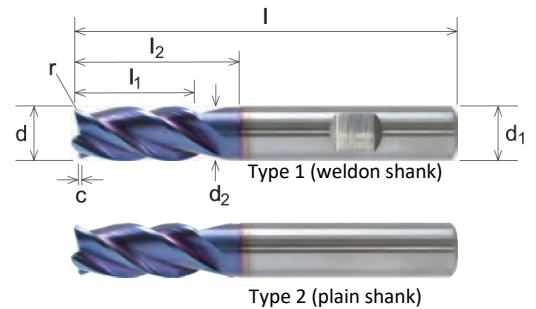
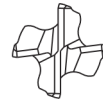




Solid Carbide 4 Flute VariCut Pro End Mills

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



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
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

EDP	D	l1	l2	L	d1	d2	R	C	Type	Price	Price if any 5pcs
03VP0400XDP	4	9	14	57	6	3.8	-	0.2 x 45°	1	€ 16.62	€ 13.96
03VP0402XDP	4	9	14	57	6	3.8	0.2		2	€ 17.73	€ 14.89
03VP0405XDP	4	9	14	57	6	3.8	0.5		2	€ 17.73	€ 14.89
03VP0500XDP	5	13	18	57	6	4.8	-	0.2 x 45°	1	€ 16.62	€ 13.96
03VP0502XDP	5	13	18	57	6	4.8	0.2		2	€ 17.73	€ 14.89
03VP0505XDP	5	13	18	57	6	4.8	0.5		2	€ 17.73	€ 14.89
03VP0600XDP	6	13	18	57	6	5.8	-	0.2 x 45°	1	€ 16.62	€ 13.96
03VP0602XDP	6	13	18	57	6	5.8	0.2		2	€ 17.73	€ 14.89
03VP0605XDP	6	13	18	57	6	5.8	0.5		2	€ 17.73	€ 14.89
03VP0800XDP	8	19	24	63	8	7.7	-	0.25 x 45°	1	€ 20.51	€ 17.23
03VP0802XDP	8	19	24	63	8	7.8	0.2		2	€ 21.62	€ 18.16
03VP0805XDP	8	19	24	63	8	7.8	0.5		2	€ 21.62	€ 18.16
EP01931099	10	22	30	72	10	9.7	-	0.25 x 45°	1	€ 34.90	€ 32.00
03VP1003XDP	10	22	32	72	10	9.8	0.3		2	€ 35.62	€ 32.70
03VP1005XDP	10	22	32	72	10	9.8	0.5		2	€ 35.62	€ 32.70
03VP1200XDP	12	26	36	83	12	11.6	-	0.3 x 45°	1	€ 39.95	€ 33.56
03VP1205XDP	12	26	36	83	12	11.8	0.5		2	€ 41.62	€ 34.96
03VP1210XDP	12	26	36	83	12	11.8	1		2	€ 41.62	€ 34.96
03VP1600XDP	16	32	42	92	16	15.5	-	0.4 x 45°	1	€ 65.56	€ 55.07
03VP1601XDP	16	32	42	92	16	15.5	-	0.4 x 45°	2	€ 65.56	€ 55.07
03VP1610XDP	16	32	42	92	16	15.8	1		2	€ 67.22	€ 56.47
03VP1620XDP	16	32	42	92	16	15.8	2		2	€ 67.22	€ 56.47
03VP2000XDP	20	38	48	104	20	19.5	-	0.4 x 45°	1	€ 99.44	€ 83.53
03VP2001XDP	20	38	48	104	20	19.5	-	0.4 x 45°	2	€ 99.44	€ 83.53
03VP2010XDP	20	38	48	104	20	19.8	1		2	€ 101.11	€ 84.93
03VP2020XDP	20	38	48	104	20	19.8	2		2	€ 101.11	€ 84.93

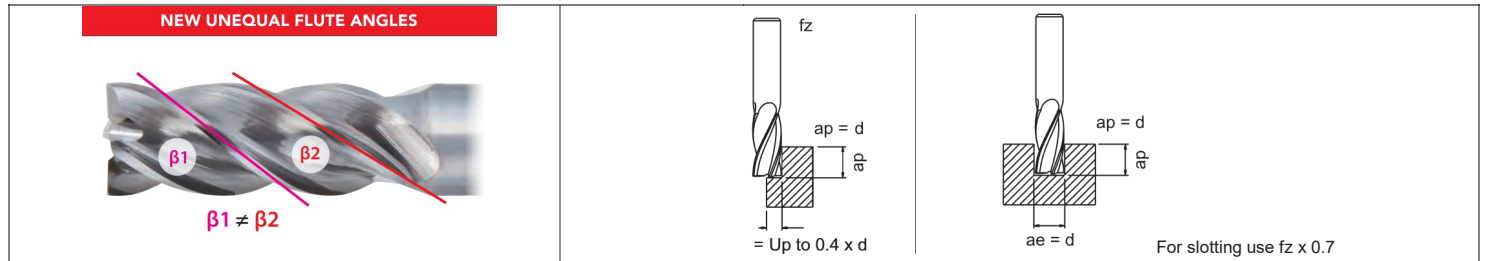
NEW VARICUT PRO ENDMILL RANGE



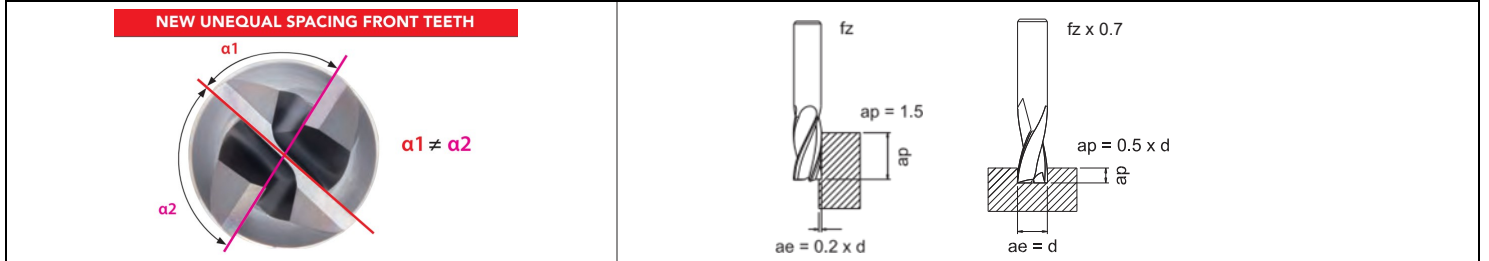
●VAT not included

CUTTING DATA

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



	Material	Vc m/min	4	5	6	8	10	12	16	20
			fz	fz	fz	fz	fz	fz	fz	fz
			(mm/tooth)	(mm/tooth)	(mm/tooth)	(mm/tooth)	(mm/tooth)	(mm/tooth)	(mm/tooth)	(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
	• 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
	• 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
	• 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
	• 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
	• 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
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
	• 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
	• 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
	• 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
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
	• 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
	• 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
	• 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
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
	• 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
	• 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
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
	• 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
	• 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
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
	• 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
	• 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
	• 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
Al	• 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
	• 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
	• 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
	• 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
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
	• 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
	• 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



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
	• 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
	• 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
	• 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
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
	• 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
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
	• 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
	• 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
	• 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
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
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
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
	• 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
	• 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

• Recommended ○ Suitable