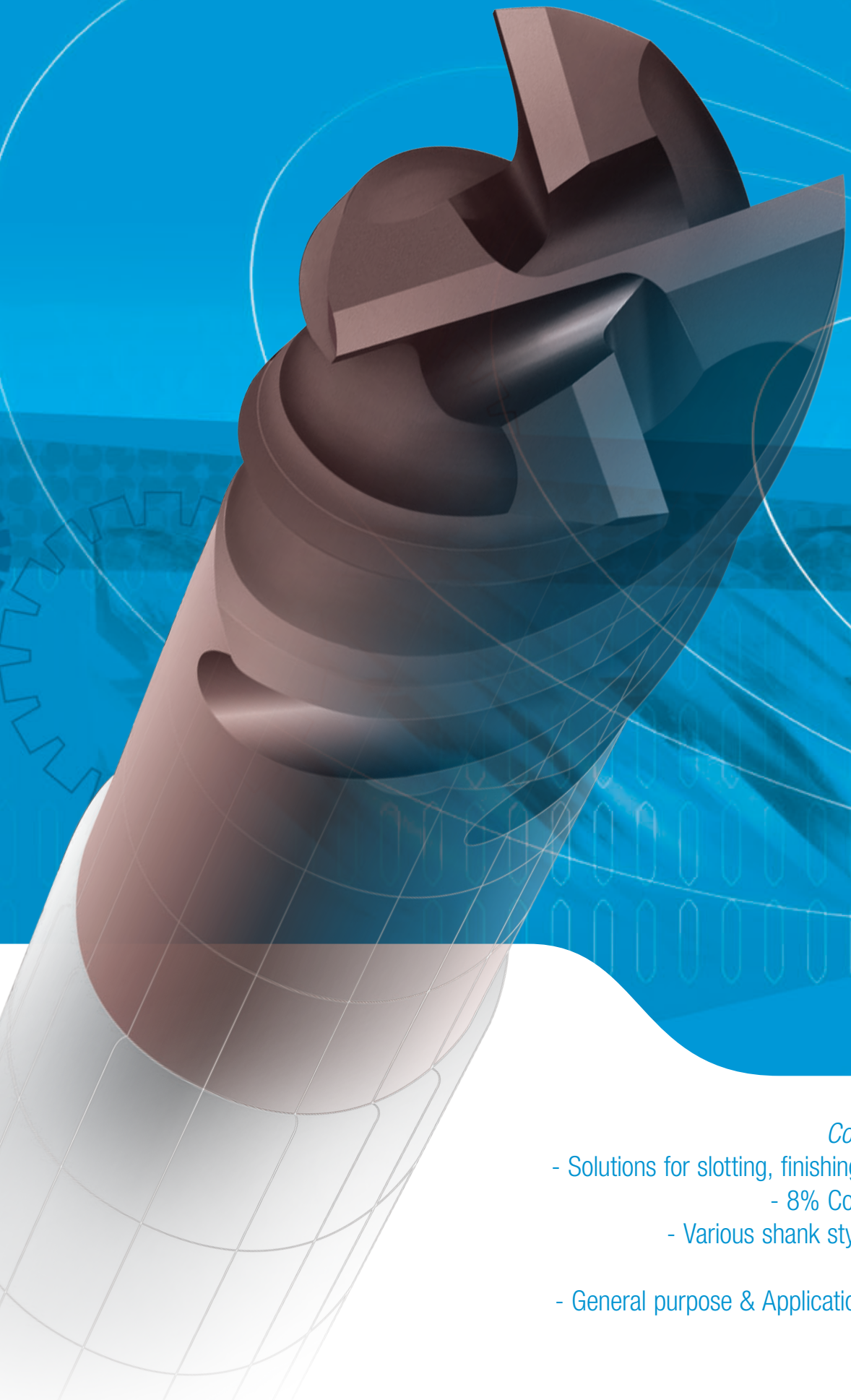
ENDMILLS



HSS 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

suttontools

ISO	VDI	Material Group	Sutton	
P	A	Steel	N	UNI
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.

Page	311	311	313	314	315	316	317	318	318	320	321	322	322
Catalogue Code	E104	E105	E106	E115	E116	E119	E120	E129	E130	E131	E178	E100	E101
Type of Cut: *Slotting*	●	●	●			●	●				●	●	●
Finishing						●	●	●	●	●			
Universal						●	●	●	●	●			
Roughing											●		
Profiling				●	●								
Material	HSS Co										HSS	HSS Co.8	
Surface Finish	*Brt*	*TiN*	*Brt*						*TiN*	*Brt*			*TiCN*
Sutton Designation	N												
Standard	-											JIS	
Shank Tolerance	-0.025										h6		

ISO	VDI^ 3323	Material		Condition	HB	N/mm²	311	311	313	314	315	316	317	318	318	320	321	322	322
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		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												○	○
	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)

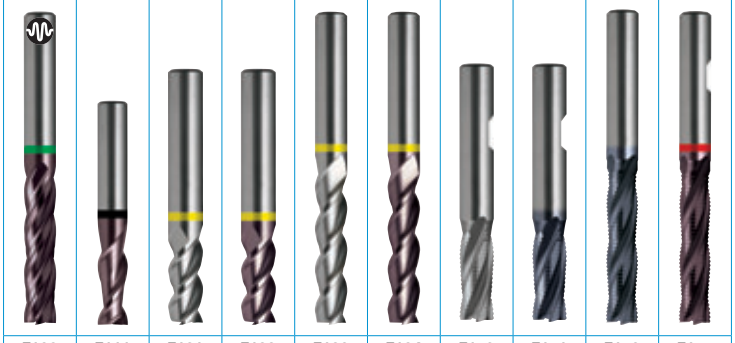
● **Optimal** ○ **Effective**

324	324	326	327	327	329	329	330	331	332	332	333	333	334	334		
E102	E103	E188	E125	E126	E127	E128	E202	E206	E144	E145	E146	E147	E113	E114		
●	●	●														
		●	●	●	●	●										
		●	●	●	●	●	●	●								
							●	●	●	●	●	●				
													●	●		
HSS Co.8																
Brt	*TiCN*	*TiAlN*	*Brt*	*TiCN*	*Brt*	*TiCN*	*TiAlN*	*TiAlN*	*Brt*	*TiCN*	*Brt*	*TiCN*	*Brt*	*TiCN*		
N									WN				N			
JIS		DIN 327D	JIS				DIN 844K	DIN 844L	JIS		DIN 844L		-			
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	

suttontools

ISO	VDI	Material Group	Sutton	
P	A	Steel	N	UNI
M	R	Stainless Steel	VA	UNI
K	F	Cast Iron	GG	UNI
N	N	Non-Ferrous Metals, Aluminiums & Coppers	Al W	UNI
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.



Page	335	336	337	337	338	338	339	339	340	341
Catalogue Code	E136	E111	E121	E122	E123	E124	E170	E171	E173	E177
Type of Cut: *Slotting*		●	●	●	●	●				
Finishing	●		●	●	●	●				
Universal	●		●	●	●	●				
Roughing							●	●	●	●
Profiling										
Material	SPM	HSS Co	SPM				HSS Co.8			SPM
Surface Finish	*TiAlN*		*Brt*	*TiAlN*	*Brt*	*TiAlN*	*Brt*	*TiCN*		*TiAlN*
Sutton Designation	UNI	Al	W				NH			H
Standard	DIN 844L		DIN 844K		DIN 844L		JIS		DIN 844L	
Shank Tolerance	h6									

ISO	VDI^ 3323	Material		Condition	HB	N/mm²	E136	E111	E121	E122	E123	E124	E170	E171	E173	E177
P	1	Steel - Non-alloy, cast & free cutting	~ 0.15 %C	A	125	440	●									
P	2	Steel - Non-alloy, cast & free cutting	~ 0.45 %C	A	190	640	●									
P	3	Steel - Non-alloy, cast & free cutting	~ 0.45 %C	QT	250	840	●						●			○
P	4	Steel - Non-alloy, cast & free cutting	~ 0.75 %C	A	270	910	●									○
P	5	Steel - Non-alloy, cast & free cutting	~ 0.75 %C	QT	300	1010	●						○	●	●	●
P	6	Steel - Low alloy & cast < 5% of alloying elements		A	180	610	●									
P	7	Steel - Low alloy & cast < 5% of alloying elements		QT	275	930	●						●	●	●	○
P	8	Steel - Low alloy & cast < 5% of alloying elements		QT	300	1010	●						○	●	●	●
P	9	Steel - Low alloy & cast < 5% of alloying elements		QT	350	1180	○						○	●	○	●
P	10	Steel - High alloy, cast & tool		A	200	680	●						○	●	●	○
P	11	Steel - High alloy, cast & tool		HT	325	1100	○						○	●	○	●
P	12	Steel - Corrosion resistant & cast	Ferritic / Martensitic	A	200	680	○						○	○	○	○
P	13	Steel - Corrosion resistant & cast	Martensitic	QT	240	810	○						○	○	○	●
M	14.1	Stainless Steel	Austenitic	AH	180	610	○							○	○	
M	14.2	Stainless Steel	Duplex		250	840	○							○	○	
M	14.3	Stainless Steel	Precipitation Hardening		250	840	○							○	○	○
K	15	Cast Iron - Grey (GG)	Ferritic / Pearlitic		180	610	○						○	●	○	○
K	16	Cast Iron - Grey (GG)	Pearlitic		260	880	○							○	○	○
K	17	Cast Iron - Nodular (GGG)	Ferritic		160	570	●						○	●	○	●
K	18	Cast Iron - Nodular (GGG)	Pearlitic		250	840	●							○	○	●
K	19	Cast Iron - Malleable	Ferritic		130	460	○						○	●	○	●
K	20	Cast Iron - Malleable	Pearlitic		230	780	○							○	○	●
N	21	Aluminum & Magnesium - wrought alloy	Non Heat Treatable		60	210	○	●	●	●	●	●				
N	22	Aluminum & Magnesium - wrought alloy	Heat Treatable	AH	100	360	○	●	●	●	●	●				
N	23	Aluminum & Magnesium - cast alloy ≤12% Si	Non Heat Treatable		75	270	○	●	●	●	●	●				
N	24	Aluminum & Magnesium - cast alloy ≤12% Si	Heat Treatable	AH	90	320	○	●	●	●	●	●				
N	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	○	●	○	●	○	●				
N	27	Copper & Cu alloys (Brass/Bronze)	Brass (CuZn, CuSnZn)		90	320			○		○		○	●	●	●
N	28	Copper & Cu alloys (Brass/Bronze)	Bronze (CuSn)		100	360	○	○	●	●	●	●				
N	29	Non-metallic - Thermosetting & fiber-reinforced plastics														
N	30	Non-metallic - Hard rubber, wood etc.														
S	31	High temp. alloys	Fe based	A	200	680										○
S	32	High temp. alloys	Fe based	AH	280	950										○
S	33	High temp. alloys	Ni / Co based	A	250	840										○
S	34	High temp. alloys	Ni / Co based	AH	350	1180										○
S	35	High temp. alloys	Ni / Co based	C	320	1080										○
S	36	Titanium & Ti alloys	CP Titanium		400 MPa											○
S	37.1	Titanium & Ti alloys	Alpha alloys		860 MPa											○
S	37.2	Titanium & Ti alloys	Alpha / Beta alloys	A	960 MPa											○
S	37.3	Titanium & Ti alloys	Alpha / Beta alloys	AH	1170 MPa											○
S	37.4	Titanium & Ti alloys	Beta alloys	A	830 MPa											○
S	37.5	Titanium & Ti alloys	Beta alloys	AH	1400 MPa											○
H	38.1	Hardened steel		HT	45 HRC											○
H	38.2	Hardened steel		HT	55 HRC											
H	39.1	Hardened steel		HT	58 HRC											
H	39.2	Hardened steel		HT	62 HRC											
H	40	Cast Iron	Chilled	C	400	1350	●							○	○	●
H	41	Cast Iron	Chilled	HT	55 HRC											

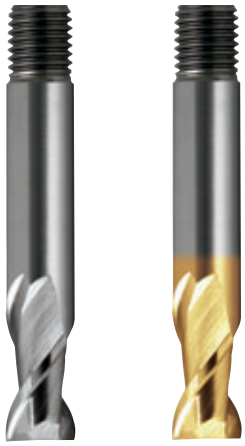
Condition: **A** (Annealed), **AH** (Age Hardened), **C** (Cast), **HT** (Hardened & Tempered), **QT** (Quenched & Tempered)

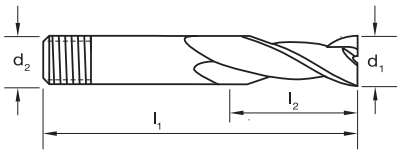
● **Optimal** ○ **Effective**

Slot Drills Threaded, 2 Flute, R30 N, Regular

suttontools

- For general milling of slots & cavities
- Suitable for materials up to 850 N/mm²
- For soft steels & non-ferrous material





Catalogue Code	E104	E105
Discount Group	B0602	B0602
Material	HSS Co	HSS Co
Surface Finish	*Brt*	*TiN*
Sutton Designation	N	N
Geometry	R30	R30
Shank Form (DIN 1835)	D	D
Shank Tolerance	-0.025	-0.025

Size Ref.	d_1 (h9)	l_1	l_2	d_2	z	Item #	Item #
0200	2	49	3	6	2	E104 0200	E105 0200
0300	3	51	7.5	6	2	E104 0300	E105 0300
0400	4	52.5	9.5	6	2	E104 0400	E105 0400
0500	5	52.5	9.5	6	2	E104 0500	E105 0500
0600	6	56.5	11	6	2	E104 0600	E105 0600
0700*	7	59.5	11	10	2	E104 0700	
0800	8	59.5	12.5	10	2	E104 0800	E105 0800
0900	9	60.5	14	10	2	E104 0900	
1000	10	60.5	14.5	10	2	E104 1000	E105 1000
1100	11	66.5	17.5	12	2	E104 1100	
1200	12	66.5	19	12	2	E104 1200	E105 1200
1300	13	68.5	19	12	2	E104 1300	
1400	14	68.5	22	12	2	E104 1400	E105 1400
1500	15	72	22	16	2	E104 1500	
1600	16	72	22	16	2	E104 1600	E105 1600
1700	17	74	24	16	2	E104 1700	
1800	18	74	24	16	2	E104 1800	E105 1800
1900	19	77	25.5	16	2	E104 1900	
2000	20	77	25.5	16	2	E104 2000	E105 2000
2200	22	100	25.5	25	2	E104 2200	
2400	24	103	25.5	25	2	E104 2400	
2500	25	101	27	25	2	E104 2500	
2800	28	95	30	25	2	E104 2800	
3000	30	93.5	30	25	2	E104 3000	
3200	32	117.5	35	32	2	E104 3200	
3600	36	111	39.5	32	2	E104 3600	
4000	40	117	46	32	2	E104 4000	
4500	45	119.5	47.5	32	2	E104 4500	
5000	50	117.5	51	32	2	E104 5000	
SD2M	6 piece set	4, 5, 6, 8, 10, 12mm				E104 SD2M	

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
E104	●	●	○	○		●	○										○		○		○		●	●	○	○																						
E105	●	●	●	●		●	●							○	○		○		○		○		●	●	○	○																						○	

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

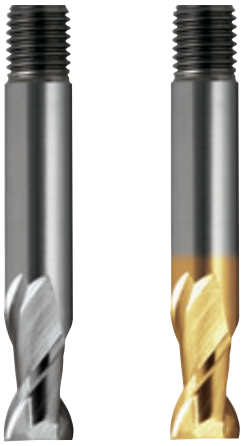
● Optimal ○ Effective

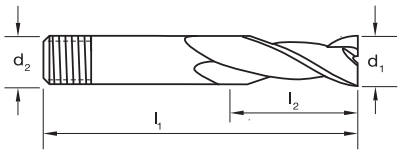
* Not available once current stock is depleted.

Slot Drills Threaded, 2 Flute, R30 N, Regular

suttontools

- For general milling of slots & cavities
- Suitable for materials up to 850 N/mm²
- For soft steels & non-ferrous material





	E104	E105
Catalogue Code	E104	E105
Discount Group	B0602	B0602
Material	HSS Co	HSS Co
Surface Finish	Brt	TiN
Sutton Designation	N	N
Geometry	R30	R30
Shank Form (DIN 1835)	D	D
Shank Tolerance	-0.025	-0.025

Size Ref.	d_1 (h9)	l_1	l_2	d_2	z	Item #	Item #
0159	1/16	2	3/32	1/4	2	E104 0159	
0238	3/32	2	5/32	1/4	2	E104 0238	
0318	1/8	2	3/16	1/4	2	E104 0318	E105 0318
0397	5/32	2-1/16	1/4	1/4	2	E104 0397	E105 0397
0476	3/16	2-1/8	9/32	1/4	2	E104 0476	E105 0476
0556*	7/32	2-3/16	11/32	1/4	2	E104 0556	
0635*	1/4	2-1/8	3/8	1/4	2	E104 0635	E105 0635
0714*	9/32	2-5/16	7/16	3/8	2	E104 0714	
0794	5/16	2-5/16	1/2	3/8	2	E104 0794	E105 0794
0953	3/8	2-3/8	9/16	3/8	2	E104 0953	E105 0953
1111	7/16	2-9/16	11/16	1/2	2	E104 1111	
1270	1/2	2-5/8	3/4	1/2	2	E104 1270	E105 1270
1429	9/16	2-11/16	7/8	1/2	2	E104 1429	E105 1429
1588	5/8	2-13/16	7/8	5/8	2	E104 1588	E105 1588
1905	3/4	3	1	5/8	2	E104 1905	E105 1905
2064*	13/16	3-7/8	1	1	2	E104 2064	
2223	7/8	3-15/16	1	1	2	E104 2223	
2381*	15/16	4-1/32	1-1/32	1	2	E104 2381	
2540	1	4	1-1/16	1	2	E104 2540	
2858	1-1/8	3-3/4	1-3/16	1	2	E104 2858	
3175	1-1/4	4	1-1/2	1	2	E104 3175	
3493	1-3/8	4-1/16	1-9/16	1	2	E104 3493	
3810	1-1/2	4-3/16	1-11/16	1	2	E104 3810	
4128*	1-5/8	4-7/16	1-7/8	1	2	E104 4128	
4445	1-3/4	4-9/16	2	1	2	E104 4445	
5080	2	4-13/16	2-1/4	1	2	E104 5080	
SD2	6 piece set	1/8, 3/16, 1/4, 5/16, 3/8, 1/2"				E104 SD2	

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
E104	●	●	○	○		●	○										○		○		○		●	●	○	○																						
E105	●	●	○	○		●	○										○		○		○		●	●	○	○																					○	

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

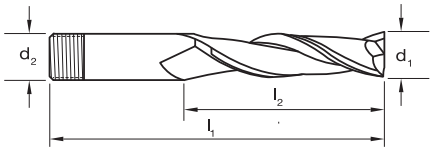
● Optimal ○ Effective

* Not available once current stock is depleted.

Slot Drills 2 Flute, R30 N, Long, Threaded

suttontools

- For general milling of slots & cavities
- Suitable for materials up to 850 N/mm²
- For soft steels & non-ferrous material



Catalogue Code	**E106**
Discount Group	B0602
Material	HSS Co
Surface Finish	***Brt***
Sutton Designation	N
Geometry	R30
Shank Form (DIN 1835)	D
Shank Tolerance	-0.025

Size Ref.	d_1 (h9)	l_1	l_2	d_2	z	Item #
0200	2	51	4	6	2	E106 0200
0300	3	60.5	11	6	2	E106 0300
0400	4	66.5	12.5	6	2	E106 0400
0500	5	70	12.5	6	2	E106 0500
0600	6	76	16	6	2	E106 0600
0700	7	76	16	10	2	E106 0700
0800	8	79.5	19	10	2	E106 0800
0900*	9	82.5	22	10	2	E106 0900
1000	10	82.5	22	10	2	E106 1000
1100	11	89	22	12	2	E106 1100
1200	12	95	25.5	12	2	E106 1200
1300	13	95	25.5	12	2	E106 1300
1400	14	101.5	28.5	12	2	E106 1400
1500	15	108	31.5	16	2	E106 1500
1600	16	108	31.5	16	2	E106 1600
1700	17	114.5	35	16	2	E106 1700
1800	18	114.5	35	16	2	E106 1800
1900*	19	120.5	38	16	2	E106 1900
2000	20	120.5	38	16	2	E106 2000
0159	1/16	2	3/16	1/4	2	E106 0159
0238	3/32	2	1/4	1/4	2	E106 0238
0318	1/8	2-1/2	7/16	1/4	2	E106 0318
0397*	5/32	2-3/4	1/2	1/4	2	E106 0397
0476	3/16	2-3/4	1/2	1/4	2	E106 0476
0556*	7/32	3	5/8	1/4	2	E106 0556
0635	1/4	3	5/8	1/4	2	E106 0635
0714*	9/32	3-1/8	3/4	3/8	2	E106 0714
0794	5/16	3-1/8	3/4	3/8	2	E106 0794
0953	3/8	3-1/4	7/8	3/8	2	E106 0953
1111	7/16	3-1/2	7/8	1/2	2	E106 1111
1270	1/2	3-3/4	1	1/2	2	E106 1270
1429	9/16	4	1-1/8	1/2	2	E106 1429
1588	5/8	4-1/4	1-1/4	5/8	2	E106 1588
1905	3/4	4-3/4	1-1/2	5/8	2	E106 1905
2223	7/8	5-3/4	1-5/8	1	2	E106 2223
2540	1	6-1/4	1-3/4	1	2	E106 2540
2858*	1-1/8	6-1/4	1-7/8	1	2	E106 2858
3175*	1-1/4	6-1/4	2	1	2	E106 3175
3493*	1-3/8	6-1/4	2-1/8	1	2	E106 3493
3810*	1-1/2	6-1/4	2-1/4	1	2	E106 3810

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
E106	●	●	○	○		●	○										○		○		○		●	●	○	○																						

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

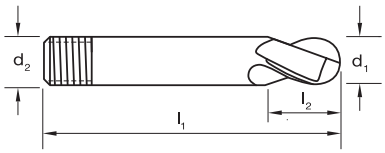
● Optimal ○ Effective

* Not available once current stock is depleted.

Slot Drills Ballnose, 2 Flute, R30 N, Regular, Threaded

suttontools

- For profiling & contour milling of slots & cavities
- Suitable for materials up to 850 N/mm²
- For soft steels & non-ferrous material



Catalogue Code	**E115**
Discount Group	B0602
Material	HSS Co
Surface Finish	***Brt***
Sutton Designation	N
Geometry	R30
Shank Form (DIN 1835)	D
Shank Tolerance	-0.025

Size Ref.	d_1 (h9)	l_1	l_2	d_2	z	Item #
0300	**3**	51	7.5	6	2	E115 0300
0400	**4**	52.5	9.5	6	2	E115 0400
0500	**5**	52.5	9.5	6	2	E115 0500
0600	**6**	56.5	11	6	2	E115 0600
0800	**8**	59.5	12.5	10	2	E115 0800
1000	**10**	60.5	14.5	10	2	E115 1000
1200	**12**	66.5	19	12	2	E115 1200
1400	**14**	68.5	22	12	2	E115 1400
1600	**16**	72	22	16	2	E115 1600
1800	**18**	74	24	16	2	E115 1800
2000	**20**	77	25.5	16	2	E115 2000
2500	**25**	95	27	25	2	E115 2500
0318*	**1/8**	2	3/16	1/4	2	E115 0318
0397*	**5/32**	2-1/16	1/4	1/4	2	E115 0397
0635*	**1/4**	2-1/8	3/8	1/4	2	E115 0635
0953*	**3/8**	2-3/8	9/16	3/8	2	E115 0953
1111*	**7/16**	2-9/16	11/16	1/2	2	E115 1111
3175*	**1-1/4**	4	1-1/2	1	2	E115 3175

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
E115	●	●	○	○		●	○										○		○		○		●	●	○	○																							

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

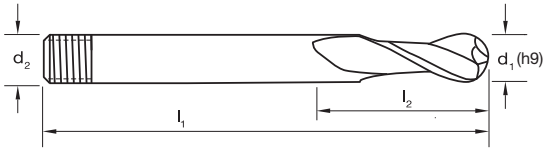
● Optimal ○ Effective

*** Not available once current stock is depleted.**

Slot Drills Ballnose, 2 Flute, R30 N, Long, Threaded

suttontools

- For profiling & contour milling of slots & cavities
- Suitable for materials up to 850 N/mm²
- For soft steels & non-ferrous material



Catalogue Code	**E116***
Discount Group	B0602
Material	HSS Co
Surface Finish	***Brt***
Sutton Designation	N
Geometry	R30
Shank Form (DIN 1835)	D
Shank Tolerance	-0.025

Size Ref.	d_1 (h9)	l_1	l_2	d_2	z	Item #
0318*	**1/8**	2-1/2	7/16	1/4	2	E116 0318
0476*	**3/16**	2-3/4	1/2	1/4	2	E116 0476
0635*	**1/4**	3	5/8	1/4	2	E116 0635
0794*	**5/16**	3-1/8	3/4	3/8	2	E116 0794
0953*	**3/8**	3-1/4	7/8	3/8	2	E116 0953
1270*	**1/2**	3-3/4	1	1/2	2	E116 1270
1588*	**5/8**	4-1/4	1-1/4	5/8	2	E116 1588
1905*	**3/4**	4-3/4	1-1/2	5/8	2	E116 1905
2540*	**1**	6-1/4	1-3/4	1	2	E116 2540

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
E116	●	●	○	○		●	○										○		○		○		●	●	○	○																						

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

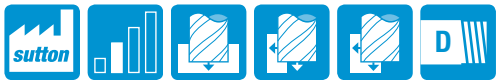
● Optimal ○ Effective

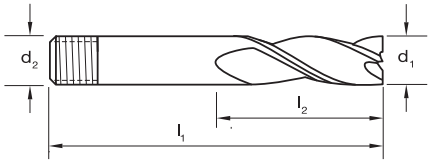
*** Not available once current stock is depleted.**

Endmills 3 Flute, R30 N, Regular, Threaded

suttontools

- For slotting and finishing with the one tool
- Suitable for materials up to 850 N/mm²
- For soft steels & non-ferrous material





Catalogue Code	**E119**
Discount Group	B0602
Material	HSS Co
Surface Finish	***Brt***
Sutton Designation	N
Geometry	R30
Shank Form (DIN 1835)	D
Shank Tolerance	-0.025

Size Ref.	d_1 (h9)	l_1	l_2	d_2	z	Item #
0300	**3**	51	8	6	3	E119 0300
0400	**4**	53	10	6	3	E119 0400
0500	**5**	58	13	6	3	E119 0500
0600	**6**	58	13	6	3	E119 0600
0800	**8**	60	13	10	3	E119 0800
1000	**10**	61	15	10	3	E119 1000
1200	**12**	67	19	12	3	E119 1200
1400	**14**	69	22	12	3	E119 1400
1600	**16**	72	22	16	3	E119 1600
2000	**20**	77	26	16	3	E119 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
E119	●	●	○	○		●	○										○		○		○		●	●	○	○																							

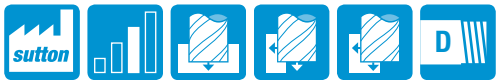
P Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metals **S** Titanium & Super Alloys **H** Hard Materials

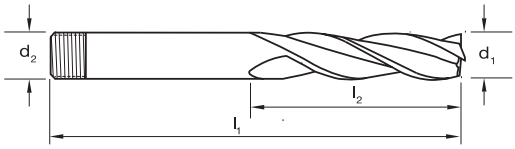
● Optimal ○ Effective

Endmills 3 Flute, R30 N, Long, Threaded

suttontools

- For slotting and finishing with the one tool
- Suitable for materials up to 850 N/mm²
- For soft steels & non-ferrous material





Catalogue Code	**E120***
Discount Group	B0602
Material	HSS Co
Surface Finish	***Brt***
Sutton Designation	**N**
Geometry	R30
Shank Form (DIN 1835)	D
Shank Tolerance	-0.025

Size Ref.	d_1 (h9)	l_1	l_2	d_2	z	Item #
0476*	**3/16**	2-3/4	1	1/4	3	E120 0476
0635*	**1/4**	3	1-1/4	1/4	3	E120 0635
0794*	**5/16**	3-1/8	1-3/8	3/8	3	E120 0794
0953*	**3/8**	3-1/4	1-1/2	3/8	3	E120 0953
1111*	**7/16**	3-1/2	1-3/4	1/2	3	E120 1111
1588*	**5/8**	4-1/4	2-1/2	5/8	3	E120 1588
2540*	**1**	6-1/4	3-1/2	1	3	E120 2540
3175*	**1-1/4**	6-1/4	4	1	3	E120 3175

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
E120	●	●	○	○		●	○										○		○		○		●	●	○	○																							

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

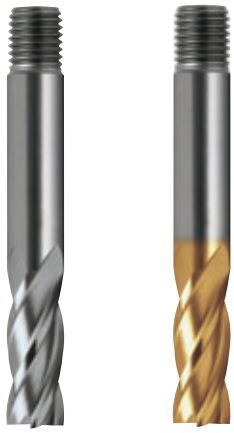
● Optimal ○ Effective

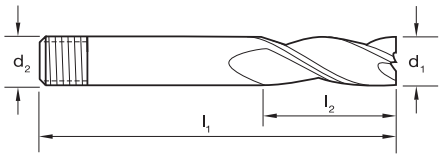
*** Not available once current stock is depleted.**

Endmills 4 Flute, R30 N, Regular, Threaded

suttontools

- For finish milling applications
- Suitable for materials up to 850 N/mm²
- For soft steels & non-ferrous material





Catalogue Code	E129	E130
Discount Group	B0602	B0602
Material	HSS Co	HSS Co
Surface Finish	*Brt*	*TiN*
Sutton Designation	N	N
Geometry	R30	R30
Shank Form (DIN 1835)	D	D
Shank Tolerance	-0.025	-0.025

Size Ref.	d_1 (k9)	l_1	l_2	d_2	z	Item #	Item #
0300	3	54	10	6	4	E129 0300	E130 0300
0400	4	57	13	6	4	E129 0400	E130 0400
0500	5	60.5	16	6	4	E129 0500	E130 0500
0600	6	60.5	16	6	4	E129 0600	E130 0600
0800	8	63.5	18	10	4	E129 0800	E130 0800
1000	10	66.5	21	10	4	E129 1000	E130 1000
1200	12	70	24	12	4	E129 1200	E130 1200
1400	14	73	28.5	12	4	E129 1400	
1600	16	77	26.5	16	4	E129 1600	E130 1600
1800	18	80	35	16	4	E129 1800	
2000	20	83.5	38	16	4	E129 2000	E130 2000
2200	22	98.5	41.5	25	4	E129 2200	
2500	25	101.5	44.5	25	4	E129 2500	
2800	28	104.5	46	25	6	E129 2800	
3000	30	104.5	46	25	6	E129 3000	
3200	32	112.5	51	32	6	E129 3200	
3600	36	116	54	32	6	E129 3600	
4000	40	117.5	55.5	32	6	E129 4000	
4500	45	119	57	32	6	E129 4500	
5000	50	127	65	32	6	E129 5000	
EM2M	6 piece set	4, 5, 6, 8, 10, 12mm				E129 EM2M	

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
E129	●	●	○	○		●	○										○		○		○		●	●	○	○																						
E130	●	●	●	●		●	●							○	○		○		○		○		●	●	○	○																					○	

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

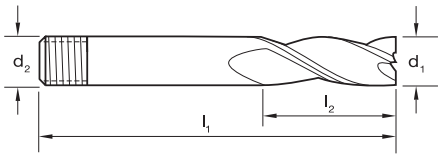
● Optimal ○ Effective

* Not available once current stock is depleted.

Endmills 4 Flute, R30 N, Regular, Threaded

suttontools

- For finish milling applications
- Suitable for materials up to 850 N/mm²
- For soft steels & non-ferrous material



Catalogue Code	E129	E130
Discount Group	B0602	B0602
Material	HSS Co	HSS Co
Surface Finish	*Brt*	*TiN*
Sutton Designation	N	N
Geometry	R30	R30
Shank Form (DIN 1835)	D	D
Shank Tolerance	-0.025	-0.025

Size Ref.	d_1 (k9)	l_1	l_2	d_2	z	Item #	Item #
0318	1/8	2-1/8	3/8	1/4	4	E129 0318	E130 0318
0397*	5/32	2-1/4	1/2	1/4	4	E129 0397	E130 0397
0476	3/16	2-1/4	1/2	1/4	4	E129 0476	E130 0476
0556*	7/32	2-3/8	5/8	1/4	4	E129 0556	
0635	1/4	2-3/8	5/8	1/4	4	E129 0635	E130 0635
0714*	9/32	2-3/8	5/8	3/8	4		
0794	5/16	2-1/2	3/4	3/8	4	E129 0794	E130 0794
0873	11/32	2-5/8	7/8	3/8	4	E129 0873	
0953	3/8	2-5/8	7/8	3/8	4	E129 0953	E130 0953
1032*	13/32	2-5/8	7/8	3/8	4	E129 1032	
1111	7/16	2-5/8	7/8	1/2	4	E129 1111	
1270	1/2	2-3/4	1	1/2	4	E129 1270	E130 1270
1429	9/16	2-7/8	1-1/8	1/2	4	E129 1429	
1588	5/8	3	1-1/4	5/8	4	E129 1588	E130 1588
1746	11/16	3-1/8	1-3/8	5/8	4	E129 1746	
1905	3/4	3-1/4	1-1/2	5/8	4	E129 1905	E130 1905
2223	7/8	3-7/8	1-5/8	1	4	E129 2223	
2540	1	4	1-11/16	1	4	E129 2540	
2858	1-1/8	4-1/8	1-13/16	1	6	E129 2858	
3175	1-1/4	4-1/4	1-15/16	1	6	E129 3175	
3493	1-3/8	4-3/8	2-1/16	1	6	E129 3493	
3810	1-1/2	4-1/2	2-3/16	1	6	E129 3810	
4445	1-3/4	4-3/4	2-1/2	1	6	E129 4445	
5080	2	5	2-3/4	1	6	E129 5080	
EM2	6 piece set 1/8, 3/16, 1/4, 5/16, 3/8, 1/2"					E129 EM2	

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
E129	●	●	○	○		●	○										○		○		○		●	●	○	○																						
E130	●	●	●	●		●	●							○	○		○		○		○		●	●	○	○																					○	

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

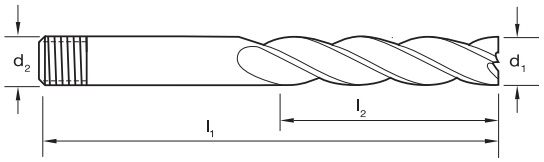
● Optimal ○ Effective

* Not available once current stock is depleted.

Endmills 4 Flute, R30 N, Long, Threaded

suttontools

- For finish milling applications
- Suitable for materials up to 850 N/mm²
- For soft steels & non-ferrous material



Catalogue Code	**E131**
Discount Group	B0602
Material	HSS Co
Surface Finish	***Brt***
Sutton Designation	N
Geometry	R30
Shank Form (DIN 1835)	D
Shank Tolerance	-0.025

Size Ref.	d_1 (k9)	l_1	l_2	d_2	z	Item #
0300	3	64	19	6	4	E131 0300
0400	4	70	26	6	4	E131 0400
0500	5	76	32	6	4	E131 0500
0600	6	76	32	6	4	E131 0600
0800	8	79.5	34	10	4	E131 0800
1000	10	82.5	37	10	4	E131 1000
1200	12	95	49.5	12	4	E131 1200
1400	14	101.5	57	12	4	E131 1400
1600	16	108.5	58	16	4	E131 1600
1800	18	115	70	16	4	E131 1800
2000	20	121.5	76	16	4	E131 2000
0318	1/8	2-1/2	5/8	1/4	4	E131 0318
0476	3/16	2-3/4	1	1/4	4	E131 0476
0556*	7/32	3	1-1/4	1/4	4	E131 0556
0635	1/4	3	1-1/4	1/4	4	E131 0635
0714*	9/32	3-1/8	1-3/8	3/8	4	E131 0714
0794	5/16	3-1/8	1-3/8	3/8	4	E131 0794
0953	3/8	3-1/4	1-1/2	3/8	4	E131 0953
1111*	7/16	3-1/2	1-3/4	1/2	4	E131 1111
1270	1/2	3-3/4	2	1/2	4	E131 1270
1588	5/8	4-1/4	2-1/2	5/8	4	E131 1588
1746*	11/16	4-1/2	2-3/4	5/8	4	E131 1746
1905	3/4	4-3/4	3	5/8	4	E131 1905
2223*	7/8	5-3/4	3-1/2	1	4	E131 2223
2540	1	6-1/2	4	1	4	E131 2540
2858*	1-1/8	6-1/2	4	1	6	E131 2858
3810*	1-1/2	6-1/2	4	1	6	E131 3810
3811*	1-1/2	6-1/2	4	1	6	E131 3811
4445*	1-3/4	6-1/2	4	1	6	E131 4445
5080*	2	6-1/2	4	1	6	E131 5080

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
E131	●	●	○	○		●	○										○		○		○		●	●	○	○																						

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

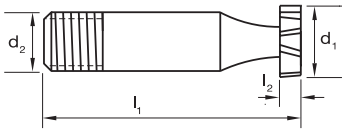
● Optimal ○ Effective

* Not available once current stock is depleted.

Roughers Woodruff Cutter, Threaded

suttontools

- For cutting key seats to suit standard imperial woodruff keys



Catalogue Code	**E178**
Discount Group	B0709
Material	HSS
Surface Finish	*Brt*
Sutton Designation	General Purpose
Geometry	-
Shank Form (DIN 1835)	D
Shank Tolerance	h6

Size Ref.	BS Cutter & Key #	d_1	l_2	l_1	d_2	Item #
0204	204	1/2	1/16	2	1/2	E178 0204
0304	304	1/2	3/32	2	1/2	E178 0304
0305	305	5/8	3/32	2	1/2	E178 0305
0404	404	1/2	1/8	2	1/2	E178 0404
0405	405	5/8	1/8	2	1/2	E178 0405
0406	406	3/4	1/8	2-1/4	1/2	E178 0406
0505	505	5/8	5/32	2	1/2	E178 0505
0506	506	3/4	5/32	2-1/4	1/2	E178 0506
0507	507	7/8	5/32	2-1/2	1/2	E178 0507
0606	606	3/4	3/16	2-1/4	1/2	E178 0606
0607	607	7/8	3/16	2-1/2	1/2	E178 0607
0608	608	1	3/16	2-3/4	1/2	E178 0608
0609	609	1-1/8	3/16	2-3/4	1/2	E178 0609
0807	807	7/8	1/4	2-1/2	1/2	E178 0807
0808	808	1	1/4	2-3/4	1/2	E178 0808
0809	809	1-1/8	1/4	2-3/4	1/2	E178 0809
0810	810	1-1/4	1/4	2-3/4	1/2	E178 0810
0812	812	1-1/2	1/4	3	1/2	E178 0812
1008	1008	1	5/16	2-3/4	1/2	E178 1008
1009	1009	1-1/8	5/16	2-3/4	1/2	E178 1009
1010	1010	1-1/4	5/16	2-3/4	1/2	E178 1010
1011	1011	1-3/8	5/16	3	1/2	E178 1011
1012	1012	1-1/2	5/16	3	1/2	E178 1012
1210	1210	1-1/4	3/8	2-3/4	1/2	E178 1210
1211	1211	1-3/8	3/8	3	1/2	E178 1211
1212	1212	1-1/2	3/8	3	1/2	E178 1212

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
E178	●	●	○	○		●	○										○		○		○		●	●	○	○																							

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

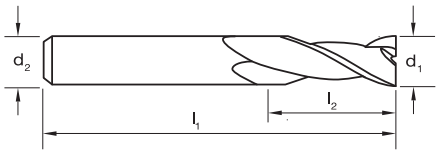
● Optimal ○ Effective

Slot Drills 2 Flute, R30 N, Regular

suttontools

- 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

JIS



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	14.1	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	●	●	●	●	○	●	○	○	○	●	○	○	○	○	○	○	●	○	●	●	○	○	○	○	○	○	○	○		○																		●	

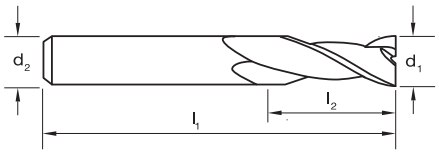
P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metals S Titanium & Super Alloys H Hard Materials

● Optimal ○ Effective

Slot Drills 2 Flute, R30 N, Regular

suttontools

- 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 #
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	E101 1905
2223	**7/8**	4-17/32	1-3/4	3/4	2	E100 2223	E101 2223
2540	**1**	4-23/32	2	3/4	2	E100 2540	E101 2540

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
E100	●	●	○	○	○	○	○	○		○			○				○	○	○	○	○	○	●	●	○	○	○	○		○																		
E101	●	●	●	●	○	●	○	○	○	●	○	○	○	○	○	○	●	○	●	●	○	○	○	○	○	○	○	○		○																		●	

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

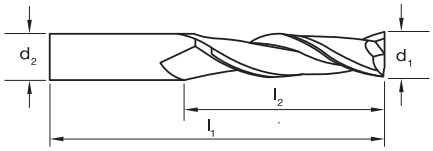
● Optimal ○ Effective

Slot Drills 2 Flute, R30 N, Long

suttontools

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

JIS



Catalogue Code	E102	E225	E103	E226
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 (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	

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
E102	●	●	○	○	○	●	○	○		○									○				●	●	○	○		○		○																			
E103	●	●	○	○	○	●	○	○	○	●	○	○	○	○	○	○	●		●				○	○	○	○	○	○		○																			

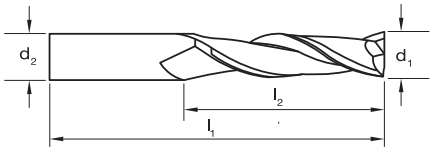
P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metals S Titanium & Super Alloys H Hard Materials

● Optimal ○ Effective

Slot Drills 2 Flute, R30 N, Long

suttontools

- 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	h6

Size Ref.	d_1 (e8)	l_1	l_2	d_2	z	Item #
0318	**1/8**	2-3/8	19/32	1/4	2	E102 0318
0397	**5/32**	2-3/8	25/32	1/4	2	E102 0397
0476	**3/16**	2-9/16	63/64	1/4	2	E102 0476
0635	**1/4**	2-9/16	1	1/4	2	E102 0635
0794	**5/16**	3-5/32	1-3/8	3/8	2	E102 0794
0953	**3/8**	3-3/4	1-3/4	3/8	2	E102 0953
1270	**1/2**	4-5/16	2-5/32	1/2	2	E102 1270
1588	**5/8**	4-23/32	2-9/16	5/8	2	E102 1588
1905	**3/4**	5-1/2	2-61/64	3/4	2	E102 1905

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
E102	●	●	○	○	○	●	○	○		○									○				●	●	○	○		○		○																			

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

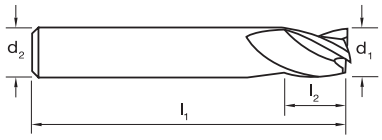
● Optimal ○ Effective

Endmills 3 Flute, R30 N, Stub

suttontools

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

DIN 327



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

Size Ref.	d_1 (e8)	l_1	l_2	d_2	z	Item #
0200	2	48	4	6	3	E188 0200
0250	2.5	49	5	6	3	E188 0250
0300	3	49	5	6	3	E188 0300
0350	3.5	50	6	6	3	E188 0350
0400	4	51	7	6	3	E188 0400
0500	5	52	8	6	3	E188 0500
0600	6	52	8	6	3	E188 0600
0700	7	60	10	10	3	E188 0700
0800	8	61	11	10	3	E188 0800
0900	9	61	11	10	3	•
1000	10	63	13	10	3	E188 1000
1200	12	73	16	12	3	E188 1200
1400	14	73	16	12	3	E188 1400
1500	15	73	16	12	3	E188 1500
1600	16	79	19	16	3	E188 1600
1800	18	79	19	16	3	E188 1800
2000	20	88	22	20	3	E188 2000
2200	22	88	22	20	3	E188 2200

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
E188	●	●	●	●	○	●	○	○	○	●	○	○	○	○	○	○	●	○	●	○	●	○	○	○	○	○	○	○		○																		●	

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

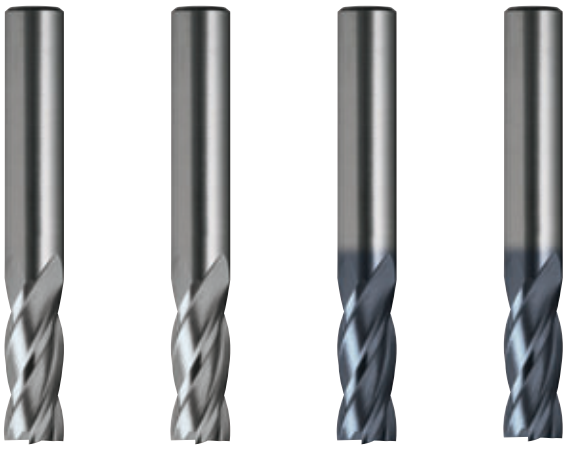
● Optimal ○ Effective

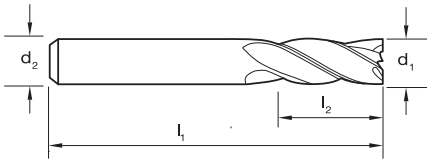
Endmills 4 Flute, R30 N, Regular

suttontools

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

JIS





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		E227 0400		E228 0400
0400	4.0	60	12	8	4	E125 0400		E126 0400	
0450	4.5	60	15	6	4		E227 0450		E228 0450
0450	4.5	60	15	8	4	E125 0450		E126 0450	
0500	5.0	60	15	6	4		E227 0500		E228 0500
0500	5.0	60	15	8	4	E125 0500		E126 0500	
0550	5.5	60	15	6	4		E227 0550		E228 0550
0550	5.5	60	15	8	4	E125 0550		E126 0550	
0600	6.0	60	15	6	4		E227 0600		E228 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			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	14.1	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
E125	●	●	○	○	○	●	○	○		○		○	○				○	○	○	○	○	○	●	●	○	○		○		○																			
E126	●	●	●	●	○	●	○	○	○	●	○	○	○	○	○	○	●	○	●	○	●	○	○	○	○	○	○	○		○																			●	

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

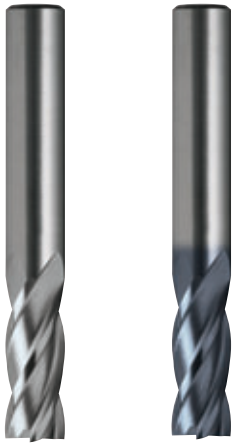
● Optimal ○ Effective

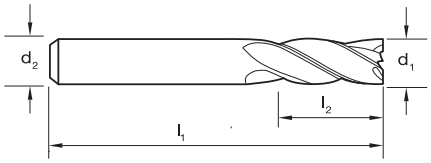
Endmills 4 Flute, R30 N, Regular

suttontools

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

JIS





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	h6	h6

Size Ref.	d_1 (k9)	l_1	l_2	d_2	z	Item #	Item #
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

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
E125	●	●	○	○	○	●	○	○		○		○	○				○	○	○	○	○	○	●	●	○	○		○		○																		
E126	●	●	●	●	○	●	○	○	○	●	○	○	○	○	○	○	●	○	●	○	●	○	○	○	○	○	○	○		○																		●	

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

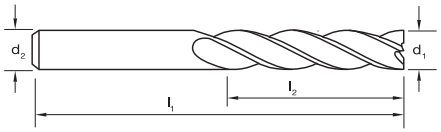
● Optimal ○ Effective

Endmills 4 Flute, R30 N, Long

suttontools

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

JIS



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	*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 (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
0400	4.0	60	20	6	4		E229 0400		E230 0400
0400	4.0	60	20	8	4	E127 0400		E128 0400	
0450	4.5	65	25	6	4		E229 0450		E230 0450
0450	4.5	65	25	8	4	•		•	
0500	5.0	65	25	6	4		E229 0500		E230 0500
0500	5.0	65	25	8	4	E127 0500		E128 0500	
0550	5.5	65	25	6	4		E229 0550		E230 0550
0550	5.5	65	25	8	4	•		•	
0600	6.0	65	25	6	4		E229 0600		E230 0600
0600	6.0	65	25	8	4	E127 0600		E128 0600	
0650	6.5	80	35	10	4	E127 0650		E128 0650	
0700	7.0	80	35	10	4	E127 0700		E128 0700	
0750	7.5	80	35	10	4	E127 0750		E128 0750	
0800	8.0	80	35	10	4	E127 0800		E128 0800	
0850	8.5	95	45	10	4	E127 0850		E128 0850	
0900	9.0	95	45	10	4	E127 0900		E128 0900	
0950	9.5	95	45	10	4	E127 0950		E128 0950	
1000	10.0	95	45	10	4	E127 1000		E128 1000	
1100	11.0	105	55	12	4	E127 1100		E128 1100	
1200	12.0	105	55	12	4	E127 1200		E128 1200	
1400	14.0	110	55	16	4	E127 1400		E128 1400	
1600	16.0	120	65	16	4	E127 1600		E128 1600	
1800	18.0	130	65	20	4	E127 1800		E128 1800	
1900	19.0	140	75	20	4	E127 1900		E128 1900	
2000	20.0	140	75	20	4	E127 2000		E128 2000	
2200	22.0	140	75	20	4	E127 2200		E128 2200	
2400	24.0	160	90	25	4	E127 2400		E128 2400	
2500	25.0	160	90	25	4	E127 2500		E128 2500	
3000	30.0	160	90	25	6	E127 3000		E128 3000	
3200	32.0	190	105	32	6	E127 3200		E128 3200	
4000	40.0	210	125	32	6			E128 4000	
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	14.1	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
E127	●	●	○	○	○	●	○	○		○		○	○				○	○	○	○	○	○	●	●	○	○		○		○																			
E128	●	●	●	●	○	●	○	○	○	●	○	○	○	○	○	○	●	○	●	○	●	○	○	○	○	○	○	○		○																			●	

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

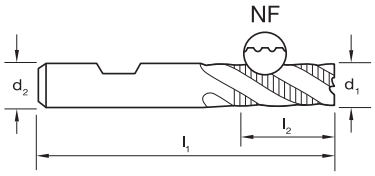
● Optimal ○ Effective

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

Roughers NF (semi roughing), R30 N, Regular

suttontools

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



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

Size Ref.	d_1 (js14)	l_1	l_2	d_2	z	Item #
0600	6	57	13	6	3	E202 0600
0800	8	69	19	10	3	E202 0800
1000	10	72	22	10	4	E202 1000
1200	12	83	26	12	4	E202 1200
1400	14	83	26	12	4	E202 1400
1600	16	92	32	16	4	E202 1600
1800	18	92	32	16	4	E202 1800
2000	20	104	38	20	4	E202 2000
2200	22	104	38	20	5	E202 2200
2500	25	121	45	25	5	E202 2500
3000	30	121	45	25	6	E202 3000
3200	32	133	53	32	6	•
3600	36	133	53	32	6	•
4000	40	155	63	40	6	•

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

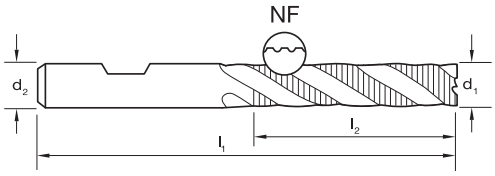
● Optimal ○ Effective

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

Roughers NF (semi roughing), R30 N, Long

suttontools

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



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

Size Ref.	d_1 (js14)	l_1	l_2	d_2	z	Item #
0600	6	68	24	6	3	•
0800	8	88	38	10	3	•
1000	10	95	45	10	4	E206 1000
1200	12	110	53	12	4	E206 1200
1400	14	110	53	12	4	E206 1400
1600	16	123	63	16	4	E206 1600
1800	18	123	63	16	4	E206 1800
2000	20	141	75	20	4	E206 2000
2200	22	141	75	20	5	E206 2200
2500	25	166	90	25	5	E206 2500
3000	30	166	90	25	6	E206 3000
3200	32	186	106	32	6	•
3600	36	186	106	32	6	•
4000	40	217	125	40	6	•

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

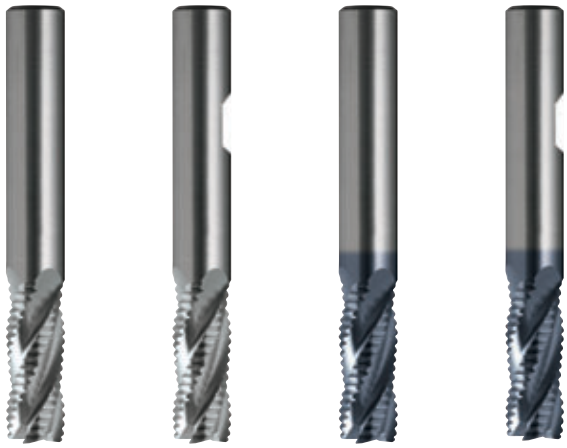
● Optimal ○ Effective

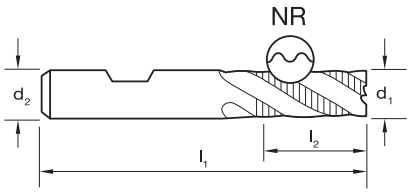
• Available on request as special manufacture. Subject to lead time.

Roughers NR (normal), R30 WN, Regular

suttontools

- 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	*Brt*	*Brt*	*TiCN*	*TiCN*
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	h6	h6	h6	h6

Size Ref.	d_1 (js14)	l_1	l_2	d_2	z	Item #	Item #	Item #	Item #
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

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
E144	●	●	○	○		●																	●	●	●	○		○		○																			
E145	●	●	○	○	○	●	○	○									○		○		○		○	○	○	○		○		○																			

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

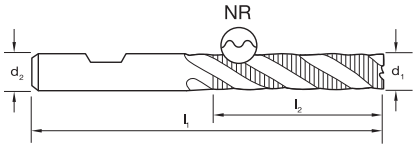
● Optimal ○ Effective

• Available on request as special manufacture. Subject to lead time. * Not available once current stock is depleted.

Roughers NR (normal), R30 WN, Long

suttontools

- 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	E147
Discount Group	B0402	B0404
Material	HSS Co.8	HSS Co.8
Surface Finish	*Brt*	*TiCN*
Sutton Designation	WN	WN
Geometry	R30 NR (coarse pitch)	R30 NR (coarse pitch)
Shank Form (DIN 1835)	A	A
Shank Tolerance	h6	h6

Size Ref.	d_1 (js14)	l_1	l_2	d_2	z	Item #	Item #
0600	6	68	24	6	3	E146 0600	E147 0600
0800	8	88	38	10	3	E146 0800	E147 0800
1000	10	95	45	10	4	E146 1000	E147 1000
1200	12	110	53	12	4	E146 1200	E147 1200
1600	16	123	63	16	4	E146 1600	E147 1600
1800	18	123	63	16	4	E146 1800	E147 1800
2000	20	141	75	20	4	E146 2000	E147 2000
2200	22	141	75	20	5	E146 2200	E147 2200
2500	25	166	90	25	5	E146 2500	E147 2500
3000	30	166	90	25	6	E146 3000	E147 3000
3200	32	186	106	32	6	•	•
4000*	40	217	125	40	6	E146 4000	
1270	1/2	4-5/16	2-1/16	1/2	4	E146 1270	E147 1270
1588	5/8	4-27/32	2-1/2	5/8	4	E146 1588	E147 1588
1905	3/4	5-9/16	2-15/16	3/4	4	E146 1905	E147 1905
2540	1	6-9/16	3-9/16	1	5	E146 2540	E147 2540
3175	1-1/4	7-5/16	4-3/16	1-1/4	6	E146 3175	E147 3175
3810	1-1/2	8-17/32	4-29/32	1-1/4	6	E146 3810	E147 3810

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
E146	●	●	○	○		●																	●	●	●	○		○		○																				
E147	●	●	○	○	○	●	○	○									○		○		○		○	○	○	○		○		○																				

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

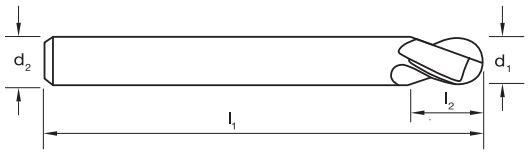
● Optimal ○ Effective

• Available on request as special manufacture. Subject to lead time. * Not available once current stock is depleted.

Slot Drills Ballnose, 2 Flute, R30 N, Long

suttontools

- 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	*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 #
0150	1.5	55	3	6	2	E113 0150	E114 0150
0200	2	55	4	6	2	E113 0200	E114 0200
0250	2.5	55	5	6	2	E113 0250	E114 0250
0300	3	60	6	6	2	E113 0300	E114 0300
0400	4	70	8	6	2	E113 0400	E114 0400
0450	4.5	70	8	6	2	•	E114 0450
0500	5	80	10	6	2	E113 0500	E114 0500
0600	6	90	12	6	2	E113 0600	E114 0600
0700	7	90	14	6	2	E113 0700	E114 0700
0800	8	100	16	8	2	E113 0800	E114 0800
0900	9	100	18	8	2	E113 0900	E114 0900
1000	10	100	20	10	2	E113 1000	E114 1000
1200	12	110	24	12	2	E113 1200	E114 1200
1400	14	110	28	12	2	E113 1400	E114 1400
1600	16	140	32	16	2	E113 1600	E114 1600
1800	18	160	35	16	2	E113 1800	E114 1800
2000	20	160	40	20	2	E113 2000	E114 2000
2500	25	180	50	25	2	E113 2500	E114 2500
3000	30	180	55	25	2	E113 3000	E114 3000
3200	32	200	60	32	2	E113 3200	E114 3200
3500	35	220	65	32	2	E113 3500	E114 3500
4000	40	220	65	32	2	E113 4000	E114 4000
0318	1/8	2-11/32	7/32	1/4	2	E113 0318	
0397	5/32	2-3/4	5/16	1/4	2	E113 0397	
0476	3/16	3-5/32	3/8	1/4	2	E113 0476	
0635*	1/4	3-17/32	15/32	1/4	2	E113 0635 *	E114 0635
0794*	5/16	3-15/16	5/8	5/16	2	E113 0794	
0953*	3/8	3-15/16	25/32	3/8	2	E113 0953	
1270*	1/2	4-11/32	15/16	1/2	2	E113 1270	
1588*	5/8	5-1/2	1-1/4	5/8	2	E113 1588	
1905*	3/4	6-9/32	1-9/16	3/4	2	E113 1905	

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
E113	●	●	○	○	○	●	○	○		○				○	○		○	○	○	○	○	○	●	●	●	○	○	○		○																		
E114	●	●	●	●	○	●	○	○	○	○	○	○	○	○	○	○	●	○	●	●	○	○	○	○	○	○	○	○		○																		●	

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

● Optimal ○ Effective

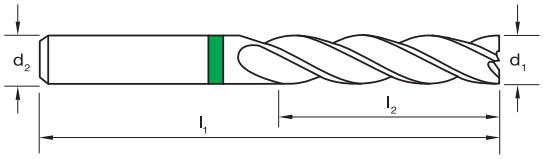
* Not available once current stock is depleted. • Available on request as special manufacture. Subject to lead time.

Endmills 4 Flute, R30/32 UNI, Long, *Harmony*

suttontools

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

DIN 844L



Catalogue Code	**E136**
Discount Group	B0612
Material	**SPM**
Surface Finish	***TiAlN***
Sutton Designation	**UNI**
Geometry	R30 / 32
Shank Form (DIN 1835)	A
Shank Tolerance	h6

Size Ref.	d_1 (k10)	l_1	l_2	d_2	z	Item #
0300	**3**	56	12	6	4	E136 0300
0400	**4**	63	19	6	4	E136 0400
0500	**5**	68	24	6	4	E136 0500
0600	**6**	68	24	6	4	E136 0600
0800	**8**	88	38	10	4	E136 0800
1000	**10**	95	45	10	4	E136 1000
1200	**12**	110	53	12	4	E136 1200
1400	**14**	110	53	12	4	E136 1400
1600	**16**	123	63	16	4	E136 1600
1800	**18**	123	63	16	4	E136 1800
2000	**20**	141	75	20	4	E136 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
E136	●	●	●	●	●	●	●	●	○	●	○	○	○	○	○	○	○	○	●	●	○	○	○	○	○	○		○		○																		●	

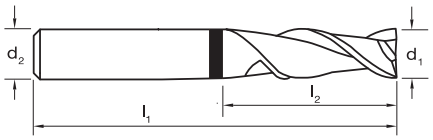
P Steel | M Stainless Steel | K Cast Iron | N Non-Ferrous Metals | S Titanium & Super Alloys | H Hard Materials

● Optimal ○ Effective

Slot Drills 2 Flute, R40 Al, Regular

suttontools

- For precision milling of slots & cavities
- Optimised for Wrought Aluminium Alloys
- TiAlN for Alloyed Aluminiums, offering excellent resistant to abrasion



Catalogue Code	**E111**
Discount Group	B0608
Material	HSS Co.8
Surface Finish	*TiAlN*
Sutton Designation	Al
Geometry	R40
Shank Form (DIN 1835)	A
Shank Tolerance	h6

Size Ref.	d_1 (e8)	l_1	l_2	d_2	z	Item #
0300	3	52	8	6	2	E111 0300
0400	4	55	11	6	2	E111 0400
0500	5	57	13	6	2	E111 0500
0600	6	57	13	6	2	E111 0600
0800	8	69	19	10	2	E111 0800
1000	10	72	22	10	2	E111 1000
1200	12	83	26	12	2	E111 1200
1600	16	92	32	16	2	E111 1600
2000	20	104	38	20	2	E111 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
E111																							●	●	●	●	○	●		○																				

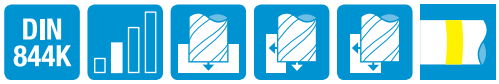
P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metals S Titanium & Super Alloys H Hard Materials

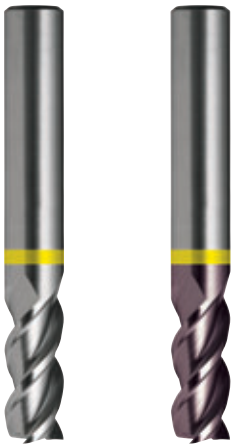
● Optimal ○ Effective

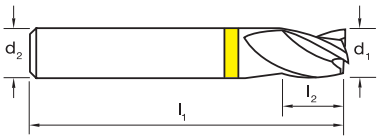
Endmills 3 Flute, R45 W, Regular

suttontools

- 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	TiAlN
Sutton Designation	W	W
Geometry	R45	R45
Shank Form (DIN 1835)	A	A
Shank Tolerance	h6	h6

Size Ref.	d_1 (e8)	l_1	l_2	d_2	z	Item #	Item #
0300	3	52	8	6	3	E121 0300	E122 0300
0400	4	55	11	6	3	E121 0400	E122 0400
0500	5	57	13	6	3	E121 0500	E122 0500
0600	6	57	13	6	3	E121 0600	E122 0600
0800	8	69	19	10	3	E121 0800	E122 0800
1000	10	72	22	10	3	E121 1000	E122 1000
1200	12	83	26	12	3	E121 1200	E122 1200
1600	16	92	32	16	3	E121 1600	E122 1600
2000	20	104	38	20	3	E121 2000	E122 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
E121																							●	●	●	●	○	○	○	●																				
E122																							●	●	●	●	○	●		●																				

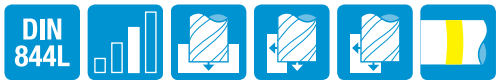
P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metals S Titanium & Super Alloys H Hard Materials

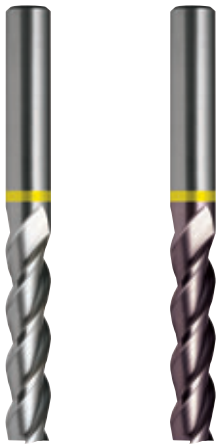
● Optimal ○ Effective

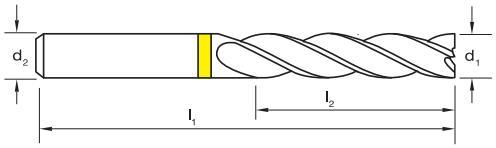
Endmills 3 Flute, R40 W, Long

suttontools

- 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	**E123**	**E124**
Discount Group	B0610	B0612
Material	**SPM**	**SPM**
Surface Finish	***Brt***	***TiAlN***
Sutton Designation	**W**	**W**
Geometry	R40	R40
Shank Form (DIN 1835)	A	A
Shank Tolerance	h6	h6

Size Ref.	d_1 (e8)	l_1	l_2	d_2	z	Item #	Item #
0300	**3**	56	12	6	3	E123 0300	E124 0300
0400	**4**	63	19	6	3	E123 0400	E124 0400
0500	**5**	68	24	6	3	E123 0500	E124 0500
0600	**6**	68	24	6	3	E123 0600	E124 0600
0800	**8**	88	38	10	3	E123 0800	E124 0800
1000	**10**	95	45	10	3	E123 1000	E124 1000
1200	**12**	110	53	12	3	E123 1200	E124 1200
1400	**14**	110	53	12	3	E123 1400	E124 1400
1600	**16**	123	63	16	3	E123 1600	E124 1600
1800	**18**	123	63	16	3	E123 1800	E124 1800
2000	**20**	141	75	20	3	E123 2000	E124 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
E123																							●	●	●	●	○	○	○	●																			
E124																							●	●	●	●	○	●		●																			

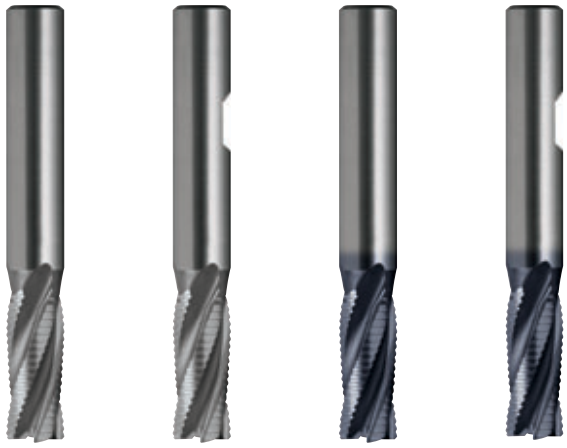
P Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metals **S** Titanium & Super Alloys **H** Hard Materials

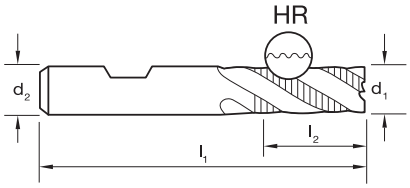
● Optimal ○ Effective

Roughers HR (fine), R30 NH, Regular

suttontools

- 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	E168	E170	E169	E171
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	R30 HR	R30 HR	R30 HR
Shank Form (DIN 1835)	A	B	A	B
Shank Tolerance	h6	h6	h6	h6

Size Ref.	d_1 (js14)	l_1	l_2	d_2	z	Item #	Item #	Item #	Item #
0600	6.0	60	15	10	3	E168 0600		E169 0600	
0700	7.0	65	20	10	3	E168 0700		E169 0700	
0800	8.0	65	20	10	3	E168 0800		E169 0800	
0900	9.0	75	25	10	3	E168 0900		E169 0900	
1000	10.0	75	25	10	4	E168 1000		E169 1000	
1100	11.0	80	30	12	4	E168 1100		E169 1100	
1200	12.0	80	30	12	4	E168 1200		E169 1200	
1400	14.0	90	35	16	4	E168 1400		E169 1400	
1500	15.0	95	40	16	4	E168 1500		E169 1500	
1600	16.0	95	40	16	4		E170 1600		E171 1600
1800	18.0	105	40	20	4		E170 1800		E171 1800
2000	20.0	110	45	20	4		E170 2000		E171 2000
2200	22.0	110	45	20	4		E170 2200		E171 2200
2500	25.0	120	50	25	5		E170 2500		E171 2500
3000	30.0	125	55	25	6		E170 3000		E171 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
E170			●		○		●	○	○	○	○	○	○				○		○		○								○																				
E171					●		●	●	●	●	●	○	○	○	○	○	●	○	●	○	●	○							●																				○	

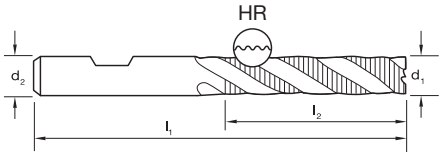
P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metals S Titanium & Super Alloys H Hard Materials

● Optimal ○ Effective

Roughers HR (fine), R30 NH, Long

suttontools

- 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	**E173**
Discount Group	B0404
Material	HSS Co.8
Surface Finish	*TiCN*
Sutton Designation	NH
Geometry	R30 HR (fine pitch)
Shank Form (DIN 1835)	A
Shank Tolerance	h6

Size Ref.	d_1 (js14)	l_1	l_2	d_2	z	Item #
1200	12	110	53	12	4	E173 1200
1600	16	123	63	16	4	E173 1600
1800	18	123	63	16	4	E173 1800
2000	20	141	75	20	4	E173 2000
2200	22	141	75	20	5	E173 2200
2500	25	166	90	25	5	E173 2500
3000	30	166	90	25	6	E173 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
E173					●		●	●	○	●	○	○	○	○	○	○	○	○	○	○	○	○							●																			○	

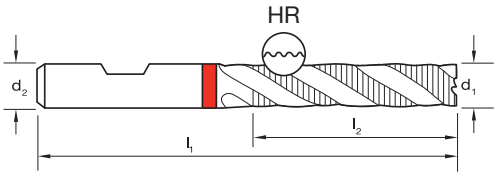
P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metals S Titanium & Super Alloys H Hard Materials

● Optimal ○ Effective

Roughers HR (fine), R30 H, Long

suttontools

- SPM offers superior performance
- For roughing applications
- HR geometry allows for heavy cuts, in harder materials
- Suitable for materials up to 1400 N/mm^2
- TiAlN for longer tool life



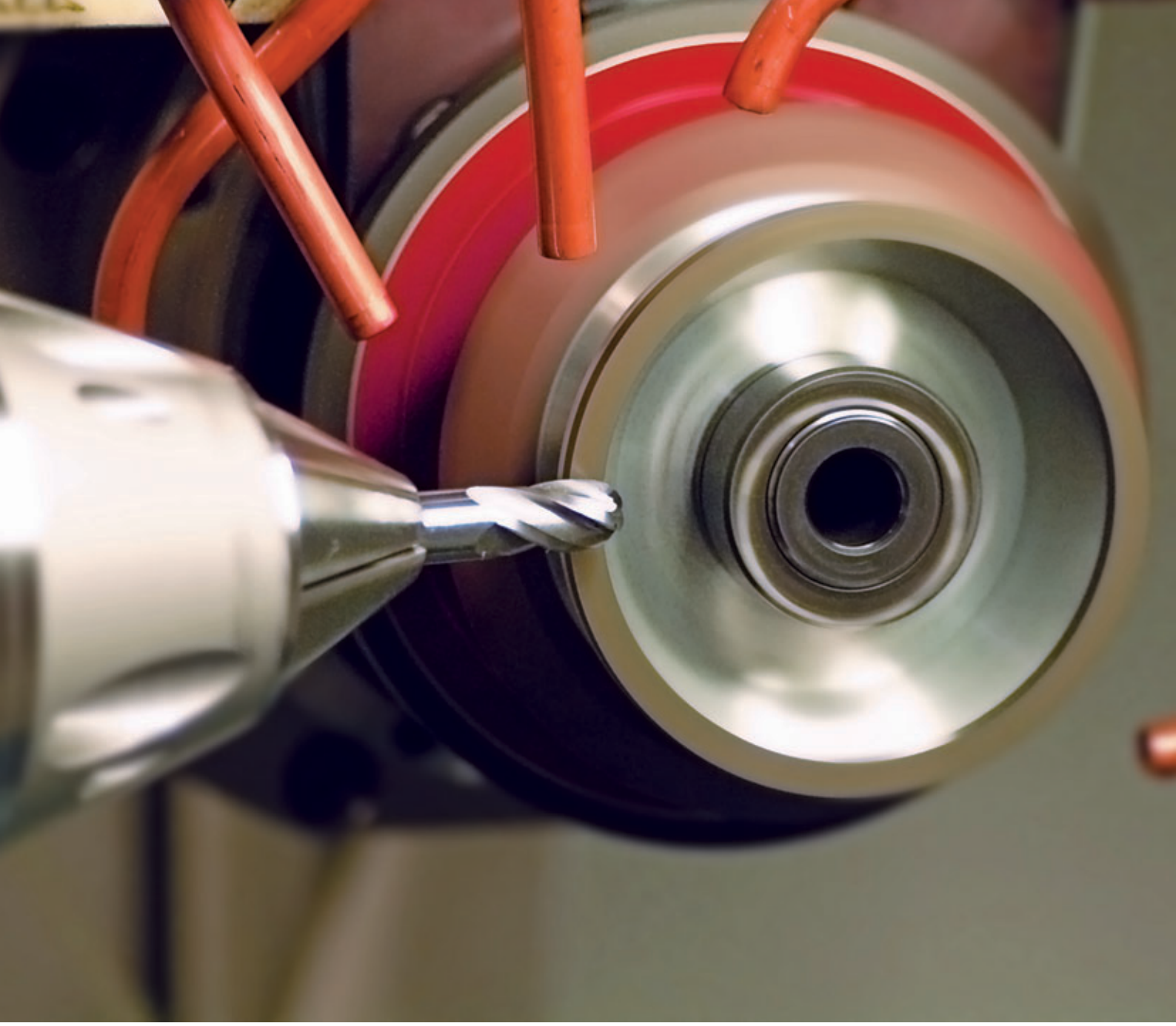
Catalogue Code	**E177**
Discount Group	B0408
Material	SPM
Surface Finish	*TiAlN*
Sutton Designation	H
Geometry	R30 HR (fine pitch)
Shank Form (DIN 1835)	B
Shank Tolerance	h6

Size Ref.	d_1 (js14)	l_1	l_2	d_2	z	Item #
0600	6	68	24	6	3	E177 0600
0800	8	88	38	10	3	E177 0800
1000	10	95	45	10	4	E177 1000
1200	12	110	53	12	4	E177 1200
1600	16	123	63	16	4	E177 1600
2000	20	141	75	20	4	E177 2000
2500	25	166	90	25	5	E177 2500

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
E177			○	○	●		○	●	●	○	●	○	●			○	○	○	●	●	●	●					○		●				○	○	○	○	○	○	○	○	○	○	○	○				●	

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

● Optimal ○ Effective



Regrinding Service… Reduce your production costs

Sutton Tools continue to reinvest to provide a 'complete' range in cutting tool products and services. Our regrinding service returns tools to 'as new' condition. Quality is guaranteed from the CNC grinding machines which are operated by highly experienced personnel, using advanced technology. A full regrinding service is offered in Europe. HSS and carbide tooling can be reconditioned by our highly experienced personnel, with reproducible, high quality results, every time.

We regrind HSS Powdered Metallurgy and grades of Solid Carbide, complemented by fifth generation thin film coatings.

Sutton Tools Recoating Service
In Europe we provide a full regrinding service for Sutton Tools distributors. Using world-leading technology, coatings are available to solve a wide range of problems relating to friction and wear, thereby improving tool performance and increasing tool life, up to 300-1000% compared to uncoated.

Send & Return Service
Sutton Tools re-sharpening boxes will be provided for safe shipment of your tools for servicing. Simply fill in the request form, and we will return the tools to 'as new' condition as instructed. Contact us for your Sutton Tools re-sharpening box and request form.