


VI-PRO

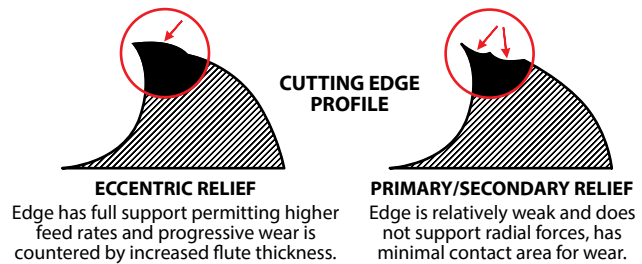
VARIABLE INDEX GEOMETRY

TITAN's VI-PRO is a High Performance, carbide end mill, that incorporates the ultimate in variable index geometry. Our flute configuration produces a harmonics shift, resulting in minimal chatter and an exceptional finish.

- Post polished ALCRO-MAX coating covers a wide range of materials
- Made in the USA from premium micrograin carbide
- Used in all slotting, roughing, profiling and finishing applications
- High Performance, chatter free machining provides versatility in use for all ferrous materials
- Designed for use in Alloy Steels, Inconel, Cast Iron, Titanium, Stainless Steel, High Temp and all other exotic materials up to 50HRc
- Enables higher SFM and heavier chip loads
- Eccentric Relief on the cutting edge provides enhanced edge strength
- Available in 4, 5 & 6 Flute - Stub, Regular, Long & Extra Long Lengths
- Available in Square End, Ball Nose and various  Corner Radius sizes
- Recommended for slotting up to 1 x Diameter

TITAN's High-Performance VI-PRO carbide end mill utilizes an Eccentric Relief on the cutting edge that provides enhanced edge strength and a smoother cutting action.

Eccentric Relief vs Primary/Secondary Relief



Why use TITAN's VI-PRO Corner Radius tools?

- The tools improve productivity and reduce costs.
- A sharp corner of an end mill is its weakest point. The corner radius design strengthens the end mill by reducing chipping and providing longer tool life.
- Extensive offering of Corner Radius tools: Stub, Regular, Long and Extra Long Lengths, with radius starting at 0.010 up to 0.250.

Benefits of Post polishing

ALCRO-MAX by nature of the coating process leaves tiny "droplets" of the coating on the surface of the tool. Proven results have shown that the removal of these droplets provide a smoother tool surface which results in a better cut. Perhaps the most important benefit, is that the tool is able to run at faster feed rates due to the smoothness of the flute area. This results in better chip evacuation and cooler temperatures resulting in longer tool life.



4 on-site Otec Post Polish machines

Carbide End Mills

YOUR #1 SOURCE FOR AMERICAN-MADE PREMIUM CUTTING TOOLS



VI-PRO

VARIABLE INDEX GEOMETRY

4 FLUTE - STUB LENGTH - SQUARE END



SERIES V42S
ALCRO-MAX COATED

VI-PRO DIAMETER	★★★ TOOL ATTRIBUTES ★★★				ROUND SHANK		WELDON FLAT	
	SHANK	LOC	OAL	# OF FLUTES	ITEM#	LIST PRICE	ITEM#	LIST PRICE
1/8	1/8	1/4	1-1/2	4	TC21133	28.36	-	-
3/16	3/16	3/8	2	4	TC21136	36.49	-	-
1/4	1/4	3/8	2	4	TC21139	41.29	-	-
5/16	5/16	7/16	2	4	TC21142	60.06	-	-
3/8	3/8	1/2	2	4	TC21145	66.58	-	-
7/16	7/16	5/8	2-1/2	4	TC21147	86.73	-	-
1/2	1/2	5/8	2-1/2	4	TC21148	99.55	TC21173	105.22
5/8	5/8	3/4	3	4	TC21151	195.99	TC21176	201.66
3/4	3/4	1	3	4	TC21154	258.49	TC21179	264.15

4 FLUTE - REGULAR LENGTH - SQUARE END



SERIES V42R
ALCRO-MAX COATED

VI-PRO DIAMETER	★★★ TOOL ATTRIBUTES ★★★				ROUND SHANK		WELDON FLAT	
	SHANK	LOC	OAL	# OF FLUTES	ITEM#	LIST PRICE	ITEM#	LIST PRICE
1/8	1/8	1/2	2	4	TC21821	33.88	-	-
3/16	3/16	9/16	2	4	TC21824	38.73	-	-
1/4	1/4	3/4	2-1/2	4	TC21827	49.16	-	-
5/16	5/16	13/16	2-1/2	4	TC21830	65.10	-	-
3/8	3/8	1	2-1/2	4	TC21833	76.27	-	-
7/16	7/16	1	2-3/4	4	TC21835	94.58	-	-
1/2	1/2	1	3	4	TC21836	114.40	TC21863	120.06
1/2	1/2	1-1/4	3	4	TC21839	114.40	TC21866	120.06
5/8	5/8	1-5/8	3-1/2	4	TC21842	207.09	TC21869	212.76
3/4	3/4	1-5/8	4	4	TC21845	286.14	TC21872	291.80
1	1	2	4	4	TC21848	534.14	TC21875	539.81

The VI-PRO performs very well in a wide range of materials including:

HIGH TEMP ALLOYS • STAINLESS STEELS • ALLOY STEELS • INCONEL
CAST IRON • HIGH TEMP NICKEL BASE ALLOYS • TITANIUM ALLOYS • EXOTICS

For coating information see page 6. For VI-PRO technical information, please see pages 229-231.

TOLERANCES	DIAMETER	SHANK
1/8" - 1/2"	+ .000, -.002	-.0001, -.0004 ISO H6
5/8" - 1"	+ .000, -.003	-.0001, -.0004 ISO H6

VI-PRO - 4 FLUTE

VI-PRO - 5 FLUTE

VI-PRO - 6 FLUTE

THREAD MILLS

Carbide End Mills

YOUR #1 SOURCE FOR AMERICAN-MADE PREMIUM CUTTING TOOLS



VI-PRO

VARIABLE INDEX GEOMETRY

4 FLUTE - LONG LENGTH - SQUARE END



SERIES V42L
ALCRO-MAX COATED

VI-PRO DIAMETER	★★★ TOOL ATTRIBUTES ★★★				ROUND SHANK		WELDON FLAT	
	SHANK	LOC	OAL	# OF FLUTES	ITEM#	LIST PRICE	ITEM#	LIST PRICE
1/4	1/4	1-1/8	3	4	TC23201	55.99	-	-
5/16	5/16	1-1/8	3	4	TC23204	77.46	-	-
3/8	3/8	1-1/4	3	4	TC23207	104.03	-	-
7/16	7/16	2	4	4	TC23209	131.96	-	-
1/2	1/2	1-1/2	4	4	TC23210	143.63	TC23331	149.30
1/2	1/2	2	4	4	TC23213	159.27	TC23334	164.94
5/8	5/8	2-1/4	5	4	TC23216	296.22	TC23337	301.89
3/4	3/4	2-1/4	5	4	TC23219	358.44	TC23340	364.10
1	1	2-1/4	5	4	TC23222	590.74	TC23343	596.41

4 FLUTE - EXTRA LONG LENGTH - SQUARE END



SERIES V42XL
ALCRO-MAX COATED

VI-PRO DIAMETER	★★★ TOOL ATTRIBUTES ★★★				ROUND SHANK		WELDON FLAT	
	SHANK	LOC	OAL	# OF FLUTES	ITEM#	LIST PRICE	ITEM#	LIST PRICE
1/4	1/4	1-1/2	4	4	TC24408	66.88	-	-
3/8	3/8	2	4	4	TC24411	117.23	-	-
7/16	7/16	3	6	4	TC24413	192.22	-	-
1/2	1/2	3	6	4	TC24414	224.60	TC24543	230.27
5/8	5/8	3	6	4	TC24417	319.45	TC24546	325.12
3/4	3/4	3	6	4	TC24420	421.67	TC24549	427.33
3/4	3/4	4	7	4	TC24423	692.45	TC24552	698.12
1	1	3	6	4	TC24426	687.46	TC24555	693.13
1	1	4-1/4	7	4	TC24429	1014.83	TC24558	1020.91

The VI-PRO performs very well in a wide range of materials including:

HIGH TEMP ALLOYS • STAINLESS STEELS • ALLOY STEELS • INCONEL
CAST IRON • HIGH TEMP NICKEL BASE ALLOYS • TITANIUM ALLOYS • EXOTICS

For coating information see page 6. For VI-PRO technical information, please see pages 229-231.

TOLERANCES	DIAMETER	SHANK
1/4" - 1/2"	+0.00, -0.02	-0.001, -.0004 ISO H6
5/8" - 1"	+0.00, -.003	-0.001, -.0004 ISO H6

VI-PRO - 4 FLUTE

VI-PRO - 5 FLUTE

VI-PRO - 6 FLUTE

THREAD MILLS

Carbide End Mills

YOUR #1 SOURCE FOR AMERICAN-MADE PREMIUM CUTTING TOOLS



VI-PRO

VARIABLE INDEX GEOMETRY

4 FLUTE - STUB LENGTH  CORNER RADIUS



**TAKE 55% OFF
OF LIST PRICE!**

SERIES V42SR
ALCRO-MAX COATED

VI-PRO DIAMETER	★ ★ ★ TOOL ATTRIBUTES ★ ★ ★					ROUND SHANK		WELDON FLAT	
	SHANK	LOC	OAL	# OF FLUTES	RAD	ITEM#	LIST PRICE	ITEM#	LIST PRICE
1/8	1/8	1/4	1-1/2	4	0.010	TC21503	32.68	-	-
3/16	3/16	3/8	2	4	0.010	TC21506	40.82	-	-
1/4	1/4	3/8	2	4	0.015	TC21509	48.11	-	-
5/16	5/16	7/16	2	4	0.015	TC21512	64.76	-	-
3/8	3/8	1/2	2	4	0.015	TC21515	71.28	-	-
7/16	7/16	5/8	2-1/2	4	0.030	TC21517	91.34	-	-
1/2	1/2	5/8	2-1/2	4	0.030	TC21518	108.96	TC21541	114.62
5/8	5/8	3/4	3	4	0.030	TC21521	205.39	TC21544	211.06
3/4	3/4	1	3	4	0.030	TC21524	267.89	TC21547	273.56



All TITAN USA tools are 100% Made in the USA

The VI-PRO performs very well in a wide range of materials including:

- HIGH TEMP ALLOYS • STAINLESS STEELS • ALLOY STEELS • INCONEL
CAST IRON • HIGH TEMP NICKEL BASE ALLOYS • TITANIUM ALLOYS • EXOTICS

For coating information see page 6. For VI-PRO technical information, please see pages 229-231.

TOLERANCES	DIAMETER	SHANK	RADIUS
1/8" - 1/2"	+ .000, -.002	-.0001, -.0004 ISO H6	+ .001, -.001
5/8" - 3/4"	+ .000, -.003	-.0001, -.0004 ISO H6	+ .001, -.001

VI-PRO - 4 FLUTE

VI-PRO - 5 FLUTE

VI-PRO - 6 FLUTE

THREAD MILLS

Carbide End Mills

YOUR #1 SOURCE FOR AMERICAN-MADE PREMIUM CUTTING TOOLS



4 FLUTE - REGULAR LENGTH  CORNER RADIUS



SERIES V42RR
ALCRO-MAX COATED

**TAKE 55% OFF
OF LIST PRICE!**

VI-PRO DIAMETER	★★★ TOOL ATTRIBUTES ★★★					ROUND SHANK		WELDON FLAT	
	SHANK	LOC	OAL	# OF FLUTES	RAD	ITEM#	LIST PRICE	ITEM#	LIST PRICE
1/8	1/8	1/2	2	4	0.010	TC22617	38.21	-	-
1/8	1/8	1/2	2	4	0.020	TC22620	38.21	-	-
1/8	1/8	1/2	2	4	0.030	TC22623	38.21	-	-
3/16	3/16	9/16	2	4	0.010	TC22626	43.06	-	-
3/16	3/16	9/16	2	4	0.020	TC22629	43.06	-	-
3/16	3/16	9/16	2	4	0.030	TC22632	43.06	-	-
1/4	1/4	3/4	2-1/2	4	0.015	TC22635	53.48	-	-
1/4	1/4	3/4	2-1/2	4	0.030	TC22638	53.48	-	-
1/4	1/4	3/4	2-1/2	4	0.060	TC22641	53.48	-	-
5/16	5/16	13/16	2-1/2	4	0.015	TC22644	68.90	-	-
5/16	5/16	13/16	2-1/2	4	0.030	TC22647	68.90	-	-
5/16	5/16	13/16	2-1/2	4	0.060	TC22650	68.90	-	-
3/8	3/8	1	2-1/2	4	0.015	TC22653	80.46	-	-
3/8	3/8	1	2-1/2	4	0.030	TC22656	80.46	-	-
3/8	3/8	1	2-1/2	4	0.060	TC22659	80.46	-	-
7/16	7/16	1	2-3/4	4	0.015	TC22660	105.00	-	-
7/16	7/16	1	2-3/4	4	0.030	TC22661	105.00	-	-
7/16	7/16	1	2-3/4	4	0.060	TC22663	105.00	-	-
1/2	1/2	1	3	4	0.015	TC22662	128.54	TC22801	134.97
1/2	1/2	1	3	4	0.030	TC22665	128.54	TC22804	134.97
1/2	1/2	1	3	4	0.060	TC22668	128.54	TC22807	134.97
1/2	1/2	1	3	4	0.090	TC22671	128.54	TC22810	134.97
1/2	1/2	1	3	4	0.120	TC22674	128.54	TC22813	134.97
1/2	1/2	1-1/4	3	4	0.015	TC22677	128.54	TC22816	134.97
1/2	1/2	1-1/4	3	4	0.030	TC22680	128.54	TC22819	134.97
1/2	1/2	1-1/4	3	4	0.060	TC22683	128.54	TC22822	134.97
1/2	1/2	1-1/4	3	4	0.090	TC22686	128.54	TC22825	134.97
1/2	1/2	1-1/4	3	4	0.120	TC22689	128.54	TC22828	134.97
5/8	5/8	1-5/8	3-1/2	4	0.030	TC22692	216.56	TC22831	222.22
5/8	5/8	1-5/8	3-1/2	4	0.060	TC22695	216.56	TC22834	222.22
5/8	5/8	1-5/8	3-1/2	4	0.090	TC22698	216.56	TC22837	222.22
5/8	5/8	1-5/8	3-1/2	4	0.120	TC22701	216.56	TC22840	222.22
3/4	3/4	1-5/8	4	4	0.030	TC22704	300.30	TC22843	305.97
3/4	3/4	1-5/8	4	4	0.060	TC22707	300.30	TC22846	305.97
3/4	3/4	1-5/8	4	4	0.090	TC22710	300.30	TC22849	305.97
3/4	3/4	1-5/8	4	4	0.120	TC22713	300.30	TC22852	305.97
3/4	3/4	1-5/8	4	4	0.190	TC22714	300.30	TC22853	305.97
3/4	3/4	1-5/8	4	4	0.250	TC22715	300.30	TC22854	305.97
1	1	2	4	4	0.030	TC22716	548.31	TC22855	553.97
1	1	2	4	4	0.060	TC22719	548.31	TC22858	553.97
1	1	2	4	4	0.090	TC22722	548.31	TC22861	553.97
1	1	2	4	4	0.120	TC22725	548.31	TC22864	553.97
1	1	2	4	4	0.190	TC22728	548.31	TC22867	553.97
1	1	2	4	4	0.250	TC22731	548.31	TC22870	553.97

For coating information see page 6. For VI-PRO technical information, please see pages 229-231.

TOLERANCES	DIAMETER	SHANK	RADIUS
1/8" - 1/2"	+0.00, -.002	-.0001, -.0004 ISO H6	+0.01, -.001
5/8" - 3/4"	+0.00, -.003	-.0001, -.0004 ISO H6	+0.01, -.001

VI-PRO - 4 FLUTE
VI-PRO - 5 FLUTE
VI-PRO - 6 FLUTE
THREAD MILLS

Carbide End Mills

YOUR #1 SOURCE FOR AMERICAN-MADE PREMIUM CUTTING TOOLS



VI-PRO

VARIABLE INDEX GEOMETRY

**TAKE 55% OFF
OF LIST PRICE!**

4 FLUTE - LONG LENGTH  CORNER RADIUS



SERIES V42LR
ALCRO-MAX COATED

VI-PRO DIAMETER	★★★ TOOL ATTRIBUTES ★★★					ROUND SHANK		WELDON FLAT	
	SHANK	LOC	OAL	# OF FLUTES	RAD	ITEM #	LIST PRICE	ITEM #	LIST PRICE
1/4	1/4	1-1/8	3	4	0.015	TC23820	60.31	-	-
1/4	1/4	1-1/8	3	4	0.030	TC23823	60.31	-	-
5/16	5/16	1-1/8	3	4	0.015	TC23826	82.16	-	-
5/16	5/16	1-1/8	3	4	0.030	TC23829	82.16	-	-
3/8	3/8	1-1/4	3	4	0.030	TC23832	108.73	-	-
3/8	3/8	1-1/4	3	4	0.060	TC23835	108.73	-	-
7/16	7/16	2	4	4	0.030	TC23836	139.65	-	-
7/16	7/16	2	4	4	0.060	TC23837	139.65	-	-
1/2	1/2	1-1/2	4	4	0.030	TC23838	153.04	TC23905	158.71
1/2	1/2	1-1/2	4	4	0.060	TC23841	153.04	TC23908	158.71
1/2	1/2	2	4	4	0.030	TC23844	168.68	TC23911	174.34
1/2	1/2	2	4	4	0.060	TC23847	168.68	TC23914	174.34
5/8	5/8	2-1/4	5	4	0.030	TC23850	305.63	TC23917	311.29
5/8	5/8	2-1/4	5	4	0.060	TC23853	305.63	TC23920	311.29
3/4	3/4	2-1/4	5	4	0.030	TC23856	384.87	TC23923	392.23
3/4	3/4	2-1/4	5	4	0.060	TC23859	384.87	TC23926	392.23
1	1	2-1/4	5	4	0.030	TC23862	600.15	TC23929	605.82
1	1	2-1/4	5	4	0.060	TC23865	600.15	TC23932	605.82



PVD coatings increase cutting tool performance

The VI-PRO performs very well in a wide range of materials including:

HIGH TEMP ALLOYS • STAINLESS STEELS • ALLOY STEELS • INCONEL
CAST IRON • HIGH TEMP NICKEL BASE ALLOYS • TITANIUM ALLOYS • EXOTICS

For coating information see page 6. For VI-PRO technical information, please see pages 229-231.

TOLERANCES	DIAMETER	SHANK	RADIUS
1/4" - 1/2"	+0.00, -.002	-.0001, -.0004 ISO H6	+0.01, -.001
5/8" - 1"	+0.00, -.003	-.0001, -.0004 ISO H6	+0.01, -.001

VI-PRO - 4 FLUTE

VI-PRO - 5 FLUTE

VI-PRO - 6 FLUTE

THREAD MILLS

Carbide End Mills

YOUR #1 SOURCE FOR AMERICAN-MADE PREMIUM CUTTING TOOLS



**TAKE 55% OFF
OF LIST PRICE!**

VI-PRO

VARIABLE INDEX GEOMETRY

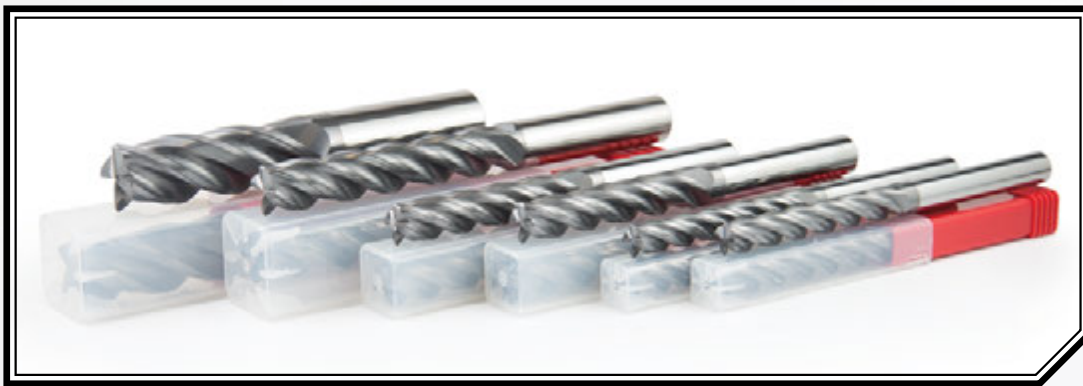
4 FLUTE - EXTRA LONG LENGTH CORNER RADIUS



CORNER RADIUS

SERIES V42XLR
ALCRO-MAX COATED

VI-PRO DIAMETER	★★★ TOOL ATTRIBUTES ★★★					ROUND SHANK		WELDON FLAT	
	SHANK	LOC	OAL	# OF FLUTES	RAD	ITEM #	LIST PRICE	ITEM #	LIST PRICE
1/4	1/4	1-1/2	4	4	0.015	TC25217	73.40	-	-
1/4	1/4	1-1/2	4	4	0.030	TC25220	73.40	-	-
3/8	3/8	2	4	4	0.030	TC25223	124.31	-	-
3/8	3/8	2	4	4	0.060	TC25226	124.31	-	-
7/16	7/16	3	6	4	0.030	TC25227	196.89	-	-
7/16	7/16	3	6	4	0.060	TC25228	196.89	-	-
1/2	1/2	3	6	4	0.030	TC25229	231.69	TC25302	237.35
1/2	1/2	3	6	4	0.060	TC25232	231.69	TC25305	237.35
5/8	5/8	3	6	4	0.030	TC25235	326.48	TC25308	332.14
5/8	5/8	3	6	4	0.060	TC25238	326.48	TC25311	332.14
3/4	3/4	3	6	4	0.030	TC25241	431.07	TC25314	436.74
3/4	3/4	3	6	4	0.060	TC25244	431.07	TC25317	436.74
3/4	3/4	4	7	4	0.030	TC25247	701.86	TC25320	707.52
3/4	3/4	4	7	4	0.060	TC25250	701.86	TC25323	707.52
1	1	3	6	4	0.030	TC25253	705.60	TC25326	711.26
1	1	3	6	4	0.060	TC25256	705.60	TC25329	711.26
1	1	4-1/4	7	4	0.030	TC25259	1024.56	TC25332	1030.63
1	1	4-1/4	7	4	0.060	TC25262	1024.56	TC25335	1030.63



TITAN USA - America's tooling partner for over 49 years

The VI-PRO performs very well in a wide range of materials including:

HIGH TEMP ALLOYS • STAINLESS STEELS • ALLOY STEELS • INCONEL
CAST IRON • HIGH TEMP NICKEL BASE ALLOYS • TITANIUM ALLOYS • EXOTICS

For coating information see page 6. For VI-PRO technical information, please see pages 229-231.

TOLERANCES	DIAMETER	SHANK	RADIUS
1/4" - 1/2"	+0.00, -.002	-.0001, -.0004 ISO H6	+0.01, -.001
5/8" - 1"	+0.00, -.003	-.0001, -.0004 ISO H6	+0.01, -.001

VI-PRO - 4 FLUTE

VI-PRO - 5 FLUTE

VI-PRO - 6 FLUTE

THREAD MILLS

Carbide End Mills

YOUR #1 SOURCE FOR AMERICAN-MADE PREMIUM CUTTING TOOLS



VI-PRO

VARIABLE INDEX GEOMETRY

4 FLUTE - STUB LENGTH - BALL NOSE



SERIES V42SB
ALCRO-MAX COATED

VI-PRO DIAMETER	★★★ TOOL ATTRIBUTES ★★★				ROUND SHANK		WELDON FLAT	
	SHANK	LOC	OAL	# OF FLUTES	ITEM#	LIST PRICE	ITEM#	LIST PRICE
1/8	1/8	1/4	1-1/2	4	TC25499	32.72	-	-
3/16	3/16	3/8	2	4	TC25501	46.75	-	-
1/4	1/4	3/8	2	4	TC25502	53.13	-	-
5/16	5/16	7/16	2	4	TC25504	69.30	-	-
3/8	3/8	1/2	2	4	TC25506	76.82	-	-
7/16	7/16	5/8	2-1/2	4	TC25507	103.42	-	-
1/2	1/2	5/8	2-1/2	4	TC25508	114.87	TC25514	121.40
5/8	5/8	3/4	3	4	TC25510	226.14	TC25516	232.68
3/4	3/4	1	3	4	TC25512	298.25	TC25518	304.79

4 FLUTE - REGULAR LENGTH - BALL NOSE



SERIES V42RB
ALCRO-MAX COATED

VI-PRO DIAMETER	★★★ TOOL ATTRIBUTES ★★★				ROUND SHANK		WELDON FLAT	
	SHANK	LOC	OAL	# OF FLUTES	ITEM#	LIST PRICE	ITEM#	LIST PRICE
1/8	1/8	1/2	2	4	TC25547	46.54	-	-
3/16	3/16	9/16	2	4	TC25549	51.44	-	-
1/4	1/4	3/4	2-1/2	4	TC25550	62.08	-	-
5/16	5/16	13/16	2-1/2	4	TC25552	75.12	-	-
3/8	3/8	1	2-1/2	4	TC25554	88.00	-	-
7/16	7/16	1	2-3/4	4	TC25555	120.37	-	-
1/2	1/2	1	3	4	TC25556	132.00	TC25566	138.54
1/2	1/2	1-1/4	3	4	TC25558	132.00	TC25568	138.54
5/8	5/8	1-5/8	3-1/2	4	TC25560	238.96	TC25570	245.50
3/4	3/4	1-5/8	4	4	TC25562	330.16	TC25572	336.69
1	1	2	4	4	TC25564	616.32	TC25574	622.85

The VI-PRO performs very well in a wide range of materials including:

HIGH TEMP ALLOYS • STAINLESS STEELS • ALLOY STEELS • INCONEL
CAST IRON • HIGH TEMP NICKEL BASE ALLOYS • TITANIUM ALLOYS • EXOTICS

For coating information see page 6. For VI-PRO technical information, please see pages 229-231.

TOLERANCES	DIAMETER	SHANK
1/8" - 1/2"	+0.00, -0.002	-0.001, -.0004 ISO H6
5/8" - 1"	+0.00, -0.003	-0.001, -.0004 ISO H6

VI-PRO - 4 FLUTE

VI-PRO - 5 FLUTE

VI-PRO - 6 FLUTE

THREAD MILLS

Carbide End Mills

YOUR #1 SOURCE FOR AMERICAN-MADE PREMIUM CUTTING TOOLS



**TAKE 55% OFF
OF LIST PRICE!**

VI-PRO

VARIABLE INDEX GEOMETRY

4 FLUTE - LONG LENGTH - BALL NOSE



SERIES V42LB
ALCRO-MAX COATED

VI-PRO DIAMETER	★★★ TOOL ATTRIBUTES ★★★				ROUND SHANK		WELDON FLAT	
	SHANK	LOC	OAL	# OF FLUTES	ITEM#	LIST PRICE	ITEM#	LIST PRICE
1/4	1/4	1-1/8	3	4	TC25602	64.59	-	-
5/16	5/16	1-1/8	3	4	TC25604	89.37	-	-
3/8	3/8	1-1/4	3	4	TC25606	120.03	-	-
7/16	7/16	2	4	4	TC25607	149.58	-	-
1/2	1/2	1-1/2	4	4	TC25608	165.73	TC25618	172.26
1/2	1/2	2	4	4	TC25610	183.78	TC25620	190.31
5/8	5/8	2-1/4	5	4	TC25612	341.80	TC25622	348.33
3/4	3/4	2-1/4	5	4	TC25614	413.58	TC25624	420.12
1	1	2-1/4	5	4	TC25616	681.63	TC25626	688.16

4 FLUTE - EXTRA LONG LENGTH - BALL NOSE



SERIES V42XLB
ALCRO-MAX COATED

VI-PRO DIAMETER	★★★ TOOL ATTRIBUTES ★★★				ROUND SHANK		WELDON FLAT	
	SHANK	LOC	OAL	# OF FLUTES	ITEM#	LIST PRICE	ITEM#	LIST PRICE
1/4	1/4	1-1/2	4	4	TC25656	93.33	-	-
3/8	3/8	2	4	4	TC25658	135.27	-	-
7/16	7/16	3	6	4	TC25659	221.81	-	-
1/2	1/2	3	6	4	TC25660	259.15	TC25672	265.69
5/8	5/8	3	6	4	TC25662	368.59	TC25674	375.14
3/4	3/4	3	6	4	TC25664	486.55	TC25676	493.08
3/4	3/4	4	7	4	TC25666	798.98	TC25678	805.52
1	1	3	6	4	TC25668	793.23	TC25680	799.76
1	1	4-1/4	7	4	TC25670	1170.96	TC25682	1177.97

The VI-PRO performs very well in a wide range of materials including:

HIGH TEMP ALLOYS • STAINLESS STEELS • ALLOY STEELS • INCONEL
CAST IRON • HIGH TEMP NICKEL BASE ALLOYS • TITANIUM ALLOYS • EXOTICS

For coating information see page 6. For VI-PRO technical information, please see pages 229-231.

TOLERANCES	DIAMETER	SHANK
1/4" - 1/2"	+0.000, -0.002	-0.0001, -.0004 ISO H6
5/8" - 1"	+0.000, -0.003	-0.0001, -.0004 ISO H6

VI-PRO - 4 FLUTE

VI-PRO - 5 FLUTE

VI-PRO - 6 FLUTE

THREAD MILLS

Carbide End Mills

YOUR #1 SOURCE FOR AMERICAN-MADE PREMIUM CUTTING TOOLS



VI-PRO VARIABLE INDEX GEOMETRY

5 FLUTE - STUB LENGTH - SQUARE END



SERIES V52S
ALCRO-MAX COATED

**TAKE 55% OFF
OF LIST PRICE!**

VI-PRO DIAMETER	★★★ TOOL ATTRIBUTES ★★★				ROUND SHANK		WELDON FLAT	
	SHANK	LOC	OAL	# OF FLUTES	ITEM #	LIST PRICE	ITEM #	LIST PRICE
1/8	1/8	1/4	1-1/2	5	TC25807	31.19	-	-
3/16	3/16	3/8	2	5	TC25809	40.13	-	-
1/4	1/4	3/8	2	5	TC25796	45.41	-	-
5/16	5/16	7/16	2	5	TC25797	66.07	-	-
3/8	3/8	1/2	2	5	TC25798	73.24	-	-
1/2	1/2	5/8	2-1/2	5	TC25799	109.51	TC25802	115.74
5/8	5/8	3/4	3	5	TC25800	215.59	TC25803	221.82
3/4	3/4	1	3	5	TC25801	284.33	TC25804	290.56

5 FLUTE - REGULAR LENGTH - SQUARE END



SERIES V52R
ALCRO-MAX COATED

VI-PRO DIAMETER	★★★ TOOL ATTRIBUTES ★★★				ROUND SHANK		WELDON FLAT	
	SHANK	LOC	OAL	# OF FLUTES	ITEM #	LIST PRICE	ITEM #	LIST PRICE
1/8	1/8	1/2	2	5	TC25829	37.27	-	-
3/16	3/16	9/16	2	5	TC25835	42.61	-	-
1/4	1/4	3/4	2-1/2	5	TC25836	54.08	-	-
5/16	5/16	13/16	2-1/2	5	TC25838	71.62	-	-
3/8	3/8	1	2-1/2	5	TC25840	83.90	-	-
1/2	1/2	1	3	5	TC25842	125.84	TC25852	132.07
1/2	1/2	1-1/4	3	5	TC25844	125.84	TC25854	132.07
5/8	5/8	1-5/8	3-1/2	5	TC25846	227.81	TC25856	234.04
3/4	3/4	1-5/8	4	5	TC25848	314.74	TC25858	320.98
1	1	2	4	5	TC25850	587.56	TC25860	593.79

The VI-PRO performs very well in a wide range of materials including:

HIGH TEMP ALLOYS • STAINLESS STEELS • ALLOY STEELS • INCONEL
CAST IRON • HIGH TEMP NICKEL BASE ALLOYS • TITANIUM ALLOYS • EXOTICS

For coating information see page 6. For VI-PRO technical information, please see pages 229, 232, 233.

TOLERANCES	DIAMETER	SHANK
1/8" - 1/2"	+0.000, -0.002	-0.0001, -.0004 ISO H6
5/8" - 1"	+0.000, -0.003	-0.0001, -.0004 ISO H6

VI-PRO - 4 FLUTE

VI-PRO - 5 FLUTE

VI-PRO - 6 FLUTE

THREAD MILLS

Carbide End Mills

YOUR #1 SOURCE FOR AMERICAN-MADE PREMIUM CUTTING TOOLS



**TAKE 55% OFF
OF LIST PRICE!**

VI-PRO

VARIABLE INDEX GEOMETRY

5 FLUTE - LONG LENGTH - SQUARE END



SERIES V52L
ALCRO-MAX COATED

VI-PRO DIAMETER	*** TOOL ATTRIBUTES ***				ROUND SHANK		WELDON FLAT	
	SHANK	LOC	OAL	# OF FLUTES	ITEM#	LIST PRICE	ITEM#	LIST PRICE
1/4	1/4	1-1/8	3	5	TC25888	61.58	-	-
5/16	5/16	1-1/8	3	5	TC25890	85.20	-	-
3/8	3/8	1-1/4	3	5	TC25892	114.43	-	-
1/2	1/2	1-1/2	4	5	TC25894	158.00	TC25904	164.22
1/2	1/2	2	4	5	TC25896	175.21	TC25906	181.43
5/8	5/8	2-1/4	5	5	TC25898	325.84	TC25908	332.08
3/4	3/4	2-1/4	5	5	TC25900	394.28	TC25910	400.51
1	1	2-1/4	5	5	TC25902	649.82	TC25912	656.04

5 FLUTE - EXTRA LONG LENGTH - SQUARE END



SERIES V52XL
ALCRO-MAX COATED

VI-PRO DIAMETER	*** TOOL ATTRIBUTES ***				ROUND SHANK		WELDON FLAT	
	SHANK	LOC	OAL	# OF FLUTES	ITEM#	LIST PRICE	ITEM#	LIST PRICE
1/4	1/4	1-1/2	4	5	TC25942	73.57	-	-
3/8	3/8	2	4	5	TC25944	128.96	-	-
1/2	1/2	3	6	5	TC25946	247.06	TC25958	253.30
5/8	5/8	3	6	5	TC25948	351.39	TC25960	357.63
3/4	3/4	3	6	5	TC25950	463.85	TC25962	470.07
3/4	3/4	4	7	5	TC25952	761.68	TC25964	767.93
1	1	3	6	5	TC25954	756.20	TC25966	762.44
1	1	4-1/4	7	5	TC25956	1116.32	TC25968	1123.00

The VI-PRO performs very well in a wide range of materials including:
 HIGH TEMP ALLOYS • STAINLESS STEELS • ALLOY STEELS • INCONEL
 CAST IRON • HIGH TEMP NICKEL BASE ALLOYS • TITANIUM ALLOYS • EXOTICS

For coating information see page 6. For VI-PRO technical information, please see pages 229, 232, 233.

TOLERANCES	DIAMETER	SHANK
1/4" - 1/2"	+0.00, -0.02	-0.001, -.0004 ISO H6
5/8" - 1"	+0.00, -0.03	-0.001, -.0004 ISO H6

VI-PRO - 4 FLUTE
 VI-PRO - 5 FLUTE
 VI-PRO - 6 FLUTE
 THREAD MILLS

Carbide End Mills

YOUR #1 SOURCE FOR AMERICAN-MADE PREMIUM CUTTING TOOLS



VI-PRO

VARIABLE INDEX GEOMETRY

5 FLUTE - STUB LENGTH  CORNER RADIUS



SERIES V52SR
ALCRO-MAX COATED

VI-PRO DIAMETER	★★★ TOOL ATTRIBUTES ★★★					ROUND SHANK		WELDON FLAT	
	SHANK	LOC	OAL	# OF FLUTES	RAD	ITEM #	LIST PRICE	ITEM #	LIST PRICE
1/8	1/8	1/4	1-1/2	5	0.010	TC25995	35.95	-	-
3/16	3/16	3/8	2	5	0.010	TC25996	44.89	-	-
1/4	1/4	3/8	2	5	0.015	TC25986	52.93	-	-
5/16	5/16	7/16	2	5	0.015	TC25987	71.24	-	-
3/8	3/8	1/2	2	5	0.015	TC25988	78.41	-	-
1/2	1/2	5/8	2-1/2	5	0.030	TC25989	119.85	TC25992	126.08
5/8	5/8	3/4	3	5	0.030	TC25990	225.94	TC25993	232.17
3/4	3/4	1	3	5	0.030	TC25991	294.68	TC25994	300.91



The VI-PRO 5 Flute Stub Length is stocked in 3 radius sizes; 0.010, 0.015, 0.030

The VI-PRO performs very well in a wide range of materials including:

HIGH TEMP ALLOYS • STAINLESS STEELS • ALLOY STEELS • INCONEL
CAST IRON • HIGH TEMP NICKEL BASE ALLOYS • TITANIUM ALLOYS • EXOTICS

For coating information see page 6. For VI-PRO technical information, please see pages 229, 232, 233.

TOLERANCES	DIAMETER	SHANK	RADIUS
1/8" - 1/2"	+0.000, -.002	-.0001, -.0004 ISO H6	+0.001, -.001
5/8" - 3/4"	+0.000, -.003	-.0001, -.0004 ISO H6	+0.001, -.001

VI-PRO - 4 FLUTE

VI-PRO - 5 FLUTE

VI-PRO - 6 FLUTE

THREAD MILLS

Carbide End Mills

YOUR #1 SOURCE FOR AMERICAN-MADE PREMIUM CUTTING TOOLS



5 FLUTE - REGULAR LENGTH CORNER RADIUS



SERIES V52RR
ALCRO-MAX COATED

**TAKE 55% OFF
OF LIST PRICE!**

VI-PRO		★★★ TOOL ATTRIBUTES ★★★					ROUND SHANK		WELDON FLAT	
DIAMETER	SHANK	LOC	OAL	# OF FLUTES	RAD	ITEM #	LIST PRICE	ITEM #	LIST PRICE	
1/8	1/8	1/2	2	5	0.010	TC26404	42.96	-	-	
1/8	1/8	1/2	2	5	0.020	TC26406	42.96	-	-	
1/8	1/8	1/2	2	5	0.030	TC26408	42.96	-	-	
3/16	3/16	9/16	2	5	0.010	TC26410	50.91	-	-	
3/16	3/16	9/16	2	5	0.020	TC26412	50.91	-	-	
3/16	3/16	9/16	2	5	0.030	TC26414	50.91	-	-	
1/4	1/4	3/4	2-1/2	5	0.015	TC26416	58.83	-	-	
1/4	1/4	3/4	2-1/2	5	0.030	TC26419	58.83	-	-	
1/4	1/4	3/4	2-1/2	5	0.060	TC26422	58.83	-	-	
5/16	5/16	13/16	2-1/2	5	0.015	TC26425	75.79	-	-	
5/16	5/16	13/16	2-1/2	5	0.030	TC26428	75.79	-	-	
5/16	5/16	13/16	2-1/2	5	0.060	TC26431	75.79	-	-	
3/8	3/8	1	2-1/2	5	0.015	TC26434	88.50	-	-	
3/8	3/8	1	2-1/2	5	0.030	TC26437	88.50	-	-	
3/8	3/8	1	2-1/2	5	0.060	TC26440	88.50	-	-	
1/2	1/2	1	3	5	0.015	TC26443	141.39	TC26625	148.46	
1/2	1/2	1	3	5	0.030	TC26446	141.39	TC26628	148.46	
1/2	1/2	1	3	5	0.060	TC26449	141.39	TC26631	148.46	
1/2	1/2	1	3	5	0.090	TC26452	141.39	TC26634	148.46	
1/2	1/2	1	3	5	0.120	TC26455	141.39	TC26637	148.46	
1/2	1/2	1-1/4	3	5	0.015	TC26458	141.39	TC26640	148.46	
1/2	1/2	1-1/4	3	5	0.030	TC26461	141.39	TC26643	148.46	
1/2	1/2	1-1/4	3	5	0.060	TC26464	141.39	TC26646	148.46	
1/2	1/2	1-1/4	3	5	0.090	TC26467	141.39	TC26649	148.46	
1/2	1/2	1-1/4	3	5	0.120	TC26470	141.39	TC26652	148.46	
5/8	5/8	1-5/8	3-1/2	5	0.030	TC26473	238.21	TC26655	244.45	
5/8	5/8	1-5/8	3-1/2	5	0.060	TC26476	238.21	TC26658	244.45	
5/8	5/8	1-5/8	3-1/2	5	0.090	TC26479	238.21	TC26661	244.45	
5/8	5/8	1-5/8	3-1/2	5	0.120	TC26482	238.21	TC26664	244.45	
3/4	3/4	1-5/8	4	5	0.030	TC26485	330.33	TC26667	336.56	
3/4	3/4	1-5/8	4	5	0.060	TC26488	330.33	TC26670	336.56	
3/4	3/4	1-5/8	4	5	0.090	TC26491	330.33	TC26673	336.56	
3/4	3/4	1-5/8	4	5	0.120	TC26494	330.33	TC26676	336.56	
3/4	3/4	1-5/8	4	5	0.190	TC26495	330.33	TC26677	336.56	
3/4	3/4	1-5/8	4	5	0.250	TC26496	330.33	TC26678	336.56	
1	1	2	4	5	0.030	TC26497	603.14	TC26679	609.37	
1	1	2	4	5	0.060	TC26500	603.14	TC26682	609.37	
1	1	2	4	5	0.090	TC26503	603.14	TC26685	609.37	
1	1	2	4	5	0.120	TC26506	603.14	TC26688	609.37	
1	1	2	4	5	0.190	TC26507	603.14	TC26689	609.37	
1	1	2	4	5	0.250	TC26508	603.14	TC26690	609.37	

The VI-PRO performs very well in a wide range of materials including:
 HIGH TEMP ALLOYS • STAINLESS STEELS • ALLOY STEELS • INCONEL
 CAST IRON • HIGH TEMP NICKEL BASE ALLOYS • TITANIUM ALLOYS • EXOTICS

For coating information see page 6. For VI-PRO technical information, please see pages 229, 232, 233.

TOLERANCES	DIAMETER	SHANK	RADIUS
1/4" - 1/2"	+0.00, -.002	-.0001, -.0004 ISO H6	+0.01, -.001
5/8" - 1"	+0.00, -.003	-.0001, -.0004 ISO H6	+0.01, -.001

VI-PRO - 4 FLUTE
VI-PRO - 5 FLUTE
VI-PRO - 6 FLUTE
THREAD MILLS

Carbide End Mills

YOUR #1 SOURCE FOR AMERICAN-MADE PREMIUM CUTTING TOOLS



VI-PRO

VARIABLE INDEX GEOMETRY

5 FLUTE - LONG LENGTH  CORNER RADIUS



SERIES V52LR
ALCRO-MAX COATED

VI-PRO DIAMETER	★★★ TOOL ATTRIBUTES ★★★					ROUND SHANK		WELDON FLAT	
	SHANK	LOC	OAL	# OF FLUTES	RAD	ITEM #	LIST PRICE	ITEM #	LIST PRICE
1/4	1/4	1-1/8	3	5	0.015	TC27109	66.34	-	-
1/4	1/4	1-1/8	3	5	0.030	TC27112	66.34	-	-
5/16	5/16	1-1/8	3	5	0.015	TC27115	90.37	-	-
5/16	5/16	1-1/8	3	5	0.030	TC27118	90.37	-	-
3/8	3/8	1-1/4	3	5	0.030	TC27121	119.61	-	-
3/8	3/8	1-1/4	3	5	0.060	TC27124	119.61	-	-
1/2	1/2	2	4	5	0.030	TC27127	185.55	TC27262	191.78
1/2	1/2	2	4	5	0.060	TC27130	185.55	TC27265	191.78
5/8	5/8	2-1/4	5	5	0.030	TC27133	336.19	TC27268	342.42
5/8	5/8	2-1/4	5	5	0.060	TC27136	336.19	TC27271	342.42
3/4	3/4	2-1/4	5	5	0.030	TC27139	423.35	TC27274	431.46
3/4	3/4	2-1/4	5	5	0.060	TC27142	423.35	TC27277	431.46
1	1	2-1/4	5	5	0.030	TC27145	660.16	TC27280	666.40
1	1	2-1/4	5	5	0.060	TC27148	660.16	TC27283	666.40



Preparing tools in our newly expanded PVD Coating Center

For coating information see page 6. For VI-PRO technical information, please see pages 229, 232, 233.

TOLERANCES	DIAMETER	SHANK	RADIUS
1/4" - 1/2"	+0.00, -.002	-.0001, -.0004 ISO H6	+0.01, -.001
5/8" - 1"	+0.00, -.003	-.0001, -.0004 ISO H6	+0.01, -.001

VI-PRO - 4 FLUTE

VI-PRO - 5 FLUTE

VI-PRO - 6 FLUTE

THREAD MILLS

Carbide End Mills

YOUR #1 SOURCE FOR AMERICAN-MADE PREMIUM CUTTING TOOLS



MADE IN THE U.S.A.

**TAKE 55% OFF
OF LIST PRICE!**

VI-PRO

VARIABLE INDEX GEOMETRY

5 FLUTE - EXTRA LONG LENGTH  CORNER RADIUS



SERIES V52XLR
ALCRO-MAX COATED

VI-PRO DIAMETER	★ ★ ★ TOOL ATTRIBUTES ★ ★ ★					ROUND SHANK		WELDON FLAT	
	SHANK	LOC	OAL	# OF FLUTES	RAD	ITEM #	LIST PRICE	ITEM #	LIST PRICE
1/4	1/4	1-1/2	4	5	0.015	TC27928	80.74	-	-
1/4	1/4	1-1/2	4	5	0.030	TC27931	80.74	-	-
3/8	3/8	2	4	5	0.030	TC27934	136.74	-	-
3/8	3/8	2	4	5	0.060	TC27937	136.74	-	-
1/2	1/2	3	6	5	0.030	TC27940	254.85	TC28002	261.09
1/2	1/2	3	6	5	0.060	TC27943	254.85	TC28005	261.09
5/8	5/8	3	6	5	0.030	TC27946	359.13	TC28008	365.36
5/8	5/8	3	6	5	0.060	TC27949	359.13	TC28011	365.36
3/4	3/4	3	6	5	0.030	TC27952	474.18	TC28014	480.41
3/4	3/4	3	6	5	0.060	TC27955	474.18	TC28017	480.41
3/4	3/4	4	7	5	0.030	TC27958	772.04	TC28020	778.27
3/4	3/4	4	7	5	0.060	TC27961	772.04	TC28023	778.27
1	1	3	6	5	0.030	TC27964	776.15	TC28026	782.39
1	1	3	6	5	0.060	TC27967	776.15	TC28029	782.39
1	1	4-1/4	7	5	0.030	TC27970	1127.01	TC28032	1133.70
1	1	4-1/4	7	5	0.060	TC27973	1127.01	TC28035	1133.70



Every coating load is rigorously inspected for thickness and adhesion

For coating information see page 6. For VI-PRO technical information, please see pages 229, 232, 233.

TOLERANCES	DIAMETER	SHANK	RADIUS
1/4" - 1/2"	+0.00, -.002	-.0001, -.0004 ISO H6	+0.01, -.001
5/8" - 1"	+0.00, -.003	-.0001, -.0004 ISO H6	+0.01, -.001

VI-PRO - 4 FLUTE

VI-PRO - 5 FLUTE

VI-PRO - 6 FLUTE

THREAD MILLS



VI-PRO - 4 FLUTE

VI-PRO - 5 FLUTE

VI-PRO - 6 FLUTE

THREAD MILLS

High Efficiency Milling and High Speed Machining are machining techniques aimed at maximizing metal removal rates (MRR) with the use of technology advancements in machines, software and end mill geometries. Both methods have the simple principle of increasing the metal removal rates (MRR).

HIGH SPEED MACHINING • HSM

High Speed Machining is based on a very light axial depth of cut, while allowing for maximum radial engagement of the end mill. This combination, along with very high spindle speed, allows for an extremely high feed rate and greatly increased metal removal rates (MRR). HSM can be used in a wide range of applications and has many benefits.

- Used in applications ranging from simple slotting to complex 5 axis contouring
- Final result is achieved with quick light cuts, which allows for an extremely smooth finish in a roughing application
- Flexibility to use higher flute counts to achieve the best finish with the least production time

High Speed Machining is a high demand application where the VI Pro End Mill and Alcro-Max coating excel to give the absolute best results in High Performance applications.



HIGH EFFICIENCY MILLING • HEM

High Efficiency Milling is based on radial chip thinning with the basic idea of keeping the end mill cutting at an ideal chip load. The stepover is substantially reduced from the typical 50% of tool diameter, while the feed rate is greatly increased to maintain the correct chip load. There are multiple benefits to the process in the correct applications.

- Reduced spindle load due to low percentage of tool diameter being engaged in the work material.
- Allows for increased axial depth of cuts using the entire LOC on extra length end mills allowing for even tool wear and increased tool life.
- HEM tool paths allow for high flute count tools with heavier core, such as our 6 flute VI Pro, to be used which also means increased tool life as well as better finish on parts.

Today's advancements in CAM software technology have paved the way for HEM to be incorporated in many applications. In combination with a High Performance VI Pro 6 flute End Mill High Efficiency Machining can increase metal removal rates by 50% or more versus conventional roughing applications, all while extending tool life and machine life together.



Carbide End Mills

YOUR #1 SOURCE FOR AMERICAN-MADE PREMIUM CUTTING TOOLS



**TAKE 55% OFF
OF LIST PRICE!**

VI-PRO

VARIABLE INDEX GEOMETRY

6 FLUTE - STUB LENGTH - SQUARE END



SERIES V62S
ALCRO-MAX COATED

VI-PRO DIAMETER	★★★ TOOL ATTRIBUTES ★★★				ROUND SHANK		WELDON FLAT	
	SHANK	LOC	OAL	# OF FLUTES	ITEM#	LIST PRICE	ITEM#	LIST PRICE
1/4	1/4	3/8	2	6	TC64404	48.43	-	-
5/16	5/16	7/16	2	6	TC64406	72.06	-	-
3/8	3/8	1/2	2	6	TC64408	79.88	-	-
1/2	1/2	5/8	2-1/2	6	TC64410	118.45	TC64416	126.24
5/8	5/8	3/4	3	6	TC64412	227.23	TC64418	235.47
3/4	3/4	1	3	6	TC64414	296.15	TC64420	302.87

6 FLUTE - STUB LENGTH  CORNER RADIUS



 CORNER RADIUS

SERIES V62SR
ALCRO-MAX COATED

VI-PRO DIAMETER	★★★ TOOL ATTRIBUTES ★★★						ROUND SHANK		WELDON FLAT	
	SHANK	LOC	OAL	# OF FLUTES	RAD	ITEM#	LIST PRICE	ITEM#	LIST PRICE	
1/4	1/4	3/8	2	6	0.015	TC64426	58.24	-	-	
5/16	5/16	7/16	2	6	0.015	TC64428	77.72	-	-	
3/8	3/8	1/2	2	6	0.015	TC64430	85.55	-	-	
1/2	1/2	5/8	2-1/2	6	0.030	TC64432	130.74	TC64438	137.53	
5/8	5/8	3/4	3	6	0.030	TC64434	240.47	TC64440	246.26	
3/4	3/4	1	3	6	0.030	TC64436	311.58	TC64442	317.24	

The VI-PRO performs very well in a wide range of materials including:
 HIGH TEMP ALLOYS • STAINLESS STEELS • ALLOY STEELS • INCONEL
 CAST IRON • HIGH TEMP NICKEL BASE ALLOYS • TITANIUM ALLOYS • EXOTICS

For coating information see page 6. For VI-PRO technical information, please see pages 229, 234, 235.

TOLERANCES	DIAMETER	SHANK	RADIUS
1/4" - 1/2"	+0.00, -.002	-.0001, -.0004 ISO H6	+0.01, -.001
5/8" - 1"	+0.00, -.003	-.0001, -.0004 ISO H6	+0.01, -.001

VI-PRO - 4 FLUTE

VI-PRO - 5 FLUTE

VI-PRO - 6 FLUTE

THREAD MILLS

Carbide End Mills

YOUR #1 SOURCE FOR AMERICAN-MADE PREMIUM CUTTING TOOLS



VI-PRO

VARIABLE INDEX GEOMETRY

6 FLUTE - REGULAR LENGTH - SQUARE END



SERIES V62R
ALCRO-MAX COATED

VI-PRO DIAMETER	★★★ TOOL ATTRIBUTES ★★★				ROUND SHANK		WELDON FLAT	
	SHANK	LOC	OAL	# OF FLUTES	ITEM #	LIST PRICE	ITEM #	LIST PRICE
1/4	1/4	3/4	2-1/2	6	TC64516	96.11	-	-
5/16	5/16	13/16	2-1/2	6	TC64520	114.15	-	-
3/8	3/8	1	2-1/2	6	TC64524	123.01	-	-
1/2	1/2	1-1/4	3	6	TC64532	164.47	TC64579	172.69
5/8	5/8	1-5/8	3-1/2	6	TC64540	274.09	TC64581	282.30
3/4	3/4	1-5/8	4	6	TC64548	344.05	TC64583	354.36
1	1	2	4	6	TC64564	526.95	TC64585	537.48

6 FLUTE - REGULAR LENGTH  CORNER RADIUS



SERIES V62RR
ALCRO-MAX COATED

VI-PRO DIAMETER	★★★ TOOL ATTRIBUTES ★★★						ROUND SHANK		WELDON FLAT	
	SHANK	LOC	OAL	# OF FLUTES	RAD	ITEM #	LIST PRICE	ITEM #	LIST PRICE	
1/4	1/4	3/4	2-1/2	6	0.015	TC67116	107.28	-	-	
5/16	5/16	13/16	2-1/2	6	0.015	TC67120	127.46	-	-	
3/8	3/8	1	2-1/2	6	0.015	TC67124	137.38	-	-	
1/2	1/2	1-1/4	3	6	0.030	TC67132	183.64	TC67184	192.81	
5/8	5/8	1-5/8	3-1/2	6	0.030	TC67140	292.72	TC67186	301.49	
3/4	3/4	1-5/8	4	6	0.060	TC67148	367.44	TC67188	378.45	
1	1	2	4	6	0.060	TC67164	562.75	TC67190	579.63	

The VI-PRO performs very well in a wide range of materials including:

HIGH TEMP ALLOYS • STAINLESS STEELS • ALLOY STEELS • INCONEL
CAST IRON • HIGH TEMP NICKEL BASE ALLOYS • TITANIUM ALLOYS • EXOTICS

For coating information see page 6. For VI-PRO technical information, please see pages 229, 234, 235.

TOLERANCES	DIAMETER	SHANK	RADIUS
1/4" - 1/2"	+0.00, -0.02	-0.001, -0.004 ISO H6	+0.01, -0.01
5/8" - 1"	+0.00, -0.03	-0.001, -0.004 ISO H6	+0.01, -0.01

VI-PRO - 4 FLUTE

VI-PRO - 5 FLUTE

VI-PRO - 6 FLUTE

THREAD MILLS

Carbide End Mills

YOUR #1 SOURCE FOR AMERICAN-MADE PREMIUM CUTTING TOOLS



**TAKE 55% OFF
OF LIST PRICE!**

VI-PRO

VARIABLE INDEX GEOMETRY

6 FLUTE - LONG LENGTH - SQUARE END



SERIES V62L
ALCRO-MAX COATED

VI-PRO DIAMETER	★★★ TOOL ATTRIBUTES ★★★					ROUND SHANK		WELDON FLAT	
	SHANK	LOC	OAL	# OF FLUTES		ITEM #	LIST PRICE	ITEM #	LIST PRICE
1/4	1/4	1-1/8	3	6		TC61316	105.95	-	-
5/16	5/16	1-1/8	3	6		TC61320	123.64	-	-
3/8	3/8	1-1/4	3	6		TC61324	140.50	-	-
1/2	1/2	2	4	6		TC61332	218.54	TC61384	229.46
5/8	5/8	2-1/4	5	6		TC61340	339.48	TC61386	349.68
3/4	3/4	2-1/4	5	6		TC61348	423.97	TC61388	436.69
1	1	3	6	6		TC61364	859.29	TC61390	876.47

6 FLUTE - LONG LENGTH  CORNER RADIUS



SERIES V62LR
ALCRO-MAX COATED

VI-PRO DIAMETER	★★★ TOOL ATTRIBUTES ★★★						ROUND SHANK		WELDON FLAT	
	SHANK	LOC	OAL	# OF FLUTES	RAD		ITEM #	LIST PRICE	ITEM #	LIST PRICE
1/4	1/4	1-1/8	3	6	0.015		TC61216	118.33	-	-
5/16	5/16	1-1/8	3	6	0.015		TC61220	138.04	-	-
3/8	3/8	1-1/4	3	6	0.015		TC61224	156.90	-	-
1/2	1/2	2	4	6	0.030		TC61232	243.99	TC61287	256.17
5/8	5/8	2-1/4	5	6	0.030		TC61240	362.56	TC61289	373.45
3/4	3/4	2-1/4	5	6	0.060		TC61248	452.78	TC61291	466.37
1	1	3	6	6	0.060		TC61264	917.66	TC61293	936.03

The VI-PRO performs very well in a wide range of materials including:

HIGH TEMP ALLOYS • STAINLESS STEELS • ALLOY STEELS • INCONEL
CAST IRON • HIGH TEMP NICKEL BASE ALLOYS • TITANIUM ALLOYS • EXOTICS

For coating information see page 6. For VI-PRO technical information, please see pages 229, 234, 235.

TOLERANCES	DIAMETER	SHANK	RADIUS
1/4" - 1/2"	+0.00, -.002	-.0001, -.0004 ISO H6	+0.01, -.001
5/8" - 1"	+0.00, -.003	-.0001, -.0004 ISO H6	+0.01, -.001

VI-PRO - 4 FLUTE

VI-PRO - 5 FLUTE

VI-PRO - 6 FLUTE

THREAD MILLS