GUN® Taps

For Through Holes in General Machining Applications

GUN® Taps for Through Holes

Spiral Point

P Steel
M Stainless Steel
K Cast Iron
N Non-Ferrous

Features/Benefits:

- GUN taps, the most efficient taps for through holes, "shoot" chips ahead of the cutting action to reduce loading and clogging the flutes
- steam oxide finish gives added wear life in ferrous materials
- high-performance TiN, TiN+CrC/C, and TiCN coatings enable higher tapping speeds for increased productivity; alternate tap coatings are available as stock modifications

Application Information:

- use for through hole tapping in a wide variety of materials:
  - steel (SH50, TiCN, TiN, TiN+CrC/C)
  - stainless steel < 30 Rc (SH50, TiN+CrC/C, TiCN, TiN)
  - non-ferrous materials (uncoated)
  - cast iron and ductile iron (uncoated, SH50, TiCN, TiN)

Coating Information:

TiCN (Titanium Carbonitride) coated taps:

- enables higher tapping speeds for increased productivity and excellent tool life
- high wear resistance and extended tap wear life
- in abrasive materials, higher wear resistance and longer tap wear life than TiN
- appropriate for a wide array of ferrous (steel) materials

TiN (Titanium Nitride) coated taps:

- provides increased tap wear life and improved product thread finish
- higher tapping speeds are possible
- appropriate for a wide array of ferrous materials

TiAlN (Titanium Aluminum Nitride coated taps:

- offers improved wear life and thread finish
- especially useful under high temperature conditions
- use with caution in non-ferrous materials

TiN+CrC/C (Titanium Nitride plus Chromium Carbide Carbon) coated taps:

- combines wear resistance of TiN with a lubricous top layer of chromium carbide carbon
- proprietary coating for both ferrous and non-ferrous materials
- effective in stainless steel (304, 316 only), and aluminum

SH50 steam oxide treated taps:

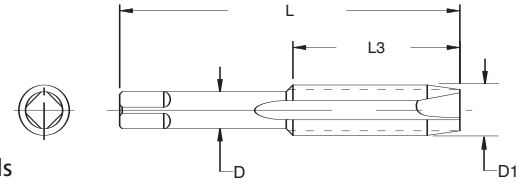
- SH50 oxide treatment provides increased lubricity; applied primarily to prevent galling and loading in steels
- ideal for tapping a wide array of ferrous materials



GUN® taps "shoot" chips ahead of the cutting action.



For Through Hole Tapping



D1 = Tap Size | *D* = Shank Diameter
L = Overall Length | *L3* = Thread Length

GUN® Taps for Through Holes

Spiral Point, Plug Chamfer 3 to 5 Pitches

- Series No. 5301TC TiCN Coated
- Series No. 2301 TiN Coated
- Series No. 5301S SH50 Oxide Coated
- Series No. 5301 Uncoated

MACHINE SCREW

D1	NC/UNC/ UNJC	NF/UNF/ UNJF	L	L3	D	Flutes	Pitch Dia. Limit	EDP Number TiCN	TiN	SH50 Oxide	Uncoated
0	-	80	1.63	.313	.141	2	H1	—	—	—	13201
0	-	80	1.63	.313	.141	2	H2	19011	19001	13111	13202
1	64	-	1.69	.375	.141	2	H1	—	—	—	13203
1	64	-	1.69	.375	.141	2	H2	—	19770	—	13204
1	-	72	1.69	.375	.141	2	H1	—	—	—	13205
1	-	72	1.69	.375	.141	2	H2	—	19771	13115	13206
2	56	-	1.75	.438	.141	2	H1	—	—	—	13207
2	56	-	1.75	.438	.141	2	H2	19012	19006	13117	13208
2	-	64	1.75	.438	.141	2	H2	—	19772	—	13211
3	48	-	1.81	.500	.141	2	H2	—	19007	13119	13213
3	-	56	1.81	.500	.141	2	H1	—	—	—	13214
3	-	56	1.81	.500	.141	2	H2	—	19773	13121	13215

Machine screw size GUN taps are continued on the next page.

(continued)

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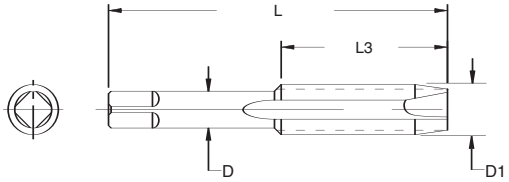
Alternate Coatings Available.
(Full package quantities only)


For Through Hole Tapping



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D = Shank Diameter
L = Overall Length
L3 = Thread Length

MACHINE SCREW

D1	NC/UNC/ UNJC	NF/UNF/ UNJF	L	L3	D	Flutes	Pitch Dia. Limit	EDP Number TiCN	TiN	SH50 Oxide	Uncoated
4	-	36	1.88	.563	.141	2	H2	—	—	13126	13217
4	40	-	1.88	.563	.141	2	H1	—	—	—	13218
4	40	-	1.88	.563	.141	2	H2	19013	19016	13123	13219
4	-	48	1.88	.563	.141	2	H2	—	19774	—	13223
5	40	-	1.94	.625	.141	2	H1	—	—	—	13224
5	40	-	1.94	.625	.141	2	H2	19014	19021	13128	13225
5	44	44	1.94	.625	.141	2	H2	—	19775	—	13229
6	32	-	2.00	.688	.141	2	H1	—	19777	—	13230
6	32	-	2.00	.688	.141	2	H2	—	19031	13131	13231
6	32	-	2.00	.688	.141	2	H3	19032	19036	13132	13232
6	32	-	2.00	.688	.141	2	H7	—	19779	—	13235
6	-	40	2.00	.688	.141	2	H2	19037	19038	13134	13237
8	32	-	2.13	.750	.168	2	H1	—	19780	—	13240
8	32	-	2.13	.750	.168	2	H2	—	19039	13136	13241
8	32	-	2.13	.750	.168	2	H3	19040	19046	13137	13242
8	32	-	2.13	.750	.168	2	H7	—	19781	—	13244
8	-	36	2.13	.750	.168	2	H2	—	19782	13139	13246
10	24	-	2.38	.875	.194	2	H1	—	19783	—	13249
10	24	-	2.38	.875	.194	2	H2	—	19784	13141	13250
10	24	-	2.38	.875	.194	2	H3	19015	19056	13142	13251
10	24	-	2.38	.875	.194	2	H7	—	19785	—	13252
10	-	32	2.38	.875	.194	2	H1	—	19786	—	13255
10	-	32	2.38	.875	.194	2	H2	—	19069	13145	13256
10	-	32	2.38	.875	.194	2	H3	19072	19071	13146	13257
10	-	32	2.38	.875	.194	2	H7	—	19787	—	13260
12	24	-	2.38	.938	.220	2	H3	19017	19076	13148	13262
12	-	28	2.38	.938	.220	2	H3	—	19788	13149	13264

FRACTIONAL

D1	NC/UNC/ UNJC	NF/UNF/ UNJF	L	L3	D	Flutes	Pitch Dia. Limit	EDP Number TiCN	TiN	SH50 Oxide	Uncoated
1/4	20	-	2.50	1.000	.255	2	H1	—	19789	—	13268
1/4	20	-	2.50	1.000	.255	2	H2	—	19079	13151	13269
1/4	20	-	2.50	1.000	.255	2	H3	19485	19086	13152	13270
1/4	20	-	2.50	1.000	.255	2	H5	—	19096	—	13273
1/4	20	-	2.50	1.000	.255	3	H3	19081	19088	13154	13272
1/4	20	-	2.50	1.000	.255	3	H5	—	—	—	13274
1/4	-	28	2.50	1.000	.255	2	H1	—	—	—	13277
1/4	-	28	2.50	1.000	.255	2	H2	—	19790	13157	13278
1/4	-	28	2.50	1.000	.255	2	H3	—	19101	13158	13280
1/4	-	28	2.50	1.000	.255	2	H4	—	19793	—	13282
1/4	-	28	2.50	1.000	.255	3	H2	19018	19791	—	13279
1/4	-	28	2.50	1.000	.255	3	H4	—	19794	—	13283

Fractional size GUN taps are continued on the next page.

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(continued)

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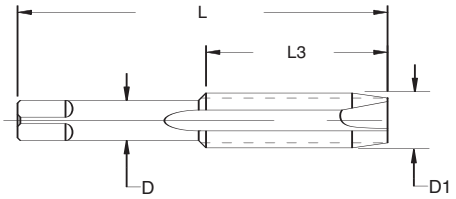

D1 *= Tap Size* ***D*** *= Shank Diameter*
L *= Overall Length* ***L3*** *= Thread Length*

Alternate Coatings Available.
(Full package quantities only)



FRACTIONAL

D1	NC/UNC/ UNJC	NF/UNF/ UNJF	L	L3	D	Flutes	Pitch Dia. Limit	EDP Number TiCN	TiN	SH50 Oxide	Uncoated
5/16	18	-	2.72	1.125	.318	2	H1	—	19795	—	13289
5/16	18	-	2.72	1.125	.318	2	H2	—	19796	—	13290
5/16	18	-	2.72	1.125	.318	2	H3	—	19106	13164	13291
5/16	18	-	2.72	1.125	.318	2	H5	—	19797	—	13294
5/16	18	-	2.72	1.125	.318	3	H3	19019	—	13166	13293
5/16	18	-	2.72	1.125	.318	3	H5	—	19798	—	13295
5/16	-	24	2.72	1.125	.318	2	H1	—	—	—	13297
5/16	-	24	2.72	1.125	.318	2	H2	—	19799	13169	13298
5/16	-	24	2.72	1.125	.318	2	H3	—	19108	13170	13300
5/16	-	24	2.72	1.125	.318	2	H4	—	—	—	13302
5/16	-	24	2.72	1.125	.318	3	H4	19020	—	—	13303
3/8	16	-	2.94	1.250	.381	3	H1	—	—	—	13305
3/8	16	-	2.94	1.250	.381	3	H2	—	19800	—	13306
3/8	16	-	2.94	1.250	.381	3	H3	19022	19111	13176	13307
3/8	16	-	2.94	1.250	.381	3	H5	—	19801	—	13309
3/8	-	24	2.94	1.250	.381	3	H1	—	—	—	13311
3/8	-	24	2.94	1.250	.381	3	H2	—	19802	—	13312
3/8	-	24	2.94	1.250	.381	3	H3	19023	19112	13180	13313
3/8	-	24	2.94	1.250	.381	3	H4	—	19803	—	13315
7/16	14	-	3.16	1.438	.323	3	H2	—	—	—	13318
7/16	14	-	3.16	1.438	.323	3	H3	19024	19113	13183	13319
7/16	14	-	3.16	1.438	.323	3	H5	—	19804	—	13320
7/16	-	20	3.16	1.438	.323	3	H3	19025	19114	13185	13324
7/16	-	20	3.16	1.438	.323	3	H5	—	19805	—	13325
1/2	13	-	3.38	1.656	.367	3	H2	—	19806	—	13327
1/2	13	-	3.38	1.656	.367	3	H3	19026	19116	13189	13328
1/2	13	-	3.38	1.656	.367	3	H5	—	19807	—	13330
1/2	-	20	3.38	1.656	.367	3	H1	—	—	—	13332
1/2	-	20	3.38	1.656	.367	3	H2	—	—	—	13333
1/2	-	20	3.38	1.656	.367	3	H3	19027	19117	13193	13334
1/2	-	20	3.38	1.656	.367	3	H5	—	19808	—	13336
5/8	11	-	3.81	1.813	.480	3	H3	19028	19118	13195	13339
5/8	11	-	3.81	1.813	.480	3	H5	—	—	—	13340
5/8	-	18	3.81	1.813	.480	3	H3	—	19809	13199	13342
3/4	10	-	4.25	2.000	.590	3	H3	19029	19119	13197	13343
3/4	10	-	4.25	2.000	.590	3	H5	—	19810	—	13344

GUN® taps for 3B class of fit are suitable for UNJ Aerospace internal threading applications.

Greenfield LIGHTNING® SERVICE Available