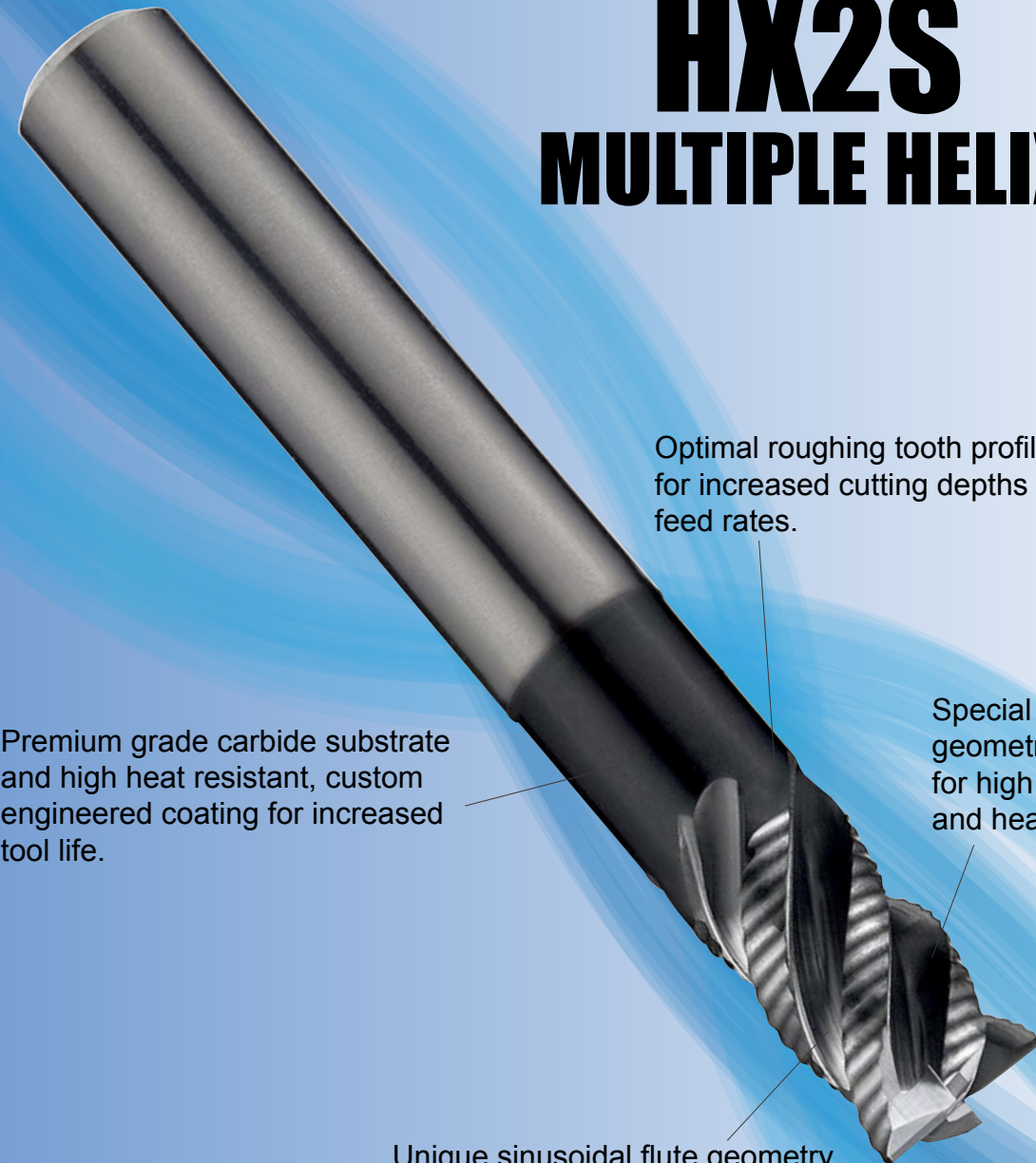


SUPERIOR PERFORMANCE



HX2S MULTIPLE HELIX



Optimal roughing tooth profile allows for increased cutting depths and feed rates.

Premium grade carbide substrate and high heat resistant, custom engineered coating for increased tool life.

Special tool geometry designed for high feed rate and heavy cutting.

Unique sinusoidal flute geometry for reduced resonance vibration and smooth chip evacuation.

IDEAL FOR MATERIAL GROUPS



HX2S & SABRE ROUGHING END MILLS



Carbide and powder metallurgy for Steel, Cast iron, Stainless steel and Nickel alloys



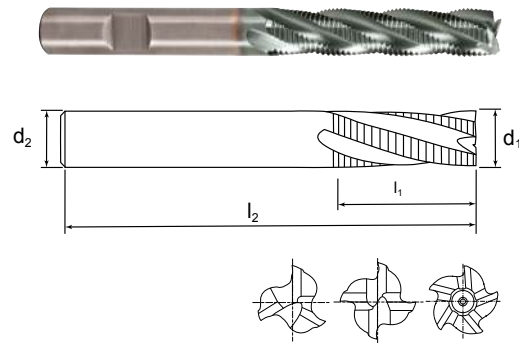
www.europatool.co.uk

MULTIFLUTE SABRE LONG LENGTH
FINE PITCH

Series No. 191140

► cutting conditions : p.270

Suitable for high feed roughing.
Designed for Steel, Stainless steel and Nickel alloys.
Sabre coating suitable for high speed cutting.
Centre cutting up to ϕ 20.0mm, non-centre cutting from ϕ 22.0mm.



EUROPA CODE	CUTTING DIAMETER d_1	SHANK DIAMETER d_2	LENGTH OF CUT l_1	OVERALL LENGTH l_2	NO. OF FLUTE z
1911400600	6.0	6	24.0	68	3
1911400700	7.0	10	30.0	80	3
1911400800	8.0	10	38.0	88	3
1911400900	9.0	10	38.0	88	3
1911401000	10.0	10	45.0	95	4
1911401200	12.0	12	53.0	110	4
1911401400	14.0	12	53.0	110	4
1911401600	16.0	16	63.0	123	4
1911401800	18.0	16	63.0	123	4
1911402000	20.0	20	75.0	141	4
1911402200	22.0	20	75.0	141	5
1911402500	25.0	25	90.0	168	5

Tolerances according to DIN 7160 & 7161

Tolerance range in μm				
Nominal Diameter in mm				
	over 3 to 6	over 6 to 10	over 10 to 18	over 18 to 30
MILL DIA js12	± 60	± 75	± 90	± 105
SHANK DIA h6	0 - 8	0 - 9	0 - 11	0 - 13

●: Excellent ○: Good

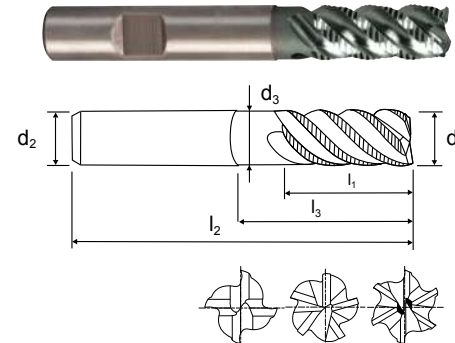
P		H	M		K		S			N				O	
11	12	15	21	22	31	32	41	42	43	61	62	63	64	81	82
●	●		●	●	○	○									
13	14	16	23		33	34	51	52	53	71	72	73	74	83	
●	●		●		○	○	○	○	○						

MULTIFLUTE SABRE EXTENDED NECK
45° HELIX FINE PITCH

Series No. 121240

► cutting conditions : p.270

Suitable for high feed roughing.
Designed for Steel, Stainless steel and Nickel alloys.
Sabre coating suitable for high speed cutting.
Centre cutting up to ϕ 16.0mm, non-centre cutting from ϕ 18.0mm.



EUROPA CODE	CUTTING DIAMETER d_1	SHANK DIAMETER d_2	LENGTH OF CUT l_1	EFFECTIVE LENGTH l_3	OVERALL LENGTH l_2	NECK DIAMETER d_3	NO. OF FLUTE z
1212400600	6.0	6	13.0	-	57	-	4
1212400800	8.0	10	19.0	-	69	-	4
1212401000	10.0	10	22.0	31.0	72	9.5	4
1212401200	12.0	12	26.0	37.0	83	11.5	4
1212401400	14.0	12	26.0	-	83	-	5
1212401600	16.0	16	32.0	44.0	92	15.0	5
1212401800	18.0	16	32.0	-	83	-	6
1212402000	20.0	20	38.0	54.0	104	19.0	6
1212402500	25.0	25	45.0	63.0	121	24.0	6

Tolerances according to DIN 7160 & 7161

Tolerance range in μm				
Nominal Diameter in mm				
	over 3 to 6	over 6 to 10	over 10 to 18	over 18 to 30
MILL DIA js12	± 60	± 75	± 90	± 105
SHANK DIA h6	0 - 8	0 - 9	0 - 11	0 - 13

●: Excellent ○: Good

P		H	M		K		S			N				O	
11	12	15	21	22	31	32	41	42	43	61	62	63	64	81	82
●	●		●	●	○	○									
13	14	16	23		33	34	51	52	53	71	72	73	74	83	
●	●		●		○	○	○	○	○						