KILOTON

HYDRAULICS PNEUMATICS TOOLS ABRASIVES

OFFICIAL IMPORTER
ENERPAC
RIDGID

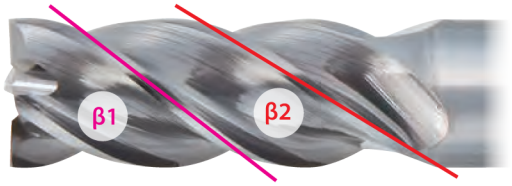
NEW

VARICUT PRO END MILL RANGE

ANTI-VIBRATION CARBIDE END MILL

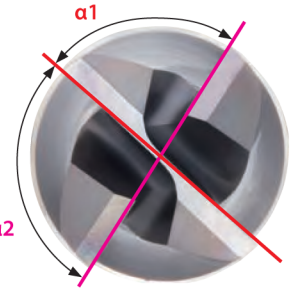
25% DISCOUNT

NEW UNEQUAL FLUTE ANGLES



β1 ≠ β2

NEW UNEQUAL SPACING FRONT TEETH



α1 ≠ α2

Introducing the NEW VariCut Pro

- Enhanced Design and Geometry
- Specially Adapted Edge Preparation
- Improved Surface Finish
- New Coating Technology
- Unique Manufacturing Procedure

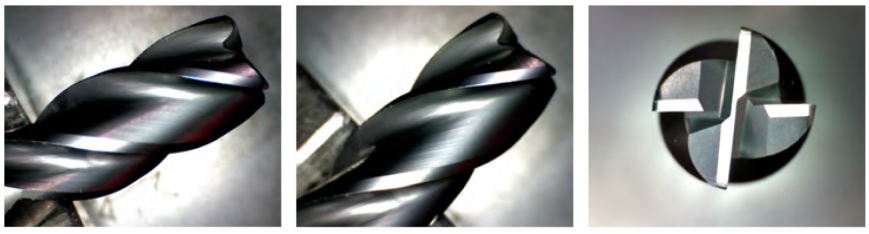
Resulting in:

- Longer Tool Life
- Improved Feeds and Speeds
- Excellent Surface Finish in a wider range of Materials
- More Versatile Machining Capabilities

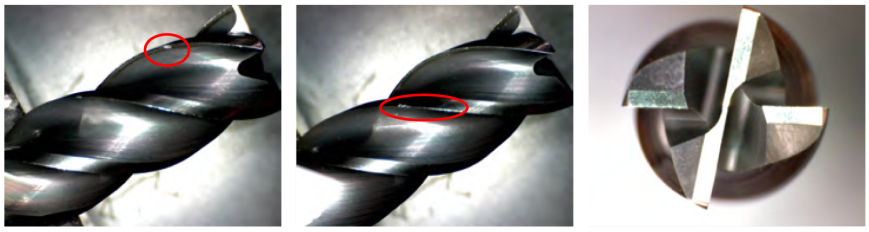
TEST RESULTS

10mm in M200 after 60 metres
1.5xD Depth of Cut, Side Milling with 2mm stepover, Vc = 120m/min, 0.090mm/tooth Feed Rate

03VP



Competitor



10mm in SS 316 L after 60 metres
1.5xD Depth of Cut, Side Milling with 2mm stepover, Vc = 80m/min, 0.057mm/tooth Feed Rate

03VP

Competitor

Tel: 0861 707 707, **WhatsApp:** 076 750 1329
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www.kiloton.co.za www.onlinetoolshop.kiloton.co.za

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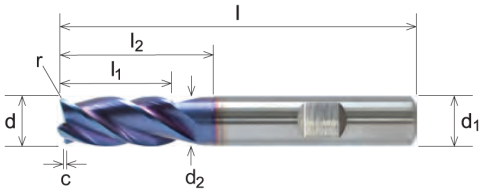
64 General Smuts Road,
Duncanville, Vereeniging

KILOTON BLOEMFONTEIN
7 Levy Street,
Hilton, Bloemfontein

03VP

Solid Carbide 4 Flute VariCut Pro End Mills

For roughing and finishing with high metal removal rates eliminating the use of multiple tools. Designed for tougher materials including Stainless steel and Titanium.



mm	DIN 6527L	SOLID CARBIDE		TYPE UNI		38/36°	Z 4	⌀ h6	⌀ h6 HB	COATED

P						M				K				Ti			Ni			Cu				N				Syn			H			
1.1	1.2	1.3	1.4	1.5	1.6	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	4.1	4.2	4.3	5.1	5.2	5.3	6.1	6.2	6.3	6.4	7.1	7.2	7.3	7.4	8.1	8.2	8.3	9.1	9.2	9.3	9.4
◉	◉	◉	◉	◉	◉	◉	◉	◉	◉	◉	◉	◉	◉	◉	◉	◉	◉	◉	◉	○	○	○	○	○	○	○	○	○	○	○	◉	◉	○	

d	l_1	l_2	l	d_1	d_2	c	r		Code	Price
4	9	14	57	6	3.8	0.2 x 45°	-	x	03VP0400X	*R 543.10*
4	9	14	57	6	3.8	-	0.2	-	03VP0402X	*R 564.80*
4	9	14	57	6	3.8	-	0.5	-	03VP0405X	*R 564.80*
5	13	18	57	6	4.8	0.2 x 45°	-	x	03VP0500X	*R 539.00*
5	13	18	57	6	4.8	-	0.2	-	03VP0502X	*R 560.50*
5	13	18	57	6	4.8	-	0.5	-	03VP0505X	*R 560.50*
6	13	18	57	6	5.8	0.2 x 45°	-	x	03VP0600X	*R 526.80*
6	13	18	57	6	5.8	-	0.2	-	03VP0602X	*R 547.80*
6	13	18	57	6	5.8	-	0.5	-	03VP0605X	*R 547.80*
8	19	24	63	8	7.7	0.25 x 45°	-	x	03VP0800X	*R 735.10*
8	19	24	63	8	7.8	-	0.2	-	03VP0802X	*R 764.50*
8	19	24	63	8	7.8	-	0.5	-	03VP0805X	*R 764.50*
10	22	32	72	10	9.7	0.25 x 45°	-	x	03VP1000X	*R 984.80*
10	22	32	72	10	9.8	-	0.3	-	03VP1003X	*R 1 024.10*
10	22	32	72	10	9.8	-	0.5	-	03VP1005X	*R 1 024.10*
12	26	36	83	12	11.6	0.3 x 45°	-	x	03VP1200X	*R 1 334.00*
12	26	36	83	12	11.8	-	0.5	-	03VP1205X	*R 1 387.30*
12	26	36	83	12	11.8	-	1	-	03VP1210X	*R 1 387.30*
16	32	42	92	16	15.5	0.4 x 45°	-	x	03VP1600X	*R 2 223.50*
16	32	42	92	16	15.8	-	1	-	03VP1610X	*R 2 312.40*
16	32	42	92	16	15.8	-	2	-	03VP1620X	*R 2 312.40*
20	38	48	104	20	19.5	0.4 x 45°	-	x	03VP2000X	*R 3 708.10*
20	38	48	104	20	19.8	-	1	-	03VP2010X	*R 3 856.40*
20	38	48	104	20	19.8	-	2	-	03VP2020X	*R 3 856.40*

ALL PRICES **EXCLUDE** VAT

VARICUT PRO END MILL RANGE

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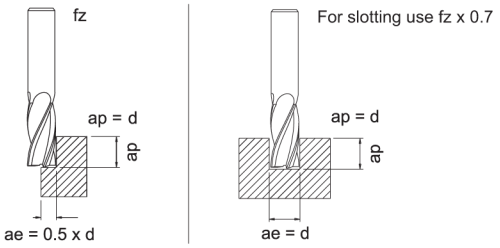
KILOTON BLOEMFONTEIN
7 Levy Street,
Hilton, Bloemfontein

CUTTING DATA

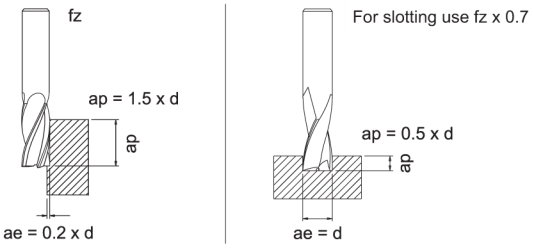
Parameters based on ideal conditions. Please adjust parameters accordingly to real applications.

◉ Recommended
○ Suitable



Material			Ø	4	5	6	8	10	12	16	20
			Vc m/min	fz (mm/tooth)	fz (mm/tooth)	fz (mm/tooth)	fz (mm/tooth)	fz (mm/tooth)	fz (mm/tooth)	fz (mm/tooth)	fz (mm/tooth)
P	◉ 1.1 Free Cutting Steel	< 120 HB	140-175	0.023-0.038	0.027-0.045	0.033-0.055	0.045-0.075	0.054-0.090	0.062-0.103	0.076-0.126	0.086-0.143
	◉ 1.2 Structural Steel	< 200 HB	140-165	0.023-0.038	0.027-0.045	0.033-0.055	0.045-0.075	0.054-0.090	0.062-0.103	0.076-0.126	0.086-0.143
	◉ 1.3 Plain Carbon Steel	< 250 HB	130-140	0.019-0.032	0.023-0.038	0.027-0.045	0.037-0.061	0.044-0.074	0.050-0.084	0.062-0.104	0.071-0.118
	◉ 1.4 Alloy Steel	< 250 HB	120-130	0.017-0.029	0.020-0.034	0.025-0.041	0.034-0.056	0.041-0.068	0.047-0.078	0.057-0.095	0.065-0.108
	◉ 1.5 Low Alloy Steel	250 - 350 HB	120-130	0.017-0.029	0.020-0.034	0.025-0.041	0.034-0.056	0.041-0.068	0.047-0.078	0.057-0.095	0.065-0.108
	◉ 1.6 Low Alloy Steel	> 350 HB	110-130	0.017-0.029	0.020-0.034	0.025-0.041	0.034-0.056	0.041-0.068	0.047-0.078	0.057-0.095	0.065-0.108
M	◉ 2.1 Free Machining Stainless Steel	< 250 HB	90-103	0.019-0.032	0.023-0.038	0.027-0.045	0.037-0.061	0.044-0.074	0.050-0.084	0.062-0.104	0.071-0.118
	◉ 2.2 Austenitic Stainless Steel	< 320 HB	90-103	0.019-0.032	0.023-0.038	0.027-0.045	0.037-0.061	0.044-0.074	0.050-0.084	0.062-0.104	0.071-0.118
	◉ 2.3 Ferritic and Martensitic Stainless Steel	< 300 HB	65-85	0.013-0.022	0.016-0.026	0.019-0.031	0.026-0.043	0.031-0.051	0.035-0.059	0.044-0.073	0.049-0.081
	◉ 2.4 Precipitation Hardened Stainless Steel	320 - 410 HB	63-80	0.013-0.022	0.016-0.026	0.019-0.031	0.026-0.043	0.031-0.051	0.035-0.059	0.044-0.073	0.049-0.081
K	◉ 3.1 Lamellar Graphite Cast Iron	< 150 HB	130-140	0.023-0.038	0.027-0.045	0.033-0.055	0.045-0.075	0.054-0.090	0.062-0.103	0.076-0.126	0.086-0.143
	◉ 3.2 Lamellar Graphite Cast Iron	150 - 300 HB	120-140	0.019-0.032	0.023-0.038	0.027-0.045	0.037-0.061	0.044-0.074	0.050-0.084	0.062-0.104	0.071-0.118
	◉ 3.3 Nodular Graphite, Malleable Cast Iron	< 200 HB	130-140	0.023-0.038	0.027-0.045	0.033-0.055	0.045-0.075	0.054-0.090	0.062-0.103	0.076-0.126	0.086-0.143
	◉ 3.4 Nodular Graphite, Malleable Cast Iron	200 - 300 HB	115-140	0.015-0.026	0.018-0.030	0.023-0.038	0.031-0.051	0.037-0.061	0.042-0.070	0.052-0.086	0.058-0.096
Ti	◉ 4.1 Titanium unalloyed	< 200 HB	60-70	0.015-0.026	0.018-0.030	0.023-0.038	0.031-0.051	0.037-0.061	0.042-0.070	0.052-0.086	0.058-0.096
	◉ 4.2 Titanium alloyed	< 270 HB	50-63	0.013-0.022	0.016-0.026	0.019-0.031	0.026-0.043	0.031-0.051	0.035-0.059	0.044-0.073	0.049-0.081
	◉ 4.3 Titanium alloyed	270 - 350 HB	45-55	0.013-0.022	0.016-0.026	0.019-0.031	0.026-0.043	0.031-0.051	0.035-0.059	0.044-0.073	0.049-0.081
Ni	◉ 5.1 Nickel unalloyed	< 150 HB	30-70	0.019-0.032	0.023-0.038	0.027-0.045	0.037-0.061	0.044-0.074	0.050-0.084	0.062-0.104	0.071-0.118
	◉ 5.2 Nickel alloyed	< 270 HB	30-60	0.019-0.032	0.023-0.038	0.027-0.045	0.037-0.061	0.044-0.074	0.050-0.084	0.062-0.104	0.071-0.118
	◉ 5.3 Nickel alloyed	270 - 350 HB	20-33	0.011-0.018	0.013-0.021	0.015-0.025	0.021-0.035	0.025-0.041	0.029-0.048	0.035-0.059	0.040-0.066
Cu	○ 6.1 Copper	< 100 HB	230-250	0.032-0.053	0.038-0.063	0.053-0.088	0.053-0.088	0.060-0.100	0.060-0.100	0.068-0.113	0.075-0.125
	○ 6.2 Beta Brass, Bronze	< 200 HB	220-240	0.032-0.053	0.038-0.063	0.053-0.088	0.053-0.088	0.060-0.100	0.060-0.100	0.068-0.113	0.075-0.125
	○ 6.3 Alpha Brass	< 200 HB	220-240	0.032-0.053	0.038-0.063	0.053-0.088	0.053-0.088	0.060-0.100	0.060-0.100	0.068-0.113	0.075-0.125
	○ 6.4 High Strength Bronze	< 470 HB	170-190	0.016-0.027	0.019-0.031	0.026-0.044	0.026-0.044	0.030-0.050	0.030-0.050	0.034-0.056	0.038-0.063
N	○ 7.1 Aluminium Magnesium unalloyed	< 100 HB	425-450	0.032-0.053	0.038-0.063	0.075-0.125	0.150-0.250	0.150-0.250	0.150-0.250	0.225-0.375	0.375-0.625
	○ 7.2 Aluminium Alloy < 5% Si	< 150 HB	170-185	0.032-0.053	0.038-0.063	0.075-0.125	0.150-0.250	0.150-0.250	0.150-0.250	0.225-0.375	0.375-0.625
	○ 7.3 Aluminium Alloy 5 to 10% Si	< 120 HB	100-120	0.032-0.053	0.038-0.063	0.075-0.125	0.150-0.250	0.150-0.250	0.150-0.250	0.225-0.375	0.375-0.625
	○ 7.4 Aluminium Alloy > 10% Si		90-110	0.032-0.053	0.038-0.063	0.075-0.125	0.150-0.250	0.150-0.250	0.150-0.250	0.225-0.375	0.375-0.625
Syn	○ 8.1 Duroplastics (short chipping)		230-250	0.011-0.019	0.014-0.023	0.017-0.028	0.023-0.038	0.027-0.045	0.033-0.055	0.044-0.073	0.055-0.091
	○ 8.2 Thermoplastics (long chipping)		220-250	0.011-0.019	0.014-0.023	0.017-0.028	0.023-0.038	0.027-0.045	0.033-0.055	0.044-0.073	0.055-0.091
	○ 8.3 Fibre Reinforced Synthetic Materials		90-100	0.011-0.019	0.014-0.023	0.017-0.028	0.023-0.038	0.027-0.045	0.033-0.055	0.044-0.073	0.055-0.091

◉ Recommended
○ Suitable



Material			Ø	4	5	6	8	10	12	16	20
			Vc m/min	fz (mm/tooth)	fz (mm/tooth)	fz (mm/tooth)	fz (mm/tooth)	fz (mm/tooth)	fz (mm/tooth)	fz (mm/tooth)	fz (mm/tooth)
P	◉ 1.1 Free Cutting Steel	< 120 HB	140-175	0.033-0.055	0.045-0.075	0.056-0.094	0.064-0.106	0.075-0.125	0.075-0.125	0.090-0.150	0.090-0.150
	◉ 1.2 Structural Steel	< 200 HB	140-165	0.033-0.055	0.045-0.075	0.056-0.094	0.064-0.106	0.075-0.125	0.075-0.125	0.090-0.150	0.090-0.150
	◉ 1.5 Low Alloy Steel	250 - 350 HB	120-130	0.023-0.038	0.030-0.050	0.045-0.075	0.060-0.100	0.068-0.113	0.075-0.125	0.083-0.138	0.083-0.138
	◉ 1.6 Low Alloy Steel	> 350 HB	110-130	0.023-0.038	0.030-0.050	0.045-0.075	0.060-0.100	0.068-0.113	0.075-0.125	0.083-0.138	0.083-0.138
M	◉ 2.2 Austenitic Stainless Steel	< 320 HB	90-103	0.017-0.028	0.023-0.038	0.030-0.050	0.034-0.056	0.045-0.075	0.049-0.081	0.060-0.100	0.064-0.106
	◉ 2.4 Precipitation Hardened Stainless Steel	320 - 410 HB	63-80	0.014-0.023	0.018-0.030	0.023-0.038	0.026-0.044	0.032-0.053	0.038-0.063	0.056-0.094	0.064-0.106
K	◉ 3.1 Lamellar Graphite Cast Iron	< 150 HB	130-140	0.033-0.055	0.045-0.075	0.056-0.094	0.064-0.106	0.075-0.125	0.075-0.125	0.090-0.150	0.090-0.150
	◉ 3.2 Lamellar Graphite Cast Iron	150 - 300 HB	120-140	0.033-0.055	0.045-0.075	0.056-0.094	0.064-0.106	0.075-0.125	0.075-0.125	0.090-0.150	0.090-0.150
	◉ 3.3 Nodular Graphite, Malleable Cast Iron	< 200 HB	130-140	0.033-0.055	0.045-0.075	0.056-0.094	0.064-0.106	0.075-0.125	0.075-0.125	0.090-0.150	0.090-0.150
	◉ 3.4 Nodular Graphite, Malleable Cast Iron	200 - 300 HB	115-140	0.033-0.055	0.045-0.075	0.056-0.094	0.064-0.106	0.075-0.125	0.075-0.125	0.090-0.150	0.090-0.150
Ti	◉ 4.1 Titanium unalloyed	< 200 HB	60-70	0.015-0.025	0.019-0.031	0.023-0.038	0.026-0.044	0.034-0.056	0.038-0.063	0.060-0.100	0.075-0.125
Ni	◉ 5.1 Nickel unalloyed	< 150 HB	30-70	0.011-0.019	0.018-0.030	0.021-0.035	0.026-0.044	0.030-0.050	0.034-0.056	0.056-0.094	0.064-0.106
H	◉ 9.1 Hardened Steel	< 32 HRC	110-130	0.023-0.038	0.030-0.050	0.045-0.075	0.060-0.100	0.068-0.113	0.075-0.125	0.083-0.138	0.083-0.138
	◉ 9.2 Hardened Steel	33 - 41 HRC	90-100	0.019-0.031	0.026-0.044	0.038-0.063	0.049-0.081	0.053-0.088	0.053-0.088	0.060-0.100	0.060-0.100
	○ 9.3 Hardened Steel	42 - 50 HRC	80-100	0.019-0.031	0.026-0.044	0.038-0.063	0.049-0.081	0.053-0.088	0.053-0.088	0.060-0.100	0.060-0.100

This promotion is valid from 01-31 August 2023 and available on pre-order only.

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