

Thread Forming — DIN Length HPT High Performance Taps

Premium Powder Metallurgy High Speed Steel
DIN Length, ANSI Shank

Thread Forming taps cold form rather than cut the threads. Advantages include no chips to dispose of, stronger higher quality threads, increased tapping speeds, longer tap life and reduced tap breakage.

DIN Length — longer than standard USCTI length — provides extra reach in tapping applications

ANSI Shank — made to standard American dimensions — fits standard tap holders

Lube Grooves provides a path for lubrication and act as vents to relieve pressure in blind hole tapping.

Plug Style (4 threads tapered) for through holes and blind holes with adequate depth. The longer taper lead is easier starting, requires less torque, produces less burr above the mouth of the tapped hole and increases tool life.

Bottoming Style (2 threads tapered) for blind holes.

Taraud à haut rendement
Machuelo de alto rendimiento



- List No. 2106 Bright Finish
- List No. 2106G TiN Coated
- List No. 2106C TiCN Coated
- List No. 2106T TiAlN Coated

DIN
Length

Powder Metallurgy High Speed Steel for enhanced performance and increased tool life under difficult tapping conditions. Recommended for a wide variety of ductile materials up to 28Rc hardness.

NOTE: Thread forming taps require a larger **tap drill size** than cutting taps because the material flows during the thread forming process. It may be necessary to experiment to determine the required hole size to produce a specific percent of thread. **Countersinking** before tapping is recommended because the forming process usually displaces material above the mouth of the tapped hole.

STANDARD PACKAGE All Sizes — 1 each

Cutting Speeds: Page 159

CNC Reduced Neck Design

TAP DRILL SIZES: Page 198
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Machine Screw — Plug Style

SIZE	TPI		PITCH DIA. LIMIT	THREAD LENGTH	NECK LENGTH	OAL	NO. OF LUBE GROOVES	BRIGHT	TIN	TICN	TIALN
	UNC	UNF						EDP NO.	COATED EDP NO.	COATED EDP NO.	COATED EDP NO.
4	40	—	H3	.433	.276	2.205	3	30670	94680	61460	61620
	40	—	H5	.433	.276	2.205	3	30671	94681	61461	61621
6	32	—	H3	.472	.315	2.205	3	30672	94682	61462	61622
	32	—	H5	.472	.315	2.205	3	30673	94683	61463	61623
8	32	—	H3	.512	.315	2.480	3	30674	94684	61464	61624
	32	—	H5	.512	.315	2.480	3	30675	94685	61465	61625
10	24	—	H4	.591	.393	2.756	4	30676	94686	61466	61626
	24	—	H6	.591	.393	2.756	4	30677	94687	61467	61627
	—	32	H4	.512	.472	2.756	4	30678	94688	61468	61628
	—	32	H6	.512	.472	2.756	4	30679	94689	61469	61629

Coolant-Through Available
Morse Taps Can Be Supplied With Through-Coolant
Holes For Blind and Through-Hole Applications.
Contact Morse Cutting Tools For Assistance.

Titanium Nitride (TiN) Coating results in an extremely hard surface with high lubricity for increased tool life. Improved thread quality, reduced torque and increased tapping speeds for greater productivity.

Titanium Carbonitride (TiCN) Coating is harder than TiN coating for more abrasive materials but has a lower temperature resistance.

Titanium Aluminum Nitride (TiAlN) Coating is especially recommended for applications generating higher temperatures.

Thread Forming HPT High Performance Taps

DIN Length

Machine Screw — Bottoming Style

Taraud à haut rendement

Machuelo de alto rendimiento

SIZE	TPI		PITCH DIA. LIMIT	THREAD LENGTH	NECK LENGTH	OAL	NO. OF LUBE GROOVES	BRIGHT	TiN COATED	TiCN COATED	TiAlN COATED
	UNC	UNF						EDP NO.	EDP NO.	EDP NO.	EDP NO.
4	40	—	H3	.433	.276	2.205	3	30750	94760	61540	61700
	40	—	H5	.433	.276	2.205	3	30751	94761	61541	61701
6	32	—	H3	.472	.315	2.205	3	30752	94762	61542	61702
	32	—	H5	.472	.315	2.205	3	30753	94763	61543	61703
8	32	—	H3	.512	.315	2.480	3	30754	94764	61544	61704
	32	—	H5	.512	.315	2.480	3	30755	94765	61545	61705
10	24	—	H4	.591	.393	2.756	4	30756	94766	61546	61706
	24	—	H6	.591	.393	2.756	4	30757	94767	61547	61707
	—	32	H4	.512	.472	2.756	4	30758	94768	61548	61708
	—	32	H6	.512	.472	2.756	4	30759	94769	61549	61709

CNC Reduced Neck Design

Fractional — Plug Style

SIZE	TPI		PITCH DIA. LIMIT	THREAD LENGTH	NECK LENGTH	OAL	NO. OF LUBE GROOVES	BRIGHT	TiN COATED	TiCN COATED	TiAlN COATED
	UNC	UNF						EDP NO.	EDP NO.	EDP NO.	EDP NO.
1/4	20	—	H4	.669	.512	3.150	4	30690	94700	61480	61640
	20	—	H6	.669	.512	3.150	4	30691	94701	61481	61641
	—	28	H4	.669	.512	3.150	4	30692	94702	61482	61642
	—	28	H6	.669	.512	3.150	4	30693	94703	61483	61643
5/16	18	—	H5	.787	.591	3.543	4	30694	94704	61484	61644
	18	—	H7	.787	.591	3.543	4	30695	94705	61485	61645
	—	24	H5	.669	.591	3.543	4	30696	94706	61486	61646
	—	24	H7	.669	.591	3.543	4	30697	94707	61487	61647
3/8	16	—	H5	.866	.669	3.937	4	30698	94708	61488	61648
	16	—	H7	.866	.669	3.937	4	30699	94709	61489	61649
	—	24	H5	.709	.826	3.937	4	30700	94710	61490	61650
	—	24	H7	.709	.826	3.937	4	30701	94711	61491	61651
7/16	14	—	H5	.866	*	3.937	4	30702	94712	61492	61652
	14	—	H8	.866	*	3.937	4	30703	94713	61493	61653
	—	20	H5	.866	*	3.937	4	30704	94714	61494	61654
	—	20	H8	.866	*	3.937	4	30705	94715	61495	61655
1/2	13	—	H5	.984	*	4.331	4	30706	94716	61496	61656
	13	—	H8	.984	*	4.331	4	30707	94717	61497	61657
	—	20	H5	.866	*	3.937	4	30708	94718	61498	61658
	—	20	H8	.866	*	3.937	4	30709	94719	61499	61659
5/8	11	—	H7	1.063	*	4.331	6	30710	94720	61500	61660
	11	—	H10	1.063	*	4.331	6	30711	94721	61501	61661
	—	18	H7	.866	*	3.937	6	30712	94722	61502	61662
	—	18	H10	.866	*	3.937	6	30713	94723	61503	61663
3/4	10	—	H7	1.181	*	4.921	6	30714	94724	61504	61664
	10	—	H10	1.181	*	4.921	6	30715	94725	61505	61665
	—	16	H7	.984	*	4.331	6	30716	94726	61506	61666
	—	16	H10	.984	*	4.331	6	30717	94727	61507	61667

* Reduced Shank (shank diameter is smaller than minor diameter)

HPT High Performance Taps

Thread Forming HPT High Performance Taps

Fractional — Bottoming Style

DIN Length

CNC Reduced Neck Design

Taraud à haut rendement

Machuelo de alto rendimiento

SIZE	TPI		PITCH DIA. LIMIT	THREAD LENGTH	NECK LENGTH	OAL	NO. OF LUBE GROOVES	BRIGHT	TIN COATED	TICN COATED	TIALN COATED
	UNC	UNF						EDP NO.	EDP NO.	EDP NO.	EDP NO.
1/4	20	—	H4	.669	.512	3.150	4	30770	94780	61560	61720
	20	—	H6	.669	.512	3.150	4	30771	94781	61561	61721
	—	28	H4	.669	.512	3.150	4	30772	94782	61562	61722
	—	28	H6	.669	.512	3.150	4	30773	94783	61563	61723
5/16	18	—	H5	.787	.591	3.543	4	30774	94784	61564	61724
	18	—	H7	.787	.591	3.543	4	30775	94785	61565	61725
	—	24	H5	.669	.591	3.543	4	30776	94786	61566	61726
	—	24	H7	.669	.591	3.543	4	30777	94787	61567	61727
3/8	16	—	H5	.866	.669	3.937	4	30778	94788	61568	61728
	16	—	H7	.866	.669	3.937	4	30779	94789	61569	61729
	—	24	H5	.709	.826	3.937	4	30780	94790	61570	61730
	—	24	H7	.709	.826	3.937	4	30781	94791	61571	61731
7/16	14	—	H5	.866	*	3.937	4	30782	94792	61572	61732
	14	—	H8	.866	*	3.937	4	30783	94793	61573	61733
	—	20	H5	.866	*	3.937	4	30784	94794	61574	61734
	—	20	H8	.866	*	3.937	4	30785	94795	61575	61735
1/2	13	—	H5	.984	*	4.331	4	30786	94796	61576	61736
	13	—	H8	.984	*	4.331	4	30787	94797	61577	61737
	—	20	H5	.866	*	3.937	4	30788	94798	61578	61738
	—	20	H8	.866	*	3.937	4	30789	94799	61579	61739
5/8	11	—	H7	1.063	*	4.331	6	30790	94800	61580	61740
	11	—	H10	1.063	*	4.331	6	30791	94801	61581	61741
	—	18	H7	.866	*	3.937	6	30792	94802	61582	61742
	—	18	H10	.866	*	3.937	6	30793	94803	61583	61743
3/4	10	—	H7	1.181	*	4.921	6	30794	94804	61584	61744
	10	—	H10	1.181	*	4.921	6	30795	94805	61585	61745
	—	16	H7	.984	*	4.331	6	30796	94806	61586	61746
	—	16	H10	.984	*	4.331	6	30797	94807	61587	61747

Metric — Plug Style

SIZE	PITCH	PITCH DIA. LIMIT	THREAD LENGTH MM	NECK LENGTH MM	OAL MM	NO. OF LUBE GROOVES	BRIGHT	TIN COATED	TICN COATED	TIALN COATED
							EDP NO.	EDP NO.	EDP NO.	EDP NO.
M4	0.7	D6	13	8	63	3	30730	94740	61520	61680
M5	0.8	D7	15	10	70	4	30731	94741	61521	61681
M6	1	D8	17	13	80	4	30732	94742	61522	61682
M8	1.25	D9	20	15	90	4	30733	94743	61523	61683
M10	1.5	D10	22	17	100	4	30734	94744	61524	61684
M12	1.75	D11	24	*	110	4	30735	94745	61525	61685
M14	2	D11	26	*	110	6	30736	94746	61526	61686
M16	2	D12	27	*	110	6	30737	94747	61527	61687
M20	2.5	D12	32	*	140	6	30738	94748	61528	61688

Metric — Bottoming Style

SIZE	PITCH	PITCH DIA. LIMIT	THREAD LENGTH MM	NECK LENGTH MM	OAL MM	NO. OF LUBE GROOVES	BRIGHT	TIN COATED	TICN COATED	TIALN COATED
							EDP NO.	EDP NO.	EDP NO.	EDP NO.
M4	0.7	D6	13	8	63	3	30810	94820	61600	61760
M5	0.8	D7	15	10	70	4	30811	94821	61601	61761
M6	1	D8	17	13	80	4	30812	94822	61602	61762
M8	1.25	D9	20	15	90	4	30813	94823	61603	61763
M10	1.5	D10	22	17	100	4	30814	94824	61604	61764
M12	1.75	D11	24	*	110	4	30815	94825	61605	61765
M14	2	D11	26	*	110	6	30816	94826	61606	61766
M16	2	D12	27	*	110	6	30817	94827	61607	61767
M20	2.5	D12	32	*	140	6	30818	94828	61608	61768

* Reduced Shank (shank diameter is smaller than minor diameter)