DIN 1835)	A	B	A	B
Shank Tolerance	b6	b6	b6	b6

Size Ref.	Chain Tolerance					Item #	Item #	Item #	Item #
	d ₁ (js14)	l ₁	l ₂	d ₂	z				
0600	6.0	60	15	10	3	E142 0600		E143 0600	
0700	7.0	65	20	10	3	E142 0700		E143 0700	
0800	8.0	65	20	10	3	E142 0800		E143 0800	
0900	9.0	75	25	10	3	E142 0900		E143 0900	
1000	10.0	75	25	10	4	E142 1000		E143 1000	
1100	11.0	80	30	12	4	E142 1100		E143 1100	
1200	12.0	80	30	12	4	E142 1200		E143 1200	
1300	13.0	90	35	16	4	E142 1300		E143 1300	
1400	14.0	90	35	16	4	E142 1400		E143 1400	
1500	15.0	95	40	16	4	E142 1500		E143 1500	
1600	16.0	95	40	16	4		E144 1600		E145 1600
1800	18.0	105	40	20	4		E144 1800		E145 1800
2000	20.0	110	45	20	4		E144 2000		E145 2000
2200	22.0	110	45	20	4		E144 2200		E145 2200
2500	25.0	120	50	25	5		E144 2500		E145 2500
3000	30.0	125	55	25	6		E144 3000		E145 3000

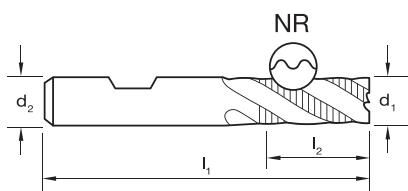
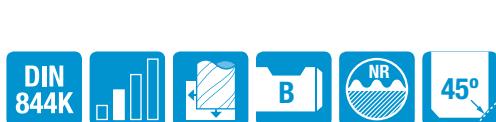
P Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metals **S** Titanium & Super Alloys **H** Hard Materials

● Optimal ○ Effective

Roughers NR (normal), R30 WN, Regular

sutton tools

- For roughing applications
 - NR geometry allows for heavy cuts
 - Suitable for materials up to 1000 N/mm²
 - TiCN for longer tool life



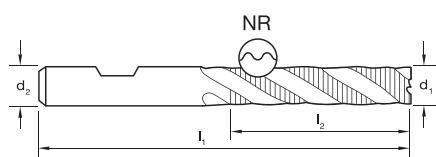
P Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metals **S** Titanium & Super Alloys **H** Hard Materials

- Optimal ○ Effective

Roughers NR (normal), R30 WN, Long

sutton tools

- For roughing applications
 - NR geometry allows for heavy cuts
 - Suitable for materials up to 1000 N/mm²
 - TiCN for longer tool life



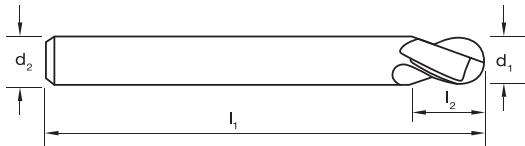
Catalogue Code	E146	E148	E147	E149
Discount Group	B0402	B0402	B0404	B0404
Material	HSS Co.8	HSS Co.8	HSS Co.8	HSS Co.8
Surface Finish	Brt	Brt	TiCN	TiCN
Sutton Designation	WN	WN	WN	WN
Geometry	R30 NR (coarse pitch)			
Shank Form (DIN 1835)	A	B	A	B
Shank Tolerance	b6	b6	b6	b6

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

● Optimal ○ Effective

sutton tools

- For long-reach profiling & contour milling applications
 - Suitable for materials up to 1000 N/mm²
 - TiCN for longer tool life



Catalogue Code	E113	E114
Discount Group	B0502	B0516
Material	HSS Co.8	HSS Co.8
Surface Finish	<i>Brt</i>	<i>TiCN</i>
Sutton Designation	N	N
Geometry	R30	R30
Shank Form (DIN 1835)	A	A
Shank Tolerance	b6	b6

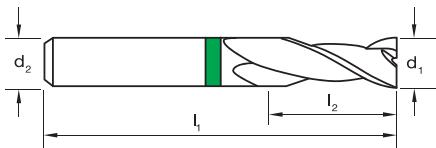
P Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metals **S** Titanium & Super Alloys **H** Hard Materials

● Optimal ○ Effective

Slot Drills 2 Flute, R30 UNI, Stub

sutton tools

- SPM offers superior performance
 - For precision milling of slots & cavities
 - Suitable for materials up to 1400 N/mm²
 - For steels & non-ferrous materials
 - TiAIN for longer tool life



Catalogue Code	E108	E109
Discount Group	B0610	B0612
Material	SPM	SPM
Surface Finish	Brt	TIAIN
Sutton Designation	UNI	UNI
Geometry	R30	R30
Shank Form (DIN 1835)	A	A
Shank Tolerance	h6	h6

Size Ref.	d ₁ (e8)	Shaft tolerances					Item #	Item #
		I ₁	I ₂	d ₂	z			
0100	1	47	3	6	2		E108 0100	•
0200	2	48	4	6	2		E108 0200	E109 0200
0300	3	49	5	6	2		E108 0300	E109 0300
0400	4	51	7	6	2		E108 0400	E109 0400
0500	5	52	8	6	2		E108 0500	E109 0500
0600	6	52	8	6	2		E108 0600	E109 0600
0800	8	61	11	10	2		E108 0800	E109 0800
1000	10	63	13	10	2		E108 1000	E109 1000
1200	12	73	16	12	2		E108 1200	E109 1200
1400	14	73	16	12	2		E108 1400	•
1600	16	79	19	16	2		E108 1600	E109 1600
1800	18	79	19	16	2		E108 1800	•
2000	20	88	22	20	2		E108 2000	E109 2000
2200	22	88	22	20	2		E108 2200	•

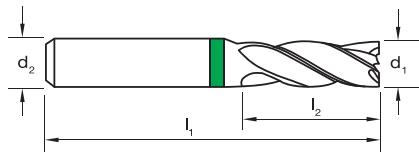
P Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metals **S** Titanium & Super Alloys **H** Hard Materials

● Optimal ○ Effective



sutton tools

- SPM offers superior performance
 - 30/32° variable flute helix for chatter free milling
 - Suitable for materials up to 1400 N/mm²
 - TiAlN for longer tool life



Catalogue Code	E134
Discount Group	B0612
Material	SPM
Surface Finish	TIAIN
Sutton Designation	HARMONY
Geometry	R30 / 32
Shank Form (DIN 1835)	A
Shank Tolerance	h6

Size Ref.	d ₁ (k10)	I ₁	I ₂	d ₂	z	Shaft Tolerance	Item #
0200	2	51	7	6	4		E134 0200
0300	3	52	8	6	4		E134 0300
0400	4	55	11	6	4		E134 0400
0500	5	57	13	6	4		E134 0500
0600	6	57	13	6	4		E134 0600
0800	8	69	19	10	4		E134 0800
1000	10	72	22	10	4		E134 1000
1200	12	83	26	12	4		E134 1200
1400	14	83	26	12	4		E134 1400
1600	16	92	32	16	4		E134 1600
1800	18	92	32	16	4		E134 1800
2000	20	104	38	20	4		E134 2000

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
E134	●	●	●	●	●	●	●	●	○	●	○	○	○	○	○	○	○	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	●							
P	Optimal	M	Optimal	Optimal	K	Optimal	M	N	M	N	M	N	S	Thermal	Optimal	M	H	Optimal	M	N	M	N	M	N	S	Thermal	Optimal	M	N	M	N	S	Thermal	Optimal	M	N	M	N	H	Optimal									

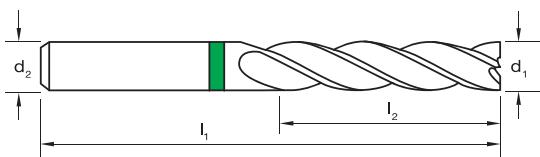
Steel | Stainless Steel | Cast Iron | Non-Ferrous Metals | Titanium & Super Alloys | Hard Materials

● Optimal ○ Effective



sutton tools

- SPM offers superior performance
 - 30/32° variable flute helix for chatter free milling
 - Suitable for materials up to 1400 N/mm²
 - TiAIN for longer tool life



Catalogue Code	E136
Discount Group	B0612
Material	SPM
Surface Finish	TIAIN
Sutton Designation	HARMONY
Geometry	R30 / 32
Shank Form (DIN 1835)	A
Shank Tolerance	b6

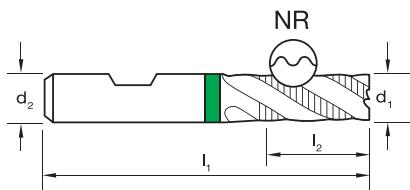
P Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metals **S** Titanium & Super Alloys **H** Hard Materials

Optimal Effective



sutton tools

- SPM offers superior performance
 - For roughing applications
 - NR geometry allows for heavy cuts
 - Suitable for materials up to 1000 N/mm²
 - TiAlN for longer tool life



Catalogue Code	E150
Discount Group	B0408
Material	SPM
Surface Finish	TIAIN
Sutton Designation	UNI
Geometry	R30 NR (coarse pitch)
Shank Form (DIN 1835)	B
Shank Tolerance	h6

Size Ref.	d ₁ (js14)	Shaft Tolerance					Item #
		I ₁	I ₂	d ₂	z		
0600	6	57	13	6	3		E150 0600
0800	8	69	19	10	3		E150 0800
1000	10	72	22	10	4		E150 1000
1200	12	83	26	12	4		E150 1200
1400	14	83	26	12	4		E150 1400
1600	16	92	32	16	4		E150 1600
1800	18	92	32	16	4		E150 1800
2000	20	104	38	20	4		E150 2000
2200	22	121	45	20	5		E150 2200
2500	25	121	45	25	5		E150 2500

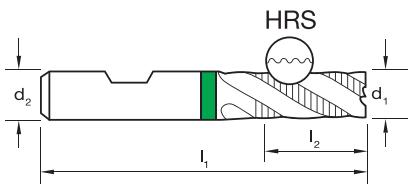
P Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metals **S** Titanium & Super Alloys **H** Hard Materials

● Optimal ○ Effective

Roughers HRS (fine), R45 UNI, Regular

sutton tools

- SPM offers superior performance
 - For roughing applications
 - HRS geometry allows for heavy cuts in short & long chipping materials
 - TiAIN for longer tool life



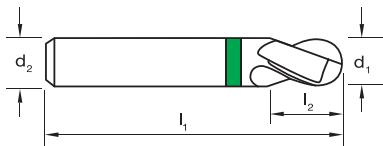
Catalogue Code	E151
Discount Group	B0408
Material	SPM
Surface Finish	TIAIN
Sutton Designation	UNI
Geometry	R45 HRS (fine pitch)
Shank Form (DIN 1835)	B
Shank Tolerance	b6

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

Optimal Effective

sutton tools

- SPM offers superior performance
 - For profile & contour milling applications
 - Suitable for materials up to 1400 N/mm²
 - TiAlN for longer tool life



Catalogue Code	E118
Discount Group	B0612
Material	SPM
Surface Finish	TIAIN
Sutton Designation	UNI
Geometry	R30
Shank Form (DIN 1835)	A
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
E118	●	●	●	●	●	●	●	●	○	○	○	○	○	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	●					

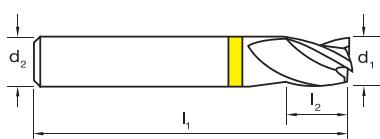
P Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metals **S** Titanium & Super Alloys **H** Hard Materials

- Optimal ○ Effective

Endmills 3 Flute, R45 W, Regular

sutton tools

- SPM offers superior performance
 - Universal use for slotting & finishing applications, with one tool
 - Optimised geometry for soft materials
 - Brt for non ferrous materials
 - TiAlN for longer tool life



Catalogue Code	E121	E122
Discount Group	B0610	B0612
Material	SPM	SPM
Surface Finish	Brt	TiAIN
Sutton Designation	W	W
Geometry	R45	R45
Shank Form (DIN 1835)	A	A
Shank Tolerance	b6	b6

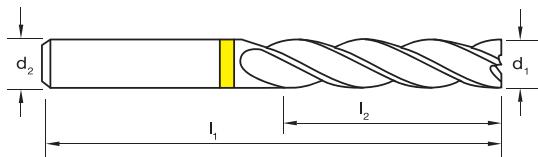
P Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metals **S** Titanium & Super Alloys **H** Hard Materials

Optimal Effective

Endmills 3 Flute, R40 W, Long

sutton tools

- SPM offers superior performance
 - Universal use for slotting & finishing applications, with one tool
 - Optimised geometry for soft materials
 - Brt for non ferrous materials
 - TiAIN for longer tool life

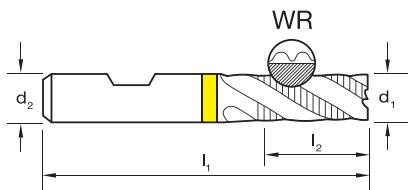


Catalogue Code	E123	E124
Discount Group	B0610	B0612
Material	SPM	SPM
Surface Finish	Brt	TIA/N
Sutton Designation	W	W
Geometry	R40	R40
Shank Form (DIN 1835)	A	A
Shank Tolerance	b6	b6

Roughers WR (coarse), R35 W, Regular

sutton tools

- SPM offers superior performance
 - For roughing applications
 - WR geometry allows for heavy cuts in long chipping materials
 - Brt for non ferrous materials
 - TiAIN for longer tool life



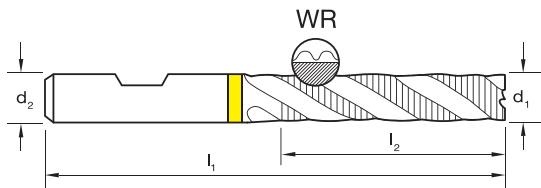
Catalogue Code	E152	E153
Discount Group	B0406	B0408
Material	SPM	SPM
Surface Finish	<i>Brt</i>	<i>TiAIN</i>
Sutton Designation	W	W
Geometry	R35 WR (coarse pitch)	R35 WR (coarse pitch)
Shank Form (DIN 1835)	B	B
Shank Tolerance	b6	b6

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

- Optimal ○ Effective

sutton tools

- SPM offers superior performance
 - For roughing applications
 - WR geometry allows for heavy cuts in long chipping materials
 - Brt for non ferrous materials
 - TiAIN for longer tool life



Catalogue Code	E154	E155
Discount Group	B0406	B0408
Material	SPM	SPM
Surface Finish	<i>Brt</i>	<i>TIAIN</i>
Sutton Designation	W	W
Geometry	R35 WR (coarse pitch)	R35 WR (coarse pitch)
Shank Form (DIN 1835)	B	B
Shank Tolerance	b6	b6

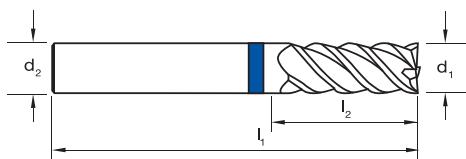
P Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metals **S** Titanium & Super Alloys **H** Hard Materials

● Optimal ○ Effective

Endmills 4 Flute, R50 VA, Regular

sutton tools

- SPM offers superior performance
 - For superior finishing applications
 - Optimised geometry for stainless steels & long chipping materials up to 1000 N/mm²
 - TiAIN for longer tool life



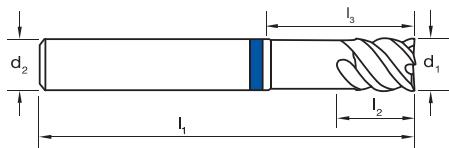
Size Ref.	d ₁ (k8)	I ₁	I ₂	d ₂	z	Shaft Tolerance	Item #
0600	6	57	13	6	4		E137 0600
0800	8	69	19	10	4		E137 0800
1000	10	72	22	10	4		E137 1000
1200	12	83	26	12	4		E137 1200
1400	14	83	26	12	4		E137 1400
1600	16	92	32	16	4		E137 1600
1800	18	92	32	16	4		E137 1800
2000	20	104	38	20	4		E137 2000

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

● Optimal ○ Effective

sutton tools

- SPM offers superior performance
 - For roughing & finishing applications
 - Optimised geometry for stainless steels & long chipping materials up to 1000 N/mm^2
 - TiAlN for longer tool life



Catalogue Code	E156	E157
Discount Group	B0612	B0612
Material	SPM	SPM
Surface Finish	TIAIN	TIAIN
Sutton Designation	VA	VA
Geometry	R55	R55
Shank Form (DIN 1835)	A	B
Shank Tolerance	h6	h6

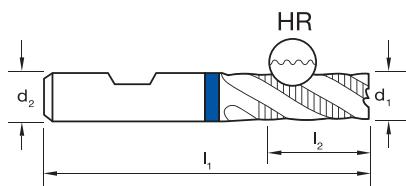
P Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metals **S** Titanium & Super Alloys **H** Hard Materials

● Optimal ○ Effective

Roughers HR (fine), R30 VA, Regular

sutton tools

- SPM offers superior performance
 - For roughing applications
 - HR geometry allows for heavy cuts, in stainless steel
 - Suitable for materials up to 1400 N/mm²



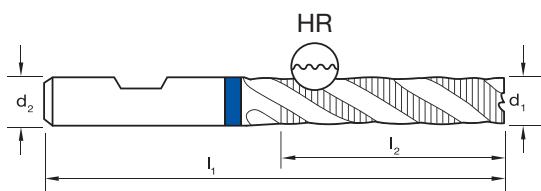
P Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metals **S** Titanium & Super Alloys **H** Hard Materials

Optimal Effective



sutton tools

- SPM offers superior performance
 - For roughing applications
 - HR geometry allows for heavy cuts, in stainless steel
 - Suitable for materials up to 1400 N/mm²



Catalogue Code	E252
Discount Group	B0408
Material	SPM
Surface Finish	TiCN
Sutton Designation	VA
Geometry	R30 HR
Shank Form (DIN 1835)	B
Shank Tolerance	h6

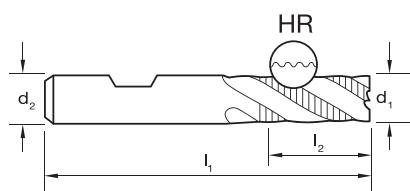
P Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metals **S** Titanium & Super Alloys **H** Hard Materials

● Optimal ○ Effective

Roughers HR (fine), R30 NH, Stub

sutton tools

- For roughing applications
 - HR geometry allows for heavy cuts, in harder materials
 - Suitable for materials up to 1300 N/mm²
 - TiCN for longer tool life



Technical Drawing and Catalogue Headers							
Size Ref.	Dimensions		Material & Surface Finish		Catalogue Headers		
	d ₁	(js14)	I ₁	I ₂	d ₂	Shank Form (DIN 1835)	
	1200	12	73	16	12	3	
	1600	16	79	19	16	3	
	2000	20	88	22	20	3	
	2500	25	102	26	25	3	
	3200	32	112	32	32	4	
Technical Drawing and Catalogue Headers							
Dimensions		Material & Surface Finish		Catalogue Headers		Catalogue Headers	
d ₁ (js14)		HSS Co.8		E160		E162	
d ₂		BrT		B0402		B0402	
I ₁		HSS Co.8		E161		B0404	
I ₂		BrT		E163		B0404	
z		TiCN		HSS Co.8		TiCN	
Shank Tolerance		NH		NH		NH	
Geometry		R30 HR (fine pitch)		R30 HR (fine pitch)		R30 HR (fine pitch)	
Shank Form (DIN 1835)		A		B		A	
Shank Tolerance		h6		h6		h6	
Item #		Item #		Item #		Item #	
E160 1200		E162 1200		E161 1200		E163 1200	
E160 1600		E162 1600		E161 1600		E163 1600	
E160 2000		E162 2000		E161 2000		E163 2000	
E160 2500		E162 2500		E161 2500		E163 2500	
E160 3200		•		E161 3200		•	

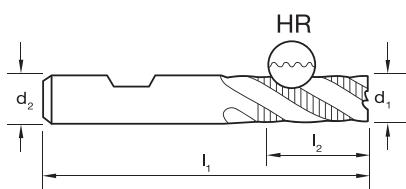
P Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metals **S** Titanium & Super Alloys **H** Hard Materials

● Optimal ○ Effective

Roughers HR (fine), R30 NH, Regular

sutton tools

- For roughing applications
 - HR geometry allows for heavy cuts, in harder materials
 - Suitable for materials up to 1300 N/mm²
 - TiCN for longer tool life



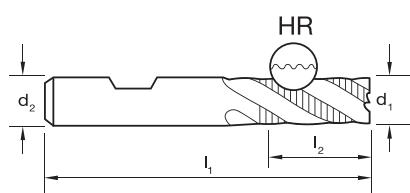
P Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metals **S** Titanium & Super Alloys **H** Hard Materials

● Optimal ○ Effective

Roughers HR (fine), R30 NH, Regular

sutton tools

- For roughing applications
 - HR geometry allows for heavy cuts, in harder materials
 - Suitable for materials up to 1300 N/mm²
 - TiCN for longer tool life



Catalogue Code	E164	E166	E165	E167
Discount Group	B0402	B0402	B0404	B0404
Material	HSS Co.8	HSS Co.8	HSS Co.8	HSS Co.8
Surface Finish	Brt	Brt	TiCN	TiCN
Sutton Designation	NH	NH	NH	NH
Geometry	R30 HR (fine pitch)			
Shank Form (DIN 1835)	A	B	A	B
Shank Tolerance	b6	b6	b6	b6

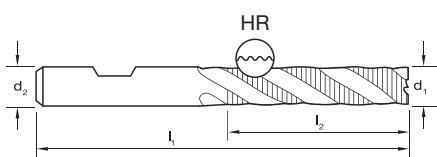
- Available on request as special manufacture

● Optimal ○ Effective

Roughers HR (fine), R30 NH, Long

sutton tools

- For roughing applications
 - HR geometry allows for heavy cuts, in harder materials
 - Suitable for materials up to 1300 N/mm²
 - TiCN for longer tool life



Catalogue Code	E172	E174	E173	E175
Discount Group	B0402	B0402	B0404	B0404
Material	HSS Co.8	HSS Co.8	HSS Co.8	HSS Co.8
Surface Finish	BrT	BrT	TiCN	TiCN
Sutton Designation	NH	NH	NH	NH
Geometry	R30 HR (fine pitch)			
Shank Form (DIN 1835)	A	B	A	B
Shank Tolerance	h6	h6	h6	h6

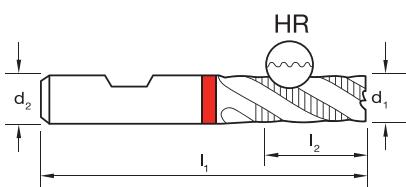
P Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metals **S** Titanium & Super Alloys **H** Hard Materials

- Optimal ○ Effective

Roughers HR (fine), R30 H, Regular

[suttontools](#)

- SPM offers superior performance
 - For roughing applications
 - HR geometry allows for heavy cuts, in harder materials
 - Suitable for materials up to 1400 N/mm²
 - TiAIN for longer tool life



Catalogue Code	E176
Discount Group	B0408
Material	SPM
Surface Finish	TiAIN
Sutton Designation	H
Geometry	R30 HR (fine pitch)
Shank Form (DIN 1835)	B
Shank Tolerance	b6

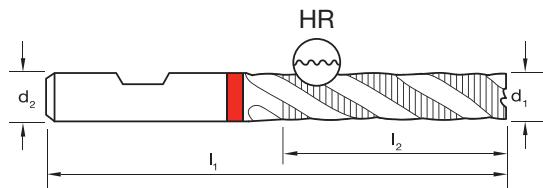
P Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metals **S** Titanium & Super Alloys **H** Hard Materials

Optimal Effective



sutton tools

- SPM offers superior performance
 - For roughing applications
 - HR geometry allows for heavy cuts, in harder materials
 - Suitable for materials up to 1400 N/mm²
 - TiAIN for longer tool life



Catalogue Code	E177
Discount Group	B0408
Material	SPM
Surface Finish	TIAIN
Sutton Designation	H
Geometry	R30 HR (fine pitch)
Shank Form (DIN 1835)	B
Shank Tolerance	h6

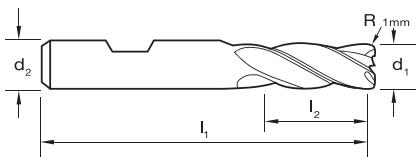
P Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metals **S** Titanium & Super Alloys **H** Hard Materials

● Optimal ○ Effective

Roughers 4 Flute, R30 Ti, Regular

sutton tools

- SPM offers superior performance
 - For roughing applications in Titaniums
 - Unique chip breaking qualities
 - TiAIN for longer tool life



Catalogue Code	E158	E159
Discount Group	B0406	B0408
Material	SPM	SPM
Surface Finish	BrT	TIAIN
Sutton Designation	Titanium Alloys	Titanium Alloys
Geometry	R30	R30
Shank Form (DIN 1835)	B	B
Shank Tolerance	h6	h6

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

Optimal Effective

AVAILABLE IN MULTIPLE LANGUAGES



L100 V2EN



L100 V2NL



L100 V2FR



L100 V2DE



L100 V2IT



L100 V2ES



L100 V2SE



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