

## VTP Spiral Pointed



Plug Style 4 to 5 Threads  
Surface Treated

**List No. 973** Machine Screw Sizes

**List No. 971** Fractional Sizes

**VANADIUM HIGH SPEED STEEL HSSE-V**

\*Replacing VIPER T Series

Nominal Size	Thread/Inch		E.D.P. Numbers						No. of Flutes	Dimensions			Std. Pack.
	NC UNC	NF UNF	H2	H3	H4	H5	H6	H7		Overall Length	Length of Thread	Shank Dia.	
<b>MACHINE SCREW SIZES - L973</b>													
2	56		87216	87218	—	—	—	—	2	1 3/4	0.437	0.141	3
3	48		87220	—	—	—	—	1 13/16		0.500	3		
4	40	48	87240 87245	87242	87243	87244	—	—		1 7/8	0.354		3
5	40		87252	—	—	—	—	1 15/16		0.394	3		
6	32	40	87258 87269	87260	87261	87264	87265	87266		2	0.433		3
8	32		87272	87274	87275	87278	87279	87280		3	2 1/8		0.472
10	24	32	— 87294	87288	—	87290	—	—	2 3/8		0.551	0.194	3
12	24	28	—	87311	—	—	—	—			0.500	0.220	3
			—	87312	—	—	—	—					
<b>FRACTIONAL SIZES - L971</b>													
1/4	20	28	87052	87056	—	87060	—	87062	3	2 1/2	0.591	0.255	3
			87066	87068	87070	87071	87072	87073					3
5/16	18	24	—	87080	—	87084	—	87086		2 23/32	0.669	0.318	3
			—	87094	87096	87097	87098	87099					3
3/8	16	24	—	87102	—	87104	—	87106		2 15/16	0.748	0.381	3
			—	87110	87112	87113	87114	87115					3
7/16	14	20	—	87116	—	87120	—	—		3 5/32	0.866	0.323	3
			—	87122	—	87126	87127	87129					3
1/2	13	20	—	87130	—	87134	—	87136		3 3/8	0.984	0.367	3
			—	87138	—	87140	87141	87142					3
9/16	12	18	—	87143	—	—	—	—		3 19/32	0.429	0.429	1
			—	87144	—	—	—	—					1
5/8	11	18	—	87148	—	87152	—	87154		3 13/16	1.102	0.480	3
			—	87158	—	87159	—	—					3
3/4	10	16	—	87164	—	—	—	87167		4 1/4	1.181	0.590	3
			—	87168	—	87169	—	—					1
7/8	9	14	—	87170	—	—	—	—		4 11/16	1.299	0.697	1
			—	87171	—	—	—	—					3
1	8	12	—	87172	—	—	—	—	5 1/8	1.378	0.800	1	
			—	—	87176	—	—	—					

Order by EDP Number

### VTP Series Tapping Speeds

SFM: Surface Feet per Minutes

VTP Spiral Flute TAP List 980, 983, 981

Work Materials	Tapping Speed SFM
Low Carbon Steel	1010,1018 30-60
Medium Carbon Steel	1035,1045 15-40
High Carbon Steel	1065,1095 15-25
Alloy Steel	4140,4130 15-40
Die Steels	D2,H13 10-25
Hardened Die Steels (20-40HRC)	D2,H13 6-12
Stainless steel (Austenitic)	303,304,316 10-25
Stainless steel (Martensitic)	410,430 10-25
Stainless steel (PH) up to 35HRC	17-4PH 8-15
Titanium Alloy Up to 32HRC	6AL4V 10-15
Magnesium Alloy	30-60
Ductile Cast Irons	80-55-06 15-40
Cast Irons	Nodular,Grey -
Copper	15-40
Brass, Brass Casting	40-60
Bronze, Brass Casting	25-50

Thread Depth	Coefficient
Up to 1.5D	1
1.5D~2.5D	0.9
2.5D~3D	0.8
Over 3D	0.7

1. These are general tapping conditions, may be altered by your condition.  
2. These conditions are for tapping depth 1.5D. In case of deeper thread you may multiply these values by the coefficient of next table

SFM: Surface Feet per Minutes

VTP Spiral Point TAP List 982, 973, 971

Work Materials	Tapping Speed SFM
Low Carbon Steel	1010,1018 35-75
Medium Carbon Steel	1035,1045 20-50
High Carbon Steel	1065,1095 15-30
Alloy Steel	4140,4130 20-50
Die Steels	D2,H13 15-30
Hardened Die Steels (20-40HRC)	D2,H13 9-15
Stainless steel (Austenitic)	303,304,316 15-35
Stainless steel (Martensitic)	410,430 15-35
Stainless steel (PH) up to 35HRC	17-4PH 10-20
Titanium Alloy Up to 32HRC	6AL4V 15-20
Magnesium Alloy	40-80
Ductile Cast Irons	80-55-06 20-50
Cast Irons	Nodular,Grey 30-60
Copper	20-50
Brass, Brass Casting	50-80
Bronze, Brass Casting	30-60

1. These are general tapping conditions, may be altered by your condition.  
2. These conditions are for tapping depth 1.5D. In case of deeper thread you may multiply these values by the coefficient of next table

TAPS