

HSS Taps



M42 COBALT TAPS

Fractional & Metric - Taps for Hardened Steel & Iron

Type 24-RNC, METRIC 32-RNC Bright Finish • Type 24-RNCN, METRIC 32-RNCN Titanium Nitride

- M-42 plug taps for tapping through holes in mold steel and hardened steel with Rockwell C hardness between C30 – C45.
- Titanium coated M-42 plug taps last twice as long as uncoated taps, titanium coatings lubricity produces smooth threads. Use in cast iron, brass, bronze, armor plate and hard plastics.



Bright Part #	Titanium Nitride Part #	Thread Size	Thread Length	Overall Length	Shank Diameter	Drill Bit Size	# of Flutes	Pitch Limit Diameter	Qty per Pack
10032	13782	2-56	7/16"	1-13/16"	0.1405	#51	2	H2	3
10052	13802	4-40	5/16"	1-7/8"	0.1405	#43	3	H2	3
10072	13822	5-40	5/16"	1-15/16"	0.1405	#38	3	H2	3
10092	13842	6-32	3/8"	2"	0.1405	#36	3	H3	3
10112	13862	8-32	3/8"	2-1/8"	0.1675	#29	3	H3	3
10132	13882	10-24	1/2"	2-3/8"	0.1935	#25	3	H3	3
10142	13892	10-32	1/2"	2-3/8"	0.1935	#21	3	H3	3
10152	13902	12-24	1/2"	2-1/2"	0.2195	#16	2	H3	3
10172	13922	1/4-20	5/8"	2-1/2"	0.2545	#7	3	H3	3
10182	13932	1/4-28	5/8"	2-1/2"	0.2545	#3	3	H3	3
10192	13942	5/16-18	11/16"	2-23/32"	0.3175	F	4	H3	3
10202	13952	5/16-24	11/16"	2-23/32"	0.3175	I	4	H3	3
10212	13962	3/8-16	3/4"	2-15/16"	0.3805	5/16"	4	H3	3
10222	13972	3/8-24	3/4"	2-15/16"	0.3805	Q	4	H3	3
10232	13982	7/16-14	7/8"	3-5/32"	0.3225	U	4	H3	3
10242	13992	7/16-20	7/8"	3-5/32"	0.3225	25/64"	4	H3	3
10272	14002	1/2-13	15/16"	3-3/8"	0.3665	27/64"	4	H3	3
10282	14012	1/2-20	15/16"	3-3/8"	0.3665	29/64"	4	H3	3
10292	14042	5/8-11	1-3/32"	3-13/16"	0.4795	17/32"	4	H3	1
10302	14052	5/8-18	1-3/32"	3-13/16"	0.4795	37/64"	4	H3	1
10312	14062	3/4-10	1-7/32"	4-1/4"	0.5895	21/32"	4	H3	1
10322	14072	3/4-16	1-7/32"	4-1/4"	0.5895	11/16"	4	H3	1
10352	14102	1"-8	2-1/2"	5-1/8"	0.7995	7/8"	3	H3	1

Bright Part #	Titanium Nitride Part #	Thread Size	Thread Length	Overall Length	Shank Diameter	Drill Bit Size	# of Flutes	PD Limit	Qty per Pack
85342	85344	2.0-0.40	.440	1.800	.1405	1.60	3	D3	3
85362	85364	2.5-0.45	.500	1.869	.1405	2.05	3	D3	3
85372	85374	3.0-0.50	.310	2.008	.1405	2.50	3	D3	3
85392	85394	4.0-0.70	.380	2.218	.1675	3.30	3	D4	3
85412	85414	5.0-0.80	.500	2.480	.1935	4.20	3	D4	3
85422	85424	6.0-1.00	.630	2.629	.2545	5.00	3	D5	3
85432	85434	7.0-1.00	.650	2.876	.3175	6.00	4	D5	3
85442	85444	8.0-1.00	.688	2.885	.3175	7.00	4	D5	3
85452	85454	8.0-1.25	.688	2.885	.3175	H	4	D5	3
85462	85464	10.0-1.25	.750	3.141	.3805	11/32"	4	D5	3
85472	85474	10.0-1.50	.750	3.141	.3805	8.50	4	D6	3
85492	85494	12.0-1.75	.940	3.380	.3665	Y	4	D6	3
85502	85504	14.0-1.50	1.000	3.590	.4285	12.50	4	D6	3
85512	85514	14.0-2.00	1.000	3.590	.4285	12.00	4	D7	1
85522	85524	16.0-1.50	1.094	3.810	.4795	14.50	4	D6	1
85532	85534	16.0-2.00	1.094	3.810	.4795	14.00	4	D7	1
85542	85544	18.0-1.50	1.168	4.030	.5415	16.50	4	D6	1
85552	85554	18.0-2.50	1.168	4.030	.5415	15.50	4	D7	1
85562	85564	20.0-2.50	1.334	4.470	.6515	17.50	4	D7	1
85572	85574	20.0-1.50	1.334	4.470	.6515	18.50	4	D6	1

HSS STRAIGHT FLUTE HAND TAPS

Machine Screw / Fractional - Ground Thread Types 23-UB, 24-UB & 25-UB Gold Oxide Types 23-UBN, 24-UBN & 25-UBN Titanium Nitride Types 23, 24 & 25 Bright Finish

- The most common style of tap
- Can be used by hand or for tapping under power
- Versatile taps for use in general machine tapping or CNC tapping applications
- Use for through hole or blind hole tapping.



Type 23-UB - Taper

Gold Oxide - low temperature stress relief that enhances lubricity, reduces friction and increases tap toughness.



Type 24-UBN - Plug

Titanium nitride - increases wear resistance by producing a higher surface hardness and exceptional lubricity resulting in longer tool life.



Type 25 - Bottoming Bright Finish

23-UB Taper Part #	24-UB Plug Part #	25-UB Bottoming Part #	23-UBN Taper Part #	24-UBN Plug Part #	25-UBN Bottoming Part #	23 Taper Part #	24 Plug Part #	25 Bottoming Part #	Size	# of Flutes	H Limit	Qty. per/pack
72701	72702	72703	45981	45982	45983	71661	71662	71663	0-80	2	H1	3
72711	72712	72713	45991	45992	45993	71671	71672	71673	0-80	2	H2	3
72721	72722	72723	44101	44102	44103	71681	71682	71683	1-64	2	H1	3
72731	72732	72733	44111	44112	44113	71691	71692	71693	1-64	2	H2	3
72741	72742	72743	44121	44122	44123	71701	71702	71703	1-72	2	H1	3

Red Bold = most common used Taps

Continued Next Page

HSS STRAIGHT FLUTE HAND TAPS

Machine Screw / Fractional - Ground Thread - Ultra Bor Super Premium
Types 23-UB, 24-UB & 25-UB Gold Oxide **Types 23-UBN, 24-UBN & 25-UBN Titanium Nitride**
Types 23, 24 & 25 Bright Finish

- The most common style of tap
- Can be used by hand or for tapping under power
- Versatile taps for use in general machine tapping or CNC tapping applications
- Use for through hole or blind hole tapping



Type 23-UB - Taper

Gold Oxide - low temperature stress relief that enhances lubricity, reduces friction and increases tap toughness.



Type 24-UBN - Plug

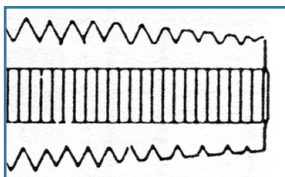
Titanium nitride- increases wear resistance by producing a higher surface hardness and exceptional lubricity resulting in longer tool life.



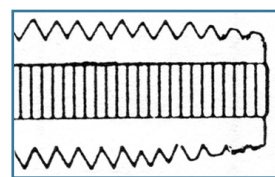
Type 25 - Bottoming
Bright Finish

Red Bold = most common used Taps

23-UB Taper Part#	24-UB Plug Part #	25-UB Bottoming Part #	23-UBN Taper Part #	24-UBN Plug Part #	25-UBN Bottoming Part #	23 Taper Part #	24 Plug Part #	25 Bottoming Part #	Size	# of Flutes	H Limit	QTY per/pack
72751	72752	72753	44131	44132	44133	71711	71712	71713	1-72	2	H2	3
72761	72762	72763	44141	44142	44143	71721	71722	71723	2-56	2	H1	3
60660	60661	60662	46001	46002	46003	71231	71232	71233	2-56	2	H2	3
72771	72772	72773	44151	44152	44153	71731	71732	71733	2-64	3	H2	3
72781	72782	72783	44161	44162	44163	71741	71742	71743	3-48	3	H1	3
60680	60681	60682	46011	46012	46013	71251	71252	71253	3-48	3	H2	3
60710	60711	60712	45931	45932	45933	71751	71752	71753	3-56	3	H2	3
60700	60701	60702	46021	46022	46023	61001	61002	61003	4-40	3	H2	3
60720	60721	60722	45951	45952	45953	61011	61012	61013	4-48	3	H2	3
72791	72792	72793	44191	44192	44193	71761	71762	71763	5-40	3	H1	3
60730	60731	60732	46031	46032	46033	61021	61022	61023	5-40	3	H2	3
60740	60741	60742	45971	45972	45973	61031	61032	61033	5-44	3	H2	3
72801	72802	72803	44211	44212	44213	71771	71772	71773	6-32	3	H1	3
72811	72812	72813	44221	44222	44223	71781	71782	71783	6-32	3	H2	3
60750	60751	60752	46041	46042	46043	61041	61042	61043	6-32	3	H3	3
72821	72822	72823	44231	44232	44233	71791	71792	71793	6-40	3	H1	3
60760	60761	60762	46051	46052	46053	61051	61052	61053	6-40	3	H2	3
72831	72832	72833	44241	44242	44243	71801	71802	71803	8-32	4	H1	3
72841	72842	72843	44251	44252	44253	71811	71812	71813	8-32	4	H2	3
60770	60771	60772	46061	46062	46063	61061	61062	61063	8-32	4	H3	3
60780	60781	60782	46071	46072	46073	61071	61072	61073	8-36	4	H2	3
72851	72852	72853	44261	44262	44263	71821	71822	71823	10-24	4	H1	3
72861	72862	72863	44271	44272	44273	71831	71832	71833	10-24	4	H2	3
60790	60791	60792	46081	46082	46083	61081	61082	61083	10-24	4	H3	3
72871	72872	72873	44281	44282	44283	71841	71842	71843	10-32	4	H1	3
72881	72882	72883	44291	44292	44293	71851	71852	71853	10-32	4	H2	3
60800	60801	60802	46091	46092	46093	61091	61092	61093	10-32	4	H3	3
60810	60811	60812	46101	46102	46103	61101	61102	61103	12-24	4	H3	3
60820	60821	60822	46111	46112	46113	61111	61112	61113	12-28	4	H3	3
72891	72892	72893	44301	44302	44303	71861	71862	71863	1/4-20	4	H1	3
72901	72902	72903	44311	44312	44313	71871	71872	71873	1/4-20	4	H2	3
60830	60831	60832	46121	46122	46123	61121	61122	61123	1/4-20	4	H3	3
72911	72912	72913	44321	44322	44323	71881	71882	71883	1/4-20	4	H5	3
72921	72922	72923	44331	44332	44333	71891	71892	71893	1/4-28	4	H1	3
72931	72932	72933	44341	44342	44343	71901	71902	71903	1/4-28	4	H2	3
60840	60841	60842	46131	46132	46133	61131	61132	61133	1/4-28	4	H3	3
72941	72942	72943	44351	44352	44353	71911	71912	71913	1/4-28	4	H4	3
72951	72952	72953	44361	44362	44363	71921	71922	71923	5/16-18	4	H2	3
60850	60851	60852	46141	46142	46143	61141	61142	61143	5/16-18	4	H3	3
72961	72962	72963	44371	44372	44373	71931	71932	71933	5/16-18	4	H5	3
72971	72972	72973	44381	44382	44383	71941	71942	71943	5/16-24	4	H2	3
60860	60861	60862	46151	46152	46153	61151	61152	61153	5/16-24	4	H3	3



TAPER
Type 23-UB, 23-UBN, 23
Type 31-UB, 31-UBN, 31
 Eight to ten threads chamfered for easy thread starting in tough materials.



PLUG
Type 24-UB, 24-UBN, 24
Type 32-UB, 32-UBN, 32
 Three to five threads chamfered. For general use when tapping into the bottom of the hole is not critical. (This is the most widely used style.)

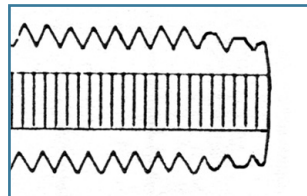
HSS STRAIGHT FLUTE HAND TAPS

Machine Screw / Fractional - Ground Thread - Magnum Super Premium

Types 23-AG, 24-AG & 25-AG Gold Oxide Types 23-AGN, 24-AGN & 25-AGN Titanium Nitride Types 23, 24 & 25 Bright Finish

Red Bold = most common used Taps

23-UB Taper Part #	24-UB Plug Part #	25-UB Bottoming Part #	23-UBN Taper Part #	24-UBN Plug Part #	25-UBN Bottoming Part #	23 Taper Part #	24 Plug Part #	25 Bottoming Part #	Size	# of Flutes	H Limit	QTY per/pack
72981	72982	72983	44391	44392	44393	71951	71952	71953	5/16-24	4	H4	3
72991	72992	72993	44401	44402	44403	71961	71962	71963	3/8-16	4	H1	3
73001	73002	73003	44411	44412	44413	71971	71972	71973	3/8-16	4	H2	3
60870	60871	60872	46161	46162	46163	61161	61162	61163	3/8-16	4	H3	3
73011	73012	73013	44421	44422	44423	71981	71982	71983	3/8-16	4	H5	3
73021	73022	73023	44431	44432	44433	71991	71992	71993	3/8-24	4	H1	3
73031	73032	73033	44441	44442	44443	72001	72002	72003	3/8-24	4	H2	3
60880	60881	60882	46171	46172	46173	61171	61172	61173	3/8-24	4	H3	3
73041	73042	73043	44451	44452	44453	72011	72012	72013	3/8-24	4	H4	3
60890	60891	60892	46181	46182	46183	61181	61182	61183	7/16-14	4	H3	3
73051	73052	73053	44461	44462	44463	72021	72022	72023	7/16-14	4	H5	3
60900	60901	60902	46191	46192	46193	61191	61192	61193	7/16-20	4	H3	3
73061	73062	73063	44471	44472	44473	72031	72032	72033	7/16-20	4	H5	3
73071	73072	73073	44481	44482	44483	72041	72042	72043	1/2-13	4	H1	3
60910	60911	60912	46201	46202	46203	61201	61202	61203	1/2-13	4	H3	3
73081	73082	73083	44491	44492	44493	72051	72052	72053	1/2-13	4	H5	3
73091	73092	73093	44501	44502	44503	72061	72062	72063	1/2-20	4	H1	3
60920	60921	60922	46211	46212	46213	61211	61212	61213	1/2-20	4	H3	3
73101	73102	73103	44511	44512	44513	72071	72072	72073	1/2-20	4	H5	3
60950	60951	60952	46221	46222	46223	55011	55012	55013	9/16-12	4	H3	1
73111	73112	73113	44521	44522	44523	72081	72082	72083	9/16-12	4	H5	1
73121	73122	73123	44531	44532	44533	72091	72092	72093	9/16-18	4	H2	1
60960	60961	60962	46231	46232	46233	55021	55022	55023	9/16-18	4	H3	1
73131	73132	73133	44541	44542	44543	72101	72102	72103	9/16-18	4	H5	1
73141	73142	73143	44551	44552	44553	72111	72112	72113	5/8-11	4	H2	1
60970	60971	60972	46241	46242	46243	55031	55032	55033	5/8-11	4	H3	1
73151	73152	73153	44561	44562	44563	72121	72122	72123	5/8-11	4	H5	1
73161	73162	73163	44571	44572	44573	72131	72132	72133	5/8-18	4	H2	1
60980	60981	60982	46251	46252	46253	55041	55042	55043	5/8-18	4	H3	1
73171	73172	73173	44581	44582	44583	72141	72142	72143	5/8-18	4	H5	1
73181	73182	73183	44591	44592	44593	72151	72152	72153	11/16-11	4	H3	1
73191	73192	73193	44601	44602	44603	72161	72162	72163	11/16-16	4	H3	1
60990	60991	60992	46261	46262	46263	55051	55052	55053	3/4-10	4	H3	1
73201	73202	73203	44611	44612	44613	72171	72172	72173	3/4-10	4	H5	1
73211	73212	73213	44621	44622	44623	72181	72182	72183	3/4-16	4	H1	1
73221	73222	73223	44631	44632	44633	72191	72192	72193	3/4-16	4	H2	1
61400	61401	61402	46271	46272	46273	55061	55062	55063	3/4-16	4	H3	1
73231	73232	73233	44641	44642	44643	72201	72202	72203	3/4-16	4	H5	1
61410	61411	61412	46281	46282	46283	55071	55072	55073	7/8-9	4	H4	1
73241	73242	73243	44651	44652	44653	72211	72212	72213	7/8-9	4	H6	1
73251	73252	73253	44661	44662	44663	72221	72222	72223	7/8-14	4	H2	1
61420	61421	61422	46291	46292	46293	55081	55082	55083	7/8-14	4	H4	1
73261	73262	73263	44671	44672	44673	72231	72232	72233	7/8-14	4	H6	1
61430	61431	61432	46301	46302	46303	55091	55092	55093	1"-8	4	H4	1
73271	73272	73273	44681	44682	44683	72241	72242	72243	1"-8	4	H6	1
61440	61441	61442	46311	46312	46313	55101	55102	55103	1"-12	4	H4	1
27570	27571	27572	46321	46322	46323	55111	55112	55113	1"-14	4	H4	1
61450	61451	61452	46331	46332	46333	55121	55122	55123	1" 1/8-7	4	H4	1
61460	61461	61462	46341	46342	46343	55131	55132	55133	1" 1/8-12	4	H4	1
61470	61471	61472	46351	46352	46353	55141	55142	55143	1" 1/4-7	4	H4	1
61480	61481	61482	46361	46362	46363	55151	55152	55153	1" 1/4-12	6	H4	1
61490	61491	61492	46371	46372	46373	55161	55162	55163	1" 3/8-6	4	H4	1
61500	61501	61502	46381	46382	46383	55171	55172	55173	1" 3/8-12	6	H4	1
61510	61511	61512	46391	46392	46393	55181	55182	55183	1" 1/2-6	4	H4	1
61520	61521	61522	46401	46402	46403	55191	55192	55193	1" 1/2-12	6	H4	1



BOTTOMING

Type 25-UB, 25-UBN, 25
Type 33-UB, 33-UBN, 33

One- and - two threads chamfered. To use after threads have been started for tapping to the bottom of a hole.