

EUROPA STANDARD SOLID CARBIDE K30 & K30 + TIALN COATING.

**CARBIDE HELD AT
2010 PRICES**

SOLID CARBIDE 2, 3 & 4 FLUTE UNCOATED

ORDER CODE : **2 FLUTE 301303**
3 FLUTE 304303
4 FLUTE 310303

DIA x LENGTH OF CUT x OVERALL LENGTH x SHANK DIA	ISSUE PRICE
1.0mm x 4.0mm x 38mm x 3mm	£4.33
2.0mm x 6.3mm x 38mm x 3mm	£4.33
3.0mm x 12mm x 38mm x 3mm	£4.33
4.0mm x 14mm x 50mm x 4mm	£5.96
5.0mm x 16mm x 50mm x 6mm	£7.50
6.0mm x 19mm x 58mm x 6mm	£7.86
8.0mm x 20mm x 63mm x 8mm	£8.87
10mm x 22mm x 75mm x 10mm	£16.49
12mm x 25mm x 75mm x 12mm	£19.14
16mm x 32mm x 89mm x 16mm	£33.16
20mm x 38mm x 100mm x 20mm	£58.87
25mm x 38mm x 100mm x 25mm	£81.41



SOLID CARBIDE 2, 3 & 4 FLUTE TIALN COATED

ORDER CODE : **2 FLUTE 301323**
3 FLUTE 304323
4 FLUTE 310323

DIA x LENGTH OF CUT x OVERALL LENGTH x SHANK DIA	ISSUE PRICE
1.0mm x 4.0mm x 38mm x 3mm	£7.09
2.0mm x 6.3mm x 38mm x 3mm	£7.09
3.0mm x 12mm x 38mm x 3mm	£7.09
4.0mm x 14mm x 50mm x 4mm	£8.72
5.0mm x 16mm x 50mm x 6mm	£10.26
6.0mm x 19mm x 58mm x 6mm	£10.61
8.0mm x 20mm x 63mm x 8mm	£13.15
10mm x 22mm x 75mm x 10mm	£20.77
12mm x 25mm x 75mm x 12mm	£24.24
16mm x 32mm x 89mm x 16mm	£41.13
20mm x 38mm x 100mm x 20mm	£73.63
25mm x 38mm x 100mm x 25mm	£99.03

SOLID CARBIDE 2 & 4 FLUTE BALL NOSED UNCOATED

ORDER CODE : **2 FLUTE 313303**
4 FLUTE 315303

DIA x LENGTH OF CUT x OVERALL LENGTH x SHANK DIA	ISSUE PRICE
1.0mm x 4.0mm x 38mm x 3mm	£5.20
2.0mm x 6.3mm x 38mm x 3mm	£5.20
3.0mm x 12mm x 38mm x 3mm	£5.20
4.0mm x 14mm x 50mm x 4mm	£7.15
5.0mm x 16mm x 50mm x 6mm	£9.01
6.0mm x 19mm x 58mm x 6mm	£9.43
8.0mm x 20mm x 63mm x 8mm	£10.62
10mm x 22mm x 75mm x 10mm	£19.79
12mm x 25mm x 75mm x 12mm	£22.99
16mm x 32mm x 89mm x 16mm	£39.78
20mm x 38mm x 100mm x 20mm	£64.22
25mm x 38mm x 100mm x 25mm	£97.69



SOLID CARBIDE 2 & 4 FLUTE BALL NOSED TIALN COATED

ORDER CODE : **2 FLUTE 313323**
4 FLUTE 315323

DIA x LENGTH OF CUT x OVERALL LENGTH x SHANK DIA	ISSUE PRICE
1.0mm x 4.0mm x 38mm x 3mm	£7.96
2.0mm x 6.3mm x 38mm x 3mm	£7.96
3.0mm x 12mm x 38mm x 3mm	£7.96
4.0mm x 14mm x 50mm x 4mm	£9.91
5.0mm x 16mm x 50mm x 6mm	£11.77
6.0mm x 19mm x 58mm x 6mm	£12.19
8.0mm x 20mm x 63mm x 8mm	£14.90
10mm x 22mm x 75mm x 10mm	£24.07
12mm x 25mm x 75mm x 12mm	£28.09
16mm x 32mm x 89mm x 16mm	£46.54
20mm x 38mm x 100mm x 20mm	£74.83
25mm x 38mm x 100mm x 25mm	£115.32

FEATURES:

EUROPA K30 CARBIDE AND COATED TIALN.

BENEFITS:

UPTO 100% TO 300% HIGHER CUTTING SPEEDS & FEEDS, COMPARED TO CARBIDE K10/30 GRADES.
UPTO 200% TO 300% HIGHER STOCK REMOVAL, COMPARED TO CARBIDE K10/30 GRADES.

APPLICATION:

DRY & HIGH SPEED CUTTING.
MACHINING ALL MATERIALS 20 HRC UPTO 50 HRC.
GENERAL MACHINING ON NC & CNC MACHINES.



ALU -XP 2 FLUTE 55 DEG.HELIX SERIES 157303



CUTTING DIAMETER	SHANK DIAMETER	LENGTH OF CUT	O/ALL LENGTH	EUROPA EDP	ISSUE PRICE
4mm	4mm	15mm	50mm	1573030400	£8.79
5mm	5mm	20mm	50mm	1573030500	£9.72
6mm	6mm	20mm	64mm	1573030600	£10.38
8mm	8mm	22mm	64mm	1573030800	£15.80
10mm	10mm	27mm	70mm	1573031000	£23.57
12mm	12mm	27mm	76mm	1573031200	£27.87
16mm	16mm	35mm	90mm	1573031600	£55.93

FEATURES:

K30 MICROGRAIN CARBIDE 2 FLUTES.
55 DEGREE HELIX ANGLE.

BENEFITS:

THE RADICAL FLUTE GEOMETRY GIVES EXCEPTIONAL SWarf CLEARANCE, WHILST THE CIRCULAR LAND AND END TEETH DESIGN GIVE EXCELLENT SURFACE FINISH.

APPLICATION:

DESIGNED TO GIVE EXTREMELY HIGH PERFORMANCE IN THE MACHINING OF ALUMINIUM AND OTHER SOFT NON-FERROUS MATERIALS.

HIGH FEED PULSAR BLUE



STANDARD LENGTH SERIES - ORDER CODE : 110350

CUTTING DIAMETER	CORNER RADIUS	SHANK DIAMETER	NECK DIA.	LENGTH OF CUT	EFFECTIVE LENGTH	OVERALL LENGTH	ORDER CODE	ISSUE PRICE
2mm	0.5mm	6mm	1.8mm	1mm	6mm	50mm	1103500200	£20.23
3mm	0.5mm	6mm	2.8mm	1.2mm	8mm	50mm	1103500300	£20.23
4mm	0.5mm	6mm	3.8mm	1.5mm	10mm	50mm	1103500400	£20.23
6mm	0.5mm	6mm	5.4mm	2.5mm	12mm	60mm	1103500600	£20.23
6mm	1mm	6mm	5.4mm	2.5mm	12mm	60mm	1103500601	£20.23
8mm	1mm	8mm	7.2mm	3.5mm	16mm	60mm	1103500800	£25.87
8mm	2mm	8mm	7.2mm	3.5mm	16mm	60mm	1103500802	£25.87
10mm	1mm	10mm	9mm	4mm	20mm	70mm	1103501000	£38.61
10mm	2mm	10mm	9mm	4mm	20mm	70mm	1103501002	£38.61
12mm	2mm	12mm	11mm	5mm	25mm	80mm	1103501200	£53.31
12mm	3mm	12mm	11mm	5mm	25mm	80mm	1103501203	£53.31

FEATURES:

CARBIDE 4 FLUTE
CORNER RADIUS.

BENEFITS:

REDUCED CLEARANCE ANGLES STRENGTHENS CORNER RADIUS & REDUCES CHATTERING EXTRA SHORT FLUTE FOR HIGH RIGIDITY HEAVY CORE WITH REDUCED DIAMETER ALLOWS GREATER DEPTHS AND MAXIMUM RIGIDITY.

APPLICATION:

SUITABLE FOR HIGH HARDENED STEELS & MATERIALS OVER HRC45 TO HRC65.

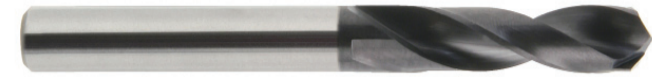
LONG SERIES - ORDER CODE : 111350

CUTTING DIAMETER	CORNER RADIUS	SHANK DIAMETER	NECK DIA.	LENGTH OF CUT	EFFECTIVE LENGTH	OVERALL LENGTH	ORDER CODE	ISSUE PRICE
2mm	0.5	6	1.8	1	6	70	1113500200	£21.35
3mm	0.5	6	2.8	1.2	8	70	1113500300	£21.35
4mm	0.5	6	3.8	1.5	10	70	1113500400	£21.35
5mm	0.5	6	-	2	10	70	1113500500	£21.35
6mm	0.5	6	5.4	2.5	12	90	1113500600	£23.41
6mm	1	6	5.4	2.5	12	90	1113500601	£23.41
8mm	1	8	7.2	3.5	16	100	1113500800	£29.88
8mm	2	8	7.2	3.5	16	100	1113500802	£29.88
10mm	1	10	9	4	20	100	1113501000	£42.12
10mm	2	10	9	4	20	100	1113501002	£42.12
12mm	2	12	11	5	25	110	1113501200	£59.14
12mm	3	12	11	5	25	110	1113501203	£59.14
16mm	3	16	-	6.5	30	110	1113501600	£102.56



SABRE PM STUB DRILLS

SERIES : 820422



DIA.	FLUTE LENGTH	O/ALL	SHANK DIA.	EUROPA EDP NO.	ISSUE PRICE
1.0mm	6mm	38mm	3.0mm	8204220100	£8.72
1.1mm	7mm	39mm	3.0mm	8204220110	£8.72
1.2mm	8mm	40mm	3.0mm	8204220120	£8.72
1.3mm	8mm	40mm	3.0mm	8204220130	£8.72
1.4mm	9mm	41mm	3.0mm	8204220140	£8.72
1.5mm	9mm	41mm	3.0mm	8204220150	£8.72
1.6mm	10mm	42mm	3.0mm	8204220160	£8.72
1.7mm	10mm	42mm	3.0mm	8204220170	£8.72
1.8mm	11mm	43mm	3.0mm	8204220180	£8.72
1.9mm	11mm	43mm	3.0mm	8204220190	£8.72
2.0mm	12mm	44mm	3.0mm	8204220200	£8.24
2.1mm	12mm	44mm	3.0mm	8204220210	£8.24
2.2mm	13mm	45mm	3.0mm	8204220220	£8.24
2.3mm	13mm	45mm	3.0mm	8204220230	£8.24
2.4mm to 2.6mm	14mm	46mm	3.0mm	8204220240	£8.24
2.7mm to 3mm	16mm	48mm	3.0mm	8204220270	£8.24
3.1mm to 3.3mm	18mm	50mm	4.0mm	8204220310	£9.87
3.4mm to 3.7mm	20mm	52mm	4.0mm	8204220340	£9.87
3.8mm to 4mm	22mm	54mm	4.0mm	8204220380	£10.97
4.1mm	22mm	66mm	6.0mm	8204220410	£12.21
4.2mm	22mm	66mm	6.0mm	8204220420	£12.21
4.3mm to 4.5mm	24mm	68mm	6.0mm	8204220430	£12.21
4.6mm	24mm	68mm	6.0mm	8204220460	£13.93
4.7mm	24mm	68mm	6.0mm	8204220470	£13.93
4.8mm to 5mm	26mm	70mm	6.0mm	8204220480	£13.93

DIA.	FLUTE LENGTH	O/ALL	SHANK DIA.	EUROPA EDP NO.	ISSUE PRICE
5.1mm to 5.3mm	26mm	70mm	6.0mm	8204220510	£16.54
5.4mm	28mm	72mm	6.0mm	8204220540	£16.54
5.5mm	28mm	72mm	6.0mm	8204220550	£16.54
5.6mm to 6mm	28mm	72mm	6.0mm	8204220560	£17.61
6.1mm to 6.5mm	31mm	75mm	8.0mm	8204220610	£18.67
6.6mm to 7mm	31mm	75mm	8.0mm	8204220660	£19.42
7.1mm to 7.5mm	34mm	78mm	8.0mm	8204220710	£20.19
7.6mm to 8mm	37mm	81mm	8.0mm	8204220760	£21.25
8.1mm to 8.5mm	37mm	87mm	10mm	8204220810	£23.06
8.6mm to 9mm	40mm	90mm	10mm	8204220860	£24.54
9.1mm to 9.5mm	40mm	90mm	10mm	8204220910	£26.44
9.6mm to 10mm	43mm	93mm	10mm	8204220960	£27.54
10.1mm to 10.5mm	43mm	100mm	12mm	8204221010	£30.09
10.6mm to 11mm	43mm	100mm	12mm	8204221060	£32.64
11.1mm to 11.5mm	47mm	104mm	12mm	8204221110	£37.05
11.6mm to 12mm	47mm	104mm	12mm	8204221160	£40.31
12.1mm to 12.5mm	51mm	108mm	12mm	8204221210	£43.31
12.6mm to 13mm	51mm	108mm	12mm	8204221260	£45.89

<p>FEATURES:</p> <p>PREMIUM PM-HSS POWDER METALLURGY STUB DRILL TiAlN COATED. 118 DEGREE POINT ANGLE UP TO 1.9MM, 135 DEGREE POINT ANGLE OVER 1.9MM</p>	<p>BENEFITS:</p> <p>EXCELLENT WEAR RESISTANCE. SPECIAL POINT GEOMETRY, NO CENTERING REQUIRED. BETTER TOOL LIFE WITH EXCELLENT COATING. IMPROVED HOLE TOLERANCES.</p>	<p>APPLICATION:</p> <p>STRUCTURAL STEELS, CARBON AND ALLOY STEELS, PRE-HARDENED AND MOULD STEELS. STAINLESS STEELS, HARDENED STEELS (HRC20-45) CAST IRONS, ALUMINIUM ALLOYS, NON-FERROUS ALLOYS.</p>
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SABRE FINE PITCH ROUGHERS



STANDARD LENGTH - ORDER CODE : 190140

LONG LENGTH - ORDER CODE : 191140

DIA x LENGTH OF CUT x OVERALL LENGTH x SHANK DIA	FLUTES	EUROPA EDP NO.	ISSUE PRICE
6mm x 13mm x 57mm x 6mm	3	1901400600	£13.59
7mm x 16mm x 66mm x 10mm	3	1901400700	£18.34
8mm x 19mm x 69mm x 10mm	3	1901400800	£18.34
9mm x 19mm x 69mm x 10mm	3	1901400900	£18.77
10mm x 22mm x 72mm x 10mm	4	1901401000	£18.77
12mm x 26mm x 83mm x 12mm	4	1901401200	£22.39
14mm x 26mm x 83mm x 12mm	4	1901401400	£27.59
16mm x 32mm x 92mm x 16mm	4	1901401600	£31.01
18mm x 32mm x 92mm x 16mm	4	1901401800	£34.70
20mm x 38mm x 104mm x 20mm	4	1901402000	£43.50
22mm x 38mm x 104mm x 20mm	5	1901402200	£53.61
25mm x 45mm x 121mm x 25mm	5	1901402500	£64.13

DIA x LENGTH OF CUT x OVERALL LENGTH x SHANK DIA	FLUTES	EUROPA EDP NO.	ISSUE PRICE
6mm x 24mm x 68mm x 6mm	3	1911400600	£19.70
7mm x 30mm x 80mm x 10mm	3	1911400700	£24.03
8mm x 38mm x 88mm x 10mm	3	1911400800	£24.03
9mm x 38mm x 88mm x 10mm	3	1911400900	£24.16
10mm x 45mm x 95mm x 10mm	4	1911401000	£24.16
12mm x 53mm x 110mm x 12mm	4	1911401200	£29.53
14mm x 53mm x 110mm x 12mm	4	1911401400	£39.05
16mm x 63mm x 123mm x 16mm	4	1911401600	£42.51
18mm x 63mm x 123mm x 16mm	4	1911401800	£50.94
20mm x 75mm x 141mm x 20mm	4	1911402000	£61.79
22mm x 75mm x 141mm x 20mm	5	1911402200	£80.85
25mm x 90mm x 166mm x 25mm	5	1911402500	£98.94