Features

- **Nachi Viper Taflet Taps** are specially engineered for steels, and require less torque than conventional coldform taps. This reduces the chance of breakage.
- **Nachi Viper Taflet Taps** are steam oxide surface treated to limit adhesion from fusion, and carries coolant to the work area. Bright finish is available when required.
- **Nachi Viper Taflet Taps** have more radial sections for higher accuracy of internal threads in steel.This compares favorably to coldform internal threads, which aren't always clean and accurate.

VIPER TAFLET

DLC Taflet

Work Materials

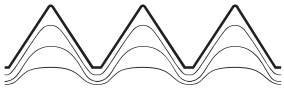
- Structural Steels
- Stainless Steels
- Carbon Steels
- Aluminum Alloys
- Alloy Steels

Performance

TAFLET

Fiber flow is:

NOT INTERRUPTED



Female thread cut by a TAFLET

Cutting Tap

Fiber flow is:

INTERRUPTED

Female thread cut by a cutting tap

Features of Taflet

Item	Cutting Tap	Taflet	Taflet Features
Tap breakdown	×	○	Does not break because there is no groove
Trouble caused by chips	×	○	No trouble because there is no chip
Accuracy of female thread	×	○	Little variations because of cold forming tapping
Female thread surface roughness	×	○	Excellent because threads are finished by sliding over the tap surface
Tapping torque	○	×	1.5 through 2.5 times the torque of a cutting tap
Female thread strength	×	○	Excellent because fiber flow is not interrupted in plastic working
Workpiece	○	×	Limited to the material of good malleability

DLC TAFLET

Semi-Dry Tapping

Forming tap with DLC coating can be used in Aluminum, Aluminum Alloys, Die Cast Aluminum.
The tap shown below, M6x1.0, tapped 1,000 holes in A6061 with mist hole lube applied and has minimum adhesion of material.

Tapping Condition	
Size	M6x1.0
Material	A6061-T6
Speed	15 m/min (49.2 SFM)
Feed	1.0 mm/rev (0.039 IPM)
Depth of Thread	13 mm
Coolant	Mist Lube (25cc x 2 nozzle/h)

1000 Hole	

*More information for **DLC Taflet** can be found on pages 206, 207*
*More information for **Viper Taflet** can be found on pages 208-210*

Viper Taflet Taps Thread Forming

Features

- NACHI Viper Taflet taps are designed for economical and efficient tapping of steel.
- No chips are produced with Taflet Taps, the threads are formed by the displacement of the metal. Threads produced this way are generally more accurate and stronger than threads produced by conventional tapping.

Performance

Advantages of NACHI Viper Taflet Taps

Conventional coldform taps for steel require high torque. NACHI Viper Taflet taps have been specially engineered for steels and require less torque, reducing the chance of breaking.

In conventional coldform threading, rapid wear and adhesion due to high frictional heat may occur. NACHI Viper Taflet tap's steam oxide surface treatment limits adhesion from fusion and carries coolant to the work area. Bright finish is also available when required.

Conventional coldform internal threads aren't always clean and accurate. NACHI Viper Taflet taps have more radial sections for higher accuracy of internal threads in steel.

DLC Taflet Thread Forming Taps

Forming TAP with DLC coating can be used in Aluminum Alloy, Die Cast Aluminum and Copper.

List No. 6956 Metric Sizes

Bottoming Style
DLC Coating

Nominal Size (mm)	Pitch (mm)	E. D. P. Numbers								Dimensions			Std. Pack.
		D3	D4	D5	D6	D7	D8	D9	D10	Overall Length	Length of Thread	Shank Dia.	
M2	0.4	91002								1 3/4	0.437	0.119	1
M2.5	0.45	91008								1 13/16	0.500	0.119	1
M3	0.5	91011								1 15/16	0.394	0.141	1
M4	0.7		91017							2 1/8	0.472	0.168	1
M5	0.8		91023							2 3/8	0.551	0.194	1
M6	1			91026				91027		2 1/2	0.591	0.255	3
M8	1.25						91035	91036		2 23/32	0.669	0.318	3
M10	1.25						91038			2 15/16	0.748	0.381	3
	1.5							91041					1
M12	1.75								91047	3 3/8	0.984	0.367	3

Order by EDP Number

Tapping Speeds

DLC Taflet Thread Forming Taps List No. 6955, 6956, 6957

Work Materials	Tapping Speed SFM
Aluminum Alloys	70 - 130

DLC Taflet Thread Forming Tap

List No. 6955 Fractional Size

Bottoming Style
DLC Coating

Nominal Size	Thread/Inch		E. D. P. Numbers								Dimensions			Std. Pack.
	NC UNC	NF UNF	H2	H3	H4	H5	H6	H7	H8	H10	Overall Length	Length of Thread	Shank Dia.	
1/4	20				97838		97912				2 1/2	0.591	0.255	1
		28			97840		97914							1
5/16	18					97873		97931			2 23/32	0.669	0.318	1
		24				97875		97933						3
3/8	16					97877		97935			2 15/16	0.748	0.381	3
		24				97879		97937						3
7/16	14					97881			97961		3 5/32	0.866	0.323	3
1/2	13					97885			97965		3 3/8	0.984	0.367	3

Order by EDP Number

List No. 6957 Machine Screw Sizes

Bottoming Style
DLC Coating

Nominal Size	Thread/Inch		E. D. P. Numbers								Dimensions			Std. Pack.
	NC UNC	NF UNF	H2	H3	H4	H5	H6	H7	H8	H10	Overall Length	Length of Thread	Shank Dia.	
2	56		97738	97776							1 3/4	0.437		3
4	40			97784		97857					1 7/8	0.354	0.141	1
6	32			97792		97865					2	0.433		1
8	32			97796		97869					2 1/8	0.472	0.168	1
10	24				97830		97904				2 3/8	0.551	0.194	3
		32			97832		97906				2 3/8	0.551		1
12	24				97834		97908				2 3/8	0.551	0.220	3

Order by EDP Number

Viper Taflet for Steel

Plug & Bottoming Style
Surface Treated

List No. 996 Metric Sizes

VANADIUM HIGH SPEED STEEL HSSE-V

Nominal Size (mm)	Pitch (mm)	Chamfer Style*	E.D.P. Numbers									Dimensions			Std. Pack.
			D3	D4	D5	D6	D7	D8	D9	D10	D11	Overall Length	Length of Thread	Shank Dia.	
M2	0.4	P	51001	–	–	–	–	–	–	–	–	1 3/4	0.437	0.119	3
		B	51002	–	–	–	–	–	–	–	–				3
M2.2	0.45	P	51004	–	–	–	–	–	–	–	–				3
		B	51005	–	–	–	–	–	–	–	–				3
M2.5	0.45	P	51007	–	–	–	–	–	–	–	–	1 13/16	0.500		3
		B	51008	–	–	–	–	–	–	–	–				3
M3	0.5	P	51010	–	–	–	–	–	–	–	–	1 15/16	0.394	0.141	1
		B	51011	–	–	–	–	–	–	–	–				1
M3.5	0.6	P	51013	–	–	–	–	–	–	–	–	2	0.433		3
		B	51014	–	–	–	–	–	–	–	–				3
M4	0.7	P	–	51016	–	–	–	–	–	–	–	2 1/8	0.472	0.168	1
		B	–	51017	–	–	–	–	–	–	–				3
M4.5	0.75	P	–	51019	–	–	–	–	–	–	–	2 3/8	0.551	0.184	3
		B	–	51020	–	–	–	–	–	–	–				3
M5	0.8	P	–	51022	–	–	–	–	–	–	–			0.194	3
		B	–	51023	–	–	–	–	–	–	–				3
M6	1	P	–	–	51025	–	–	–	–	–	–	2 1/2	0.591	0.255	3
		B	–	–	51026	–	–	–	–	–	–				1
M7	1	P	–	–	–	51028	–	–	–	–	–	2 23/32	0.669	0.318	3
		B	–	–	–	51029	–	–	–	–	–				3
M8	1	P	–	–	51031	–	–	–	–	–	–				3
		B	–	–	51032	–	–	–	–	–	–				3
	1.25	P	–	–	–	–	–	51034	–	–	–				1
		B	–	–	–	–	–	51035	–	–	–				1
M10	1.25	P	–	–	–	–	–	51037	–	–	–	2 15/16	0.748	0.381	3
		B	–	–	–	–	–	51038	–	–	–				3
	1.50	P	–	–	–	–	–	–	51040	–	–				3
		B	–	–	–	–	–	–	51041	–	–				1
M12	1.25	P	–	–	–	–	–	–	51043	–	–	3 3/8	0.984	0.367	3
		B	–	–	–	–	–	–	51044	–	–				1
	1.75	P	–	–	–	–	–	–	–	51046	–				1
		B	–	–	–	–	–	–	–	51047	–				3
M14	1.5	P	–	–	–	–	–	–	–	51049	–	3 19/32		0.429	3
		B	–	–	–	–	–	–	–	51050	–				3
	2	P	–	–	–	–	–	–	–	–	51052				3
		B	–	–	–	–	–	–	–	–	51053				3
M16	1.5	P	–	–	–	–	–	–	–	51055	–	3 13/16	1.102	0.480	3
		B	–	–	–	–	–	–	–	51056	–				1
	2	P	–	–	–	–	–	–	–	–	51058				3
		B	–	–	–	–	–	–	–	–	51059				3
M18	1.5	P	–	–	–	–	–	–	–	51061	–	4 1/32		0.542	3
		B	–	–	–	–	–	–	–	51062	–				3
	2.5	P	–	–	–	–	–	–	–	–	51064				3
		B	–	–	–	–	–	–	–	–	51065				3
M20	1.5	P	–	–	–	–	–	–	–	51067	–	4 15/32	1.181	0.652	3
		B	–	–	–	–	–	–	–	51068	–				3
	2.5	P	–	–	–	–	–	–	–	–	51070				3
		B	–	–	–	–	–	–	–	–	51071				3

Order by EDP Number

* P : Plug, B : Bottom

Viper Taflet for Steel

Plug & Bottoming Style
Surface Treated

List No. 995 Fractional Sizes

VANADIUM HIGH SPEED STEEL HSSE-V

Nominal Size	Thread/Inch		Chamfer Style*	E.D.P. Numbers						Dimensions			Std . Pack.
	NC UNC	NF UNF		H4	H5	H6	H7	H8	H10	Overall Length	Length of Thread	Shank Dia.	
1/4	20		P	77837	–	77911	–	–	77978	2 1/2	0.591	0.255	3
			B	77838	–	77912	–	–	77979				3
		28	P	77839	–	77913	–	–	77980				3
			B	77840	–	77914	–	–	77981				3
5/16	18		P	–	77872	–	77930	–	–	2 23/32	0.669	0.318	3
			B	–	77873	–	77931	–	–				3
		24	P	–	77874	–	77932	–	–				3
			B	–	77875	–	77933	–	–				3
3/8	16		P	–	77876	–	77934	–	–	2 15/16	0.748	0.381	3
			B	–	77877	–	77935	–	–				1
		24	P	–	77878	–	77936	–	–				3
			B	–	77879	–	77937	–	–				3
7/16	14		P	–	77880	–	–	77960	–	3 5/32	0.866	0.323	3
			B	–	77881	–	–	77961	–				3
		20	P	–	77882	–	–	77962	–				3
			B	–	77883	–	–	77963	–				3
1/2	13		P	–	77884	–	–	77964	–	3 3/8	0.984	0.367	3
			B	–	77885	–	–	77965	–				3
		20	P	–	77886	–	–	77966	–				3
			B	–	77887	–	–	77967	–				3
9/16	12		P	–	–	–	77946	–	77990	3 19/32	0.984	0.429	3
			B	–	–	–	77947	–	77991				3
		18	P	–	–	–	77948	–	77992				3
			B	–	–	–	77949	–	77993				3
5/8	11		P	–	–	–	77950	–	77994	3 13/16	1.102	0.480	3
			B	–	–	–	77951	–	77995				3
		18	P	–	–	–	77952	–	77996				3
			B	–	–	–	77953	–	77997				3
3/4	10		P	–	–	–	77954	–	77998	4 1/4	1.181	0.590	3
			B	–	–	–	77955	–	77999				3
		16	P	–	–	–	77956	–	78000				3
			B	–	–	–	77957	–	78001				3

Order by EDP Number

* P : Plug, B : Bottom

Viper Taflet for Steel

Plug & Bottoming Style
Surface Treated

List No. 995 Machine Screw Sizes

VANADIUM HIGH SPEED STEEL HSSE-V

Nominal Size	Thread/Inch		Chamfer Style*	E.D.P. Numbers						Dimensions			Std. Pack.
	NC UNC	NF UNF		H2	H3	H4	H5	H6	H10	Overall Length	Length of Thread	Shank Dia.	
0		80	B	77732	—	—	—	—	—	1 5/8	0.311		1
1	64		B	77734	—	—	—	—	—	1 11/16	0.374		3
		72	B	77736	—	—	—	—	—				3
2	56		B	77738	77776	—	—	—	—	1 3/4	0.437		3
		64	B	77740	77778	—	—	—	—				3
3	48		B	77742	77780	—	—	—	—	1 13/16	0.500		3
		56	B	77744	77782	—	—	—	—				3
4	40		P	—	77783	—	77856	—	—	1 7/8	0.354	0.141	3
			B	—	77784	—	77857	—	—				3
		48	P	—	77785	—	77858	—	—				3
			B	—	77786	—	77859	—	—				3
5	40		P	—	77787	—	77860	—	—	1 15/16	0.394		3
			B	—	77788	—	77861	—	—				3
		44	P	—	77789	—	77862	—	—				3
			B	—	77790	—	77863	—	—				3
6	32		P	—	77791	—	77864	—	77970	2	0.433		3
			B	—	77792	—	77865	—	77971				3
		40	P	—	77793	—	77866	—	—				3
			B	—	77794	—	77867	—	—				3
8	32		P	—	77795	—	77868	—	77972	2 1/8	0.472	0.168	3
			B	—	77796	—	77869	—	77973				3
		36	P	—	77797	—	77870	—	—				3
			B	—	77798	—	77871	—	—				3
10	24		P	—	—	77829	—	77903	77974	2 3/8	0.551	0.194	3
			B	—	—	77830	—	77904	77975				3
		32	P	—	—	77831	—	77905	77976				3
			B	—	—	77832	—	77906	77977				3
12	24		P	—	—	77833	—	77907	—			0.220	3
			B	—	—	77834	—	77908	—				3
		28	P	—	—	77835	—	77909	—				3
			B	—	—	77836	—	77910	—				3

Order by EDP Number

* P : Plug, B : Bottom