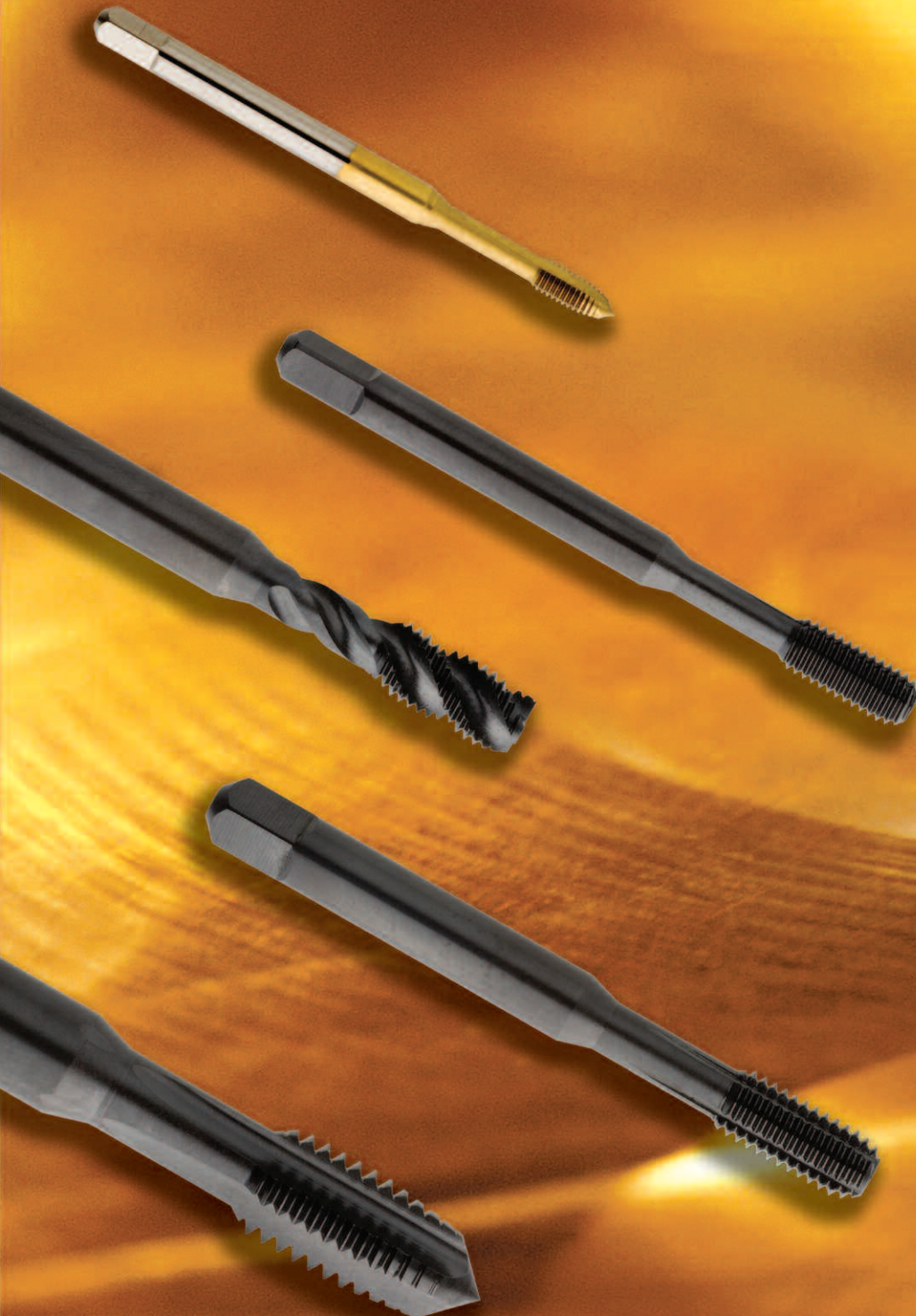


**Gold**  
High Performance  
Taps

American Made  
American Owned  
Since 1881



**BRUBAKER TOOL**<sup>TM</sup>



## HIGH PERFORMANCE TAPS

**B**rubaker Tool has been manufacturing taps for over 125 years. Our company can trace its roots to specialized taps for the steam locomotive industry. This foundation in rail-road taps led to the production of quality general purpose and special order taps. Over the past several years Brubaker has gained strength and expanded its presence in high performance, special application taps. Based upon these successes we are proud to introduce our Gold High Performance Tap Series. Our Gold Series will enable us to provide our valued customers with high performance taps as a catalog offering with off-the-shelf availability.

Our Brubaker Gold, High Performance Taps are yet another indication of our commitment to quality, growth and the support of American manufacturing.

Whether your manufacturing needs call for a standard tap, high performance tap, special geometry, special or standard end mill, we can meet all of your round tool cutting needs. Please call us and let us show you why Brubaker has remained a leading supplier to American industry for over 125 years.

American Made  
American Owned  
Since 1881

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BRUBAKER TOOL  
200 FRONT STREET, MILLERSBURG, PA 17061

717-692-2113 • Fax 717-692-4995

Toll Free 800-522-8665

Customer Service 800-522-8665 • Technical Support 800-522-8665

[www.brubakertool.com](http://www.brubakertool.com)

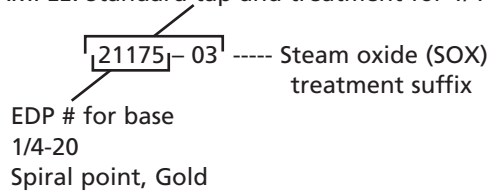
To find a distributor, go to [www.brubakertool.com](http://www.brubakertool.com) and click on the "Distributor Search" button or simply contact customer service.

## HIGH PERFORMANCE TAPS

### Tap Product Numbering System

To simplify our numbering system, our catalog layout and your ordering, we are using an EDP number and a suffix to identify coated or surface treated taps. In all cases, the five digit EDP number by itself will refer to a base part number. For all Gold series taps, we strongly recommend a surface treatment or coating. Some series are not available bright. In order to get a tap with a coating or surface treatment you must specify a five digit EDP number plus a two digit suffix. For series where we recommend a specific treatment, that treatment will appear with the EDP number and suffix as the standard offering in the series. To order a tap with a surface treatment or coating other than the standard, simply substitute the desired two digit suffix in place of the standard two digit suffix. Available treatments appear in the top right corner of each series.







EXAMPLE: Standard tap and treatment for 1/4-20 Spiral Point, Gold



If you want a treatment other than the standard for this series...

- 21175 – 03      1) Begin with the standard offering  
 21175 –            2) Drop the standard suffix for the series  
     – 88            3) Consult the table for the desired suffix , in this case Titanium Nitride (TiN) 88  
                           instead of the steam oxide (SOX) 03  
 21175 – 88      4) Add the desired treatment suffix in place of the series standard treatment suffix

### Surface Treatments and Coatings

TREATMENT	ABBREVIATION	SUFFIX	COLOR CODE
Nitride	N	02	
Steam Oxide	SOX	03	
Nitride Steam Oxide	NiSOX	23	
Titanium Nitride	TiN	88	
Titanium Carbonitride	TiCN	89	
Chromium Carbide	CrC	90	

\*Bright Taps (00) are only available for series where indicated in the table at the top right hand corner of the series page.

### LIMITED WARRANTY





Brubaker Tool warrants to original equipment manufacturers, distributors and industrial and commercial users of its products that each new product which it manufactures or supplies is free from defects in material and workmanship. Its sole obligation under this warranty is limited to furnishing, without additional charge, a replacement for, or, at its option, repairing or issuing credit for any such product which shall, within one year from the date of sale by Brubaker Tool, be returned freight prepaid to Brubaker Tool and which, upon inspection, is determined by Brubaker Tool to be defective in materials or workmanship. The provisions of this warranty shall not apply to any product which has been subjected to misuse, improper operating conditions, or which has been repaired or altered, if such would adversely affect performance of the product. Complete written information with respect to all such matters must be furnished to Brubaker Tool as a prerequisite to its consideration of any claim or complaint under this warranty.

The repair, replacement or issuance of credit for parts provided for in this warranty constitutes the Buyer's exclusive remedy. The warranty is in lieu of all other warranties, express or implied, including any implied warranty of merchantability or fitness for a particular purpose. Brubaker Tool has no liability or responsibility on any claim of any kind, whether in contract, tort or otherwise, for any loss or damage arising out of, connected with, or resulting from the manufacture, sale, delivery or use of any product sold hereunder, in excess of the cost of replacement or repair as provided herein. In no event shall Brubaker Tool be liable for any special, incidental or consequential damages. Brubaker Tool makes no other warranty, express or implied, except as set forth above; and neither assumes nor authorizes any other person or entity to assume for it any other obligation or liability in connection with any of its products.

#### WARNING

Any cutting tool may break or shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment at all times in the vicinity of use. Wet or dry grinding of cutting tools produces potentially hazardous dusts or mists; to avoid adverse health effects, use adequate ventilation and read the material Safety Data Sheet for further applicable tool material or grade before grinding.

# HIGH PERFORMANCE TAPS

SURFACE TREATMENTS	
	SOX .....03
	NiSOX .....23
	TiN .....88
	TiCN .....89

## SPIRAL POINT GOLD, Fractional

- HSS-V Premium Vanadium High Speed Steel
- Available only with Plug Chamfer.
- **Steam Oxide (03) is the standard Treatment/Coating for this series.**
- If a different Treatment/Coating is desired, it must be specified at the time of order. Change the suffix of the part number accordingly. (XXXXX-03) 23 = Nit. & SOX, 88 = Tin, 89 = TiCN
- Allow up to 1 week for non-standard Treatments/Coatings other than Steam Oxide.



Size	NC	NF	No. of Flutes	GH2	GH3	GH4	GH5	GH6	GH7	List Price	*Coated Price	Drill Size	% Thrd.
4	40	-	2	21149-03	21150-03	21151-03	21152-03			\$12.00	\$13.66	43	71%
6	32	-	2	21153-03	21154-03	21155-03	21156-03	21157-03	21158-03	\$9.98	\$11.35	2.75mm	73%
8	32	-	3	21159-03	21160-03	21161-03	21162-03	21163-03	21164-03	\$9.98	\$11.35	3.4mm	74%
10	24	-	3		21165-03	21166-03	21167-03		21168-03	\$9.98	\$11.35	25	75%
10	-	32	3	21169-03	21170-03	21171-03	21172-03	21173-03	21174-03	\$9.98	\$11.35	21	76%
1/4	20	-	3		21175-03		21220-03		21227-03	\$11.08	\$12.60	7	75%
1/4	-	28	3		21228-03	21229-03	21230-03	21231-03	21232-03	\$11.08	\$12.60	3	80%
5/16	18	-	3		21233-03		21234-03		21235-03	\$12.43	\$14.13	F	77%
5/16	-	24	3		21236-03	21237-03	21238-03	21239-03	21240-03	\$12.43	\$14.13	I	75%
3/8	16	-	3		21241-03		21242-03		21243-03	\$14.02	\$15.94	5/16	77%
3/8	-	24	3		21244-03	21245-03	21246-03	19999-03	21247-03	\$14.02	\$15.94	Q	79%
7/16	14	-	3		21250-03		21251-03		21254-03	\$18.23	\$20.73	9.3mm	77%
7/16	-	20	3		21255-03		21256-03		21257-03	\$18.23	\$20.73	25/64	72%
1/2	13	-	3		21262-03		21263-03		21264-03	\$21.08	\$23.97	27/64	78%
1/2	-	20	3		21270-03		21271-03		21272-03	\$21.08	\$23.97	29/64	72%
5/8	11	-	3		21273-03		21274-03		21275-03	\$38.21	\$43.46	17/32	79%
5/8	-	18	3		21276-03		21277-03		21278-03	\$38.21	\$43.46	14.5mm	75%
3/4	10	-	3		21279-03		21280-03		21281-03	\$59.94	\$68.17	21/32	72%
3/4	-	16	3		21282-03		21283-03		21284-03	\$59.94	\$68.17	11/16	77%
7/8	9	-	4			21285-03				\$89.03	\$101.26	49/64	76%
7/8	-	14	4			21286-03				\$93.49	\$106.32	13/16	67%
1"	8	-	4			21287-03				\$118.58	\$134.87	7/8	77%





\* Coated Prices are applied to TiN and TiCN Coatings

## Material Application Guidelines: Spiral Point, Gold

Work Material	Aluminum		Cast Iron		Steel			Alloy Steel	Stainless Steel			High Nickel	Titanium	Die Steel	Hardened Steel	
	Wrought	Casting	Grey	Ductile, Malleable	Low Carbon	Medium Carbon	High Carbon		300 Series	400 Series	PH Series				< 35HrC	35 - 45 HrC
Best Suited						○	○	○	●	○	●			○	○	
Cutting Speed						40 - 60 SFM	30 - 50 SFM	30 - 50 SFM	40 - 60 SFM	30 - 50 SFM	30 - 50 SFM			30 - 50 SFM	30 - 50 SFM	
Mtl. Examples	6160, 7075				1008,1010, 1018	1035, 1045	1050, 1055	4140, 4340	303, 304, 316		17-4PH, 15-5	Inconel, Monel	6Al4V	D2, S7		

BEST ●  
GOOD ○

# HIGH PERFORMANCE TAPS

SURFACE TREATMENTS	
	SOX .....03
	NiSOX .....23
	TiN .....88
	TiCN .....89

## SPIRAL POINT GOLD, *Metric*

- HSS-V Premium Vanadium High Speed Steel
- Available only with Plug Chamfer.
- **Steam Oxide (03) is the standard Treatment/Coating for this series.**
- If a different Treatment/Coating is desired, it must be specified at the time of order. Change the suffix of the part number accordingly. (XXXXX-03) 23 = Nit. & SOX, 88 = Tin, 89 = TiCN
- Allow up to 1 week for non-standard Treatments/Coatings other than Steam Oxide.



Size	Pitch (mm)	No. of Flutes	GD3	GD4	GD5	GD6	GD7	List Price	*Coated Price	Drill Size	% Thrd.
M3	0.50	2	21288-03					\$15.57	\$17.22	2.5mm	77%
M3.5	0.60	2		21289-03				\$13.59	\$14.96	2.9mm	77%
M4	0.70	3		21290-03				\$13.59	\$14.96	3.3mm	77%
M5	0.80	3		21291-03				\$13.59	\$14.96	4.2mm	77%
M6	1.00	3			21292-03			\$13.59	\$15.11	5.0mm	77%
M7	1.00	3			21293-03			\$15.57	\$17.27	6.0mm	77%
M8	1.00	3			21294-03			\$15.57	\$17.27	7.0mm	77%
M8	1.25	3			21295-03			\$15.57	\$17.27	17/64	77%
M10	1.25	3			21296-03			\$21.63	\$23.55	8.75mm	77%
M10	1.50	3				21297-03		\$21.63	\$23.55	8.5mm	77%
M12	1.25	3			21298-03			\$25.95	\$28.84	27/64	79%
M12	1.75	3				21299-03		\$25.95	\$28.84	13/32	74%
M14	1.50	3				21300-03		\$38.65	\$43.89	12.5mm	77%
M14	2.00	3					21302-03	\$38.65	\$43.89	12.0mm	77%
M16	1.50	3				21303-03		\$46.86	\$52.11	14.5mm	77%
M16	2.00	3					21305-03	\$46.86	\$52.11	14.0mm	77%
M18	1.50	3				21306-03		\$65.72	\$73.96	16.5mm	77%
M18	2.50	3					21308-03	\$65.72	\$73.96	15.5mm	77%
M20	2.50	3					21309-03	\$89.69	\$101.92	11/16	78%





\* Coated Prices are applied to TiN and TiCN Coatings

## Material Application Guidelines: Spiral Point, Gold

Work Material	Aluminum		Cast Iron		Steel			Alloy Steel	Stainless Steel			High Nickel	Titanium	Die Steel	Hardened Steel	
	Wrought	Casting	Grey	Ductile, Malleable	Low Carbon	Medium Carbon	High Carbon		300 Series	400 Series	PH Series				< 35HRC	35 - 45 HRC
Best Suited						○	○	○	●	○	●			○	○	
Cutting Speed						40 - 60 SFM	30 - 50 SFM	30 - 50 SFM	40 - 60 SFM	30 - 50 SFM	30 - 50 SFM			30 - 50 SFM	30 - 50 SFM	
Mtl. Examples	6160, 7075				1008, 1010, 1018	1035, 1045	1050, 1055	4140, 4340	303, 304, 316		17-4PH, 15-5	Inconel, Monel	6Al4V	D2, S7		

**BEST** ●  
**GOOD** ○

## HIGH PERFORMANCE TAPS

SURFACE TREATMENTS	
	SOX .....03
	NiSOX .....23
	TiN .....88
	TiCN .....89

### SPIRAL FLUTE GOLD, Fractional

- HSS-V Premium Vanadium High Speed Steel
- Available only with Modified Bottom Chamfer / Male Center Removed.
- **Steam Oxide (03) is the standard Treatment/Coating for this series.**
- If a different Treatment/Coating is desired, it must be specified at the time of order. Change the suffix of the part number accordingly. (XXXXX-03) 23 = Nit. & SOX, 88 = Tin, 89 = TiCN
- Allow up to 1 week for non-standard Treatments/Coatings other than Steam Oxide.



Size	NC	NF	No. of Flutes	GH2	GH3	GH4	GH5	GH6	GH7	List Price	*Coated Price	Drill Size	% Thrd.
4	40	-	2	21311-03	21312-03	21314-03	21315-03			\$18.01	\$19.66	43	71%
6	32	-	3	21317-03	21318-03	21320-03	21321-03	21323-03	21324-03	\$14.62	\$16.00	2.75mm	73%
8	32	-	3	21326-03	21327-03	21329-03	21330-03	21332-03	21333-03	\$14.62	\$16.00	3.4mm	74%
10	24	-	3		21335-03	21336-03	21338-03		21339-03	\$14.62	\$16.00	25	75%
10	-	32	3	21340-03	21341-03	21342-03	21343-03	21344-03	21345-03	\$14.62	\$16.00	21	76%
1/4	20	-	3		21346-03		21347-03		21348-03	\$15.88	\$17.40	7	75%
1/4	-	28	3		21349-03	21350-03	21351-03	21352-03	21353-03	\$15.88	\$17.40	3	80%
5/16	18	-	3		21354-03		21355-03		21356-03	\$19.50	\$21.20	F	77%
5/16	-	24	3		21357-03	21358-03	21359-03	21360-03	21361-03	\$19.50	\$21.20	I	75%
3/8	16	-	3		21362-03		21363-03		21364-03	\$22.67	\$24.59	5/16	77%
3/8	-	24	3		21365-03	21366-03	21367-03	21368-03	21369-03	\$22.67	\$24.59	Q	79%
7/16	14	-	3		21370-03		21371-03		21372-03	\$33.87	\$36.37	9.3mm	77%
7/16	-	20	3		21373-03		21374-03		21375-03	\$33.87	\$36.37	25/64	72%
1/2	13	-	3		21376-03		21377-03		21378-03	\$39.92	\$42.81	27/64	78%
1/2	-	20	3		21379-03		21380-03		21381-03	\$39.92	\$42.81	29/64	72%
5/8	11	-	4		21382-03		21383-03		21384-03	\$70.31	\$75.56	17/32	79%
5/8	-	18	4		21385-03		21386-03		21387-03	\$70.31	\$75.56	14.5mm	75%
3/4	10	-	4		21388-03		21389-03		21390-03	\$90.42	\$98.66	21/32	72%
3/4	-	16	4		21391-03		21392-03		21393-03	\$90.42	\$98.66	11/16	77%
7/8	9	-	4			21394-03				\$125.55	\$137.78	49/64	76%
7/8	-	14	4			21395-03				\$131.43	\$144.27	13/16	67%
1"	8	-	4			21396-03				\$158.92	\$175.21	7/8	77%





\* Coated Prices are applied to TiN and TiCN Coatings

### Material Application Guidelines: Spiral Flute, Gold

Work Material	Aluminum		Cast Iron		Steel			Alloy Steel	Stainless Steel			High Nickel	Titanium	Die Steel	Hardened Steel	
	Wrought	Casting	Grey	Ductile, Malleable	Low Carbon	Medium Carbon	High Carbon		300 Series	400 Series	PH Series				< 35HrC	35 - 45 Hrc
Best Suited						○		○	●	○	●			○	○	
Cutting Speed						30 - 45 SFM		20 - 40 SFM	30 - 45 SFM	20 - 40 SFM	20 - 40 SFM			20 - 40 SFM	20 - 40 SFM	
Mtl. Examples	6160, 7075				1008,1010, 1018	1035, 1045	1050, 1055	4140, 4340	303, 304, 316		17-4PH, 15-5	Inconel, Monel	6Al4V	D2, S7		

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# HIGH PERFORMANCE TAPS

SURFACE TREATMENTS	
	SOX .....03
	NiSOX .....23
	TiN .....88
	TiCN .....89

## SPIRAL FLUTE GOLD, *Metric*

- HSS-V Premium Vanadium High Speed Steel
- Available only with Modified Bottom Chamfer / Male Center Removed.
- **Steam Oxide (03) is the standard Treatment/Coating for this series.**
- If a different Treatment/Coating is desired, it must be specified at the time of order. Change the suffix of the part number accordingly. (XXXXX-03) 23 = Nit. & SOX, 88 = Tin, 89 = TiCN
- Allow up to 1 week for non-standard Treatments/Coatings other than Steam Oxide.



Size	Pitch (mm)	No. of Flutes	GD3	GD4	GD5	GD6	GD7	List Price	*Coated Price	Drill Size	% Thrd.
M3	0.50	3	21397-03					\$22.48	\$24.13	2.5mm	77%
M3.5	0.60	3		21398-03				\$20.75	\$22.13	2.9mm	77%
M4	0.70	3		21399-03				\$20.75	\$22.13	3.3mm	77%
M5	0.80	3		21406-03				\$20.75	\$22.13	4.2mm	77%
M6	1.00	3			21407-03			\$20.75	\$22.27	5.0mm	77%
M7	1.00	3			21408-03			\$22.48	\$24.18	6.0mm	77%
M8	1.00	3			21410-03			\$22.48	\$24.18	7.0mm	77%
M8	1.25	3			21411-03			\$22.48	\$24.18	17/64	77%
M10	1.25	3			21448-03			\$31.72	\$33.64	8.75mm	77%
M10	1.50	3				21449-03		\$31.72	\$33.64	8.5mm	77%
M12	1.25	3			21450-03			\$38.21	\$41.10	27/64	79%
M12	1.75	3				21451-03		\$38.21	\$41.10	13/32	74%
M14	1.50	4				21452-03		\$57.67	\$62.92	12.5mm	77%
M14	2.00	4					21453-03	\$57.67	\$62.92	12.0mm	77%
M16	1.50	4				21454-03		\$67.68	\$72.93	14.5mm	77%
M16	2.00	4					21455-03	\$67.68	\$72.93	14.0mm	77%
M18	1.50	4				21456-03		\$98.00	\$106.24	16.5mm	77%
M18	2.50	4					21457-03	\$98.00	\$106.24	15.5mm	77%
M20	2.50	4					21458-03	\$128.28	\$140.51	11/16	78%

\* Coated Prices are applied to TiN and TiCN Coatings

## Material Application Guidelines: Spiral Flute, Gold







Work Material	Aluminum		Cast Iron		Steel			Alloy Steel	Stainless Steel			High Nickel	Titanium	Die Steel	Hardened Steel	
	Wrought	Casting	Grey	Ductile, Malleable	Low Carbon	Medium Carbon	High Carbon		300 Series	400 Series	PH Series				< 35HRC	35 - 45 HRC
Best Suited						○		○	●	○	●			○	○	
Cutting Speed						30 - 45 SFM		20 - 40 SFM	30 - 45 SFM	20 - 40 SFM	20 - 40 SFM			20 - 40 SFM	20 - 40 SFM	
Mtl. Examples	6160, 7075				1008, 1010, 1018	1035, 1045	1050, 1055	4140, 4340	303, 304, 316		17-4PH, 15-5	Inconel, Monel	6Al4V	D2, S7		

BEST ●  
GOOD ○

## HIGH PERFORMANCE TAPS

### FORMING TAPS GOLD, Fractional

- HSS-V Premium Vanadium High Speed Steel
- Available with Plug and Bottom Chamfers.
- Multiple Lube Grooves, sizes No. 6 (M3.5) and larger.
- **Steam Oxide (03) is the standard Treatment/Coating for this series.**
- If a different Treatment/Coating is desired, it must be specified at the time of order. Change the suffix of the part number accordingly. (XXXXX-03) 00 = Bright, 23 = Nit. & SOX, 88 = Tin, 89 = TiCN, 90 = CrC
- Allow up to 1 week for non-standard Treatments/Coatings other than Steam Oxide.

SURFACE TREATMENTS	
	Bright .....00
	SOX .....03
	NiSOX .....23
	TiN .....88
	TiCN .....89
	CrC .....90



Size	NC	NF	Taper Length	No. Grv.	GH2	GH3	GH4	GH5	GH6	GH7	GH8	GH9	GH10	List Price	*Coated Price	Drill Size	% Thrd.
0	80	-	Bottom	0	21459-03	21460-03								\$12.83	\$14.48	1.35mm	85%
0	80	-	Plug	0	21461-03	21462-03		21463-03		21464-03				\$12.83	\$14.48	1.35mm	85%
2	56	-	Bottom	0	21465-03	21466-03								\$12.73	\$14.38	1.95mm	79%
2	56	-	Plug	0	21467-03	21468-03		21469-03		21470-03				\$12.73	\$14.38	1.95mm	79%
4	40	-	Bottom	0		21471-03		21472-03		21473-03				\$11.56	\$13.21	39	77%
4	40	-	Plug	0		21474-03		21475-03		21476-03				\$11.56	\$13.21	39	77%
5	40	-	Bottom	0		21477-03		21478-03		21479-03				\$11.56	\$13.21	33	74%
5	40	-	Plug	0		21480-03		21481-03		21482-03				\$11.56	\$13.21	33	74%
6	32	-	Bottom	2		21483-03		21484-03		21485-03		21486-03		\$9.46	\$10.84	3.1mm	79%
6	32	-	Plug	2		21487-03		21488-03		21489-03		21490-03		\$9.46	\$10.84	3.1mm	79%
8	32	-	Bottom	2		21491-03		21492-03		21493-03		21494-03		\$9.46	\$10.84	3.75mm	81%
8	32	-	Plug	2		21495-03		21496-03		21497-03		21498-03		\$9.46	\$10.84	3.75mm	81%
10	24	-	Bottom	2		21499-03	21536-03	21537-03	21538-03	21539-03		21540-03		\$9.46	\$10.84	18	76%
10	24	-	Plug	2		21541-03	21542-03	21543-03	21544-03	21545-03		21546-03		\$9.46	\$10.84	18	76%
10	-	32	Bottom	2		21547-03	21548-03	21549-03	21550-03	21551-03		21552-03		\$9.46	\$10.84	17	84%
10	-	32	Plug	2		21553-03	21554-03	21555-03	21556-03	21557-03		21558-03		\$9.46	\$10.84	17	84%
1/4	20	-	Bottom	4		21559-03	21560-03	21561-03	21562-03	21563-03		21564-03		\$9.66	\$11.18	5.7mm	79%
1/4	20	-	Plug	4		21565-03	21566-03	21567-03	21568-03	21569-03		21570-03		\$9.66	\$11.18	5.7mm	79%
1/4	-	28	Bottom	4		21571-03	21572-03	21573-03	21574-03	21575-03		21576-03		\$9.66	\$11.18	5.9mm	76%
1/4	-	28	Plug	4		21577-03	21578-03	21579-03	21580-03	21581-03		21582-03		\$9.66	\$11.18	5.9mm	76%
5/16	18	-	Bottom	4		21583-03		21584-03		21585-03		21586-03		\$11.19	\$12.89	7.25mm	75%
5/16	18	-	Plug	4		21587-03		21588-03		21589-03		21590-03		\$11.19	\$12.89	7.25mm	75%
5/16	-	24	Bottom	4		21591-03		21592-03		21593-03		21594-03		\$11.19	\$12.89	7.4mm	78%
5/16	-	24	Plug	4		21595-03		21596-03		21597-03		21598-03		\$11.19	\$12.89	7.4mm	78%
3/8	16	-	Bottom	4		21599-03		21600-03		21602-03		21604-03		\$15.25	\$17.17	8.75mm	75%
3/8	16	-	Plug	4		21606-03		21608-03		21610-03		21612-03		\$15.25	\$17.17	8.75mm	75%
3/8	-	24	Bottom	4		21614-03		21616-03		21618-03		21620-03		\$15.25	\$17.17	9.0mm	76%
3/8	-	24	Plug	4		21622-03		21734-03		21735-03		21736-03		\$15.25	\$17.17	9.0mm	76%
7/16	14	-	Bottom	6				21737-03		21738-03	21739-03	21740-03		\$23.36	\$25.86	10.2mm	77%
7/16	14	-	Plug	6				21741-03		21742-03	21743-03	21744-03		\$23.36	\$25.86	10.2mm	77%
7/16	-	20	Bottom	6				21745-03		21746-03	21747-03	21748-03		\$23.36	\$25.86	Z	75%
7/16	-	20	Plug	6				21749-03		21750-03	21751-03	21752-03		\$23.36	\$25.86	Z	75%
1/2	13	-	Bottom	6				21753-03		21754-03	21755-03	21756-03		\$26.71	\$29.60	11.8mm	71%
1/2	13	-	Plug	6				21757-03		21758-03	21759-03	21760-03		\$26.71	\$29.60	11.8mm	71%
1/2	-	20	Bottom	6				21761-03		21762-03	21763-03	21764-03		\$26.71	\$29.60	12.0mm	85%
1/2	-	20	Plug	6				21765-03		21766-03	21767-03	21768-03		\$26.71	\$29.60	12.0mm	85%
5/8	11	-	Bottom	6				21769-03		21770-03		21771-03	21772-03	\$41.95	\$47.20	37/64	79%
5/8	11	-	Plug	6				21773-03		21774-03		21775-03	21776-03	\$41.95	\$47.20	37/64	79%
5/8	-	18	Bottom	6				21777-03		21778-03		21779-03	21780-03	\$41.95	\$47.20	19/32	87%
5/8	-	18	Plug	6				21781-03		21782-03		21783-03	21784-03	\$41.95	\$47.20	19/32	87%
3/4	10	-	Bottom	6				21785-03		21786-03		21787-03	21788-03	\$52.22	\$60.46	45/64	72%
3/4	10	-	Plug	6				21789-03		21790-03		21791-03	21792-03	\$52.22	\$60.46	45/64	72%
3/4	-	16	Bottom	6				21793-03		21794-03		21795-03	21796-03	\$52.22	\$60.46	23/32	77%
3/4	-	16	Plug	6				21797-03		21798-03		21799-03	21822-03	\$52.22	\$60.46	23/32	77%

\* Coated Prices are applied to TiN, TiCN and CrC Coatings

### Material Application Guidelines: Forming Taps, Gold







Work Material	Aluminum		Cast Iron		Steel			Alloy Steel	Stainless Steel			High Nickel	Titanium	Die Steel	Hardened Steel	
	Wrought	Casting	Grey	Ductile, Malleable	Low Carbon	Medium Carbon	High Carbon		300 Series	400 Series	PH Series				< 35HRC	35 - 45 HRC
Best Suited	●	●			●	●		○	●	○	○			○		
Cutting Speed	120 - 150 SFM	120 - 150 SFM			60 - 90 SFM	60 - 90 SFM		60 - 90 SFM	45 - 75 SFM	45 - 75 SFM	45 - 75 SFM			45 - 75 SFM		
Mtl. Examples	6160, 7075				1008,1010, 1018	1035, 1045	1050, 1055	4140, 4340	303, 304, 316		17-4PH, 15-5	Inconel, Monel	6Al4V	D2, S7		

BEST ●  
GOOD ○

# HIGH PERFORMANCE TAPS

## FORMING TAPS GOLD, *Metric*

- HSS-V Premium Vanadium High Speed Steel
- Available with Plug and Bottom Chamfers.
- Multiple Lube Grooves, sizes No. 6 (M3.5) and larger.
- **Steam Oxide (03) is the standard Treatment/Coating for this series.**
- If a different Treatment/Coating is desired, it must be specified at the time of order. Change the suffix of the part number accordingly. (XXXXX-03) 00 = Bright, 23 = Nit. & SOX, 88 = Tin, 89 = TiCN, 90 = CrC
- Allow up to 1 week for non-standard Treatments/Coatings other than Steam Oxide.

SURFACE TREATMENTS	
	Bright . . . . .00
	SOX . . . . .03
	NiSOX . . . . .23
	TiN . . . . .88
	TiCN . . . . .89
	CrC . . . . .90



Size	Pitch (mm)	Chamfer	No. Grv.	GD3	GD4	GD5	GD6	GD7	GD8	GD9	GD10	List Price	*Coated Price	Drill Size	% Thrd.
M3	0.50	Bottom	0	21823-03		21824-03						\$11.49	\$13.14	2.75mm	77%
M3	0.50	Plug	0	21825-03		21826-03						\$11.49	\$13.14	2.75mm	77%
M3.5	0.60	Bottom	2		21827-03		21828-03					\$9.66	\$11.04	3.2mm	77%
M3.5	0.60	Plug	2		21829-03		21830-03					\$9.66	\$11.04	3.2mm	77%
M4	0.70	Bottom	2		21831-03		21832-03					\$9.66	\$11.04	27	75%
M4	0.70	Plug	2		21833-03		21834-03					\$9.66	\$11.04	27	75%
M5	0.80	Bottom	2		21835-03			21836-03				\$9.66	\$11.04	4.6mm	77%
M5	0.80	Plug	2		21837-03			21838-03				\$9.66	\$11.04	4.6mm	77%
M6	1.00	Bottom	4			21839-03			21840-03			\$10.24	\$11.76	5.5mm	77%
M6	1.00	Plug	4			21841-03			21842-03			\$10.24	\$11.76	5.5mm	77%
M8	1.25	Bottom	4				21843-03			21844-03		\$11.01	\$12.71	7.4mm	74%
M8	1.25	Plug	4				21845-03			21846-03		\$11.01	\$12.71	7.4mm	74%
M10	1.50	Bottom	4				21847-03			21848-03		\$20.23	\$22.15	9.25mm	77%
M10	1.50	Plug	4				21849-03			21850-03		\$20.23	\$22.15	9.25mm	77%
M12	1.75	Bottom	6					21851-03			21852-03	\$26.71	\$29.60	11.2mm	70%
M12	1.75	Plug	6					21853-03			21854-03	\$26.71	\$29.60	11.2mm	70%






\* Coated Prices are applied to TiN, TiCN and CrC Coatings

## Material Application Guidelines: Forming Taps, Gold

Work Material	Aluminum		Cast Iron		Steel			Alloy Steel	Stainless Steel			High Nickel	Titanium	Die Steel	Hardened Steel	
	Wrought	Casting	Grey	Ductile, Malleable	Low Carbon	Medium Carbon	High Carbon		300 Series	400 Series	PH Series				< 35Hrc	35 - 45 Hrc
Best Suited	●	●			●	●		○	●	○	○			○		
Cutting Speed	120 - 150 SFM	120 - 150 SFM			60 - 90 SFM	60 - 90 SFM		60 - 90 SFM	45 - 75 SFM	45 - 75 SFM	45 - 75 SFM			45 - 75 SFM		
Mtl. Examples	6160, 7075				1008, 1010, 1018	1035, 1045	1050, 1055	4140, 4340	303, 304, 316		17-4PH, 15-5	Inconel, Monel	6Al4V	D2, S7		

BEST ●  
GOOD ○

# HIGH PERFORMANCE TAPS

SURFACE TREATMENTS	
	Bright . . . . .00
	N . . . . .02
	TiN . . . . .88
	TiCN . . . . .89
	CrC . . . . .90

## STRAIGHT FLUTE DIE CAST GOLD, Fractional

- HSS-V Premium Vanadium High Speed Steel
- Available with Plug and Bottom Chamfers.
- **Nitride (02) is the standard Treatment/Coating for this series.**
- If a different Treatment/Coating is desired, it must be specified at the time of order. Change the suffix of the part number accordingly.  
(XXXXX-02) 00 = Bright, 88 = Tin, 89 = TiCN, 90 = CrC
- Allow up to 1 week for non-standard Treatments/Coatings other than Nitride.



Size	NC	NF	No. of Flutes	Chamfer	GH2	GH3	GH5	List Price	Coated* Price	Drill Size	% Thrd.
4	40	-	3	Plug	21855-02			\$10.75	\$12.40	43	71%
4	40	-	3	Bottom	21856-02			\$10.75	\$12.40	43	71%
6	32	-	3	Plug		21857-02		\$8.85	\$10.23	2.75mm	73%
6	32	-	3	Bottom		21858-02		\$8.85	\$10.23	2.75mm	73%
8	32	-	3	Plug		21859-02		\$8.85	\$10.23	3.4mm	74%
8	32	-	3	Bottom		21860-02		\$8.85	\$10.23	3.4mm	74%
10	24	-	3	Plug		21861-02		\$8.85	\$10.23	25	75%
10	24	-	3	Bottom		21862-02		\$8.85	\$10.23	25	75%
10	-	32	3	Plug		21863-02		\$8.85	\$10.23	21	76%
10	-	32	3	Bottom		21864-02		\$8.85	\$10.23	21	76%
1/4	20	-	3	Plug		21865-02	21866-02	\$9.90	\$11.42	7	75%
1/4	20	-	3	Bottom		21867-02	21868-02	\$9.90	\$11.42	7	75%
1/4	-	28	3	Plug		21869-02		\$9.90	\$11.42	3	80%
1/4	-	28	3	Bottom		21870-02		\$9.90	\$11.42	3	80%
5/16	18	-	4	Plug		21871-02	21872-02	\$11.10	\$12.80	F	77%
5/16	18	-	4	Bottom		21873-02	21874-02	\$11.10	\$12.80	F	77%
5/16	-	24	4	Plug		21875-02		\$11.10	\$12.80	I	75%
5/16	-	24	4	Bottom		21876-02		\$11.10	\$12.80	I	75%
3/8	16	-	4	Plug		21877-02	21878-02	\$12.50	\$14.42	5/16	77%
3/8	16	-	4	Bottom		21879-02	21880-02	\$12.50	\$14.42	5/16	77%
3/8	-	24	4	Plug		21881-02		\$12.50	\$14.42	Q	79%
3/8	-	24	4	Bottom		21882-02		\$12.50	\$14.42	Q	79%
7/16	14	-	4	Plug		21883-02		\$16.27	\$18.77	9.3mm	77%
7/16	14	-	4	Bottom		21884-02		\$16.27	\$18.77	9.3mm	77%
7/16	-	20	4	Plug		21885-02		\$16.27	\$18.77	25/64	72%
7/16	-	20	4	Bottom		21886-02		\$16.27	\$18.77	25/64	72%
1/2	13	-	4	Plug		21887-02		\$18.74	\$21.63	27/64	78%
1/2	13	-	4	Bottom		21888-02		\$18.74	\$21.63	27/64	78%
1/2	-	20	4	Plug		21889-02		\$18.74	\$21.63	29/64	72%
1/2	-	20	4	Bottom		21890-02		\$18.74	\$21.63	29/64	72%






\* Coated Prices are applied to TiN, TiCN and CrC Coatings

## Material Application Guidelines: Straight Flute Die Cast, Gold

Work Material	Aluminum		Cast Iron		Steel			Alloy Steel	Stainless Steel			High Nickel	Titanium	Die Steel	Hardened Steel	
	Wrought	Casting	Grey	Ductile, Malleable	Low Carbon	Medium Carbon	High Carbon		300 Series	400 Series	PH Series				< 35HrC	35 - 45 Hrc
Best Suited	●	●														
Cutting Speed	80 - 100 SFM	80 - 100 SFM														
Mtl. Examples	6160, 7075				1008,1010, 1018	1035, 1045	1050, 1055	4140, 4340	303, 304, 316		17-4PH, 15-5		Inconel, Monel	6Al4V	D2, S7	

**BEST** ●  
**GOOD** ○

# HIGH PERFORMANCE TAPS

SURFACE TREATMENTS	
	Bright ..... .00
	N ..... .02
	TiN ..... .88
	TiCN ..... .89
	CrC ..... .90

## STRAIGHT FLUTE DIE CAST GOLD, *Metric*

- HSS-V Premium Vanadium High Speed Steel
- Available with Plug and Bottom Chamfers.
- **Nitride (02) is the standard Treatment/Coating for this series.**
- If a different Treatment/Coating is desired, it must be specified at the time of order. Change the suffix of the part number accordingly.  
(XXXXX-02) 00 = Bright, 88 = Tin, 89 = TiCN, 90 = CrC
- Allow up to 1 week for non-standard Treatments/Coatings other than Nitride.



Size	Pitch (mm)	No. of Flutes	Chamfer	GD3	GD4	GD5	GD6	List Price	*Coated Price	Drill Size	% Thrd.
M3	0.50	3	Plug	21891-02				\$14.03	\$15.68	2.5mm	77%
M3	0.50	3	Bottom	21892-02				\$14.03	\$15.68	2.5mm	77%
M4	0.70	3	Plug		21893-02			\$12.50	\$13.88	3.3mm	77%
M4	0.70	3	Bottom		21894-02			\$12.50	\$13.88	3.3mm	77%
M5	0.80	3	Plug			21895-02		\$12.50	\$13.88	4.2mm	77%
M5	0.80	3	Bottom			21896-02		\$12.50	\$13.88	4.2mm	77%
M6	1.00	3	Plug			21897-02		\$12.50	\$14.02	5.0mm	77%
M6	1.00	3	Bottom			21898-02		\$12.50	\$14.02	5.0mm	77%
M8	1.25	4	Plug			21899-02		\$14.03	\$15.73	17/64	77%
M8	1.25	4	Bottom			21974-02		\$14.03	\$15.73	17/64	77%
M10	1.25	4	Plug			21975-02		\$19.59	\$21.51	8.75mm	77%
M10	1.25	4	Bottom			21976-02		\$19.59	\$21.51	8.75mm	77%
M10	1.50	4	Plug				21977-02	\$19.59	\$21.51	8.5mm	77%
M10	1.50	4	Bottom				21978-02	\$19.59	\$21.51	8.5mm	77%
M12	1.75	4	Plug				21979-02	\$23.35	\$26.24	13/32	74%
M12	1.75	4	Bottom				21980-02	\$23.35	\$26.24	13/32	74%

\* Coated Prices are applied to TiN, TiCN and CrC Coatings

## Material Application Guidelines: Straight Flute Die Cast, Gold

Work Material	Aluminum		Cast Iron		Steel			Alloy Steel	Stainless Steel			High Nickel	Titanium	Die Steel	Hardened Steel	
	Wrought	Casting	Grey	Ductile, Malleable	Low Carbon	Medium Carbon	High Carbon		300 Series	400 Series	PH Series				< 35HRC	35 - 45 HRC
Best Suited	●	●														
Cutting Speed	80 - 100 SFM	80 - 100 SFM														
Mtl. Examples	6160, 7075				1008, 1010, 1018	1035, 1045	1050, 1055	4140, 4340	303, 304, 316	17-4PH, 15-5		Inconel, Monel	6Al4V	D2, S7		

BEST ●  
GOOD ○



 **BRUBAKER TOOL™**

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62-22614 08/06

