

# HIGH PERFORMANCE TAPS-METRIC



## HSSE-V3 METRIC TAPS SPIRAL POINT & SPIRAL FLUTE Blue Ring

Designed for high-speed tapping applications. Developed to withstand the high stress and high heat associated with high-speed CNC production tapping. Features a unique free-cutting design with a special tempering and geometry which contributes to extra tool life.

### Applications and Features:

- Used in general machine tapping applications for mild carbon steels such as 1018, 1010, 1035, 1045, 1050 and 1065
- Up to 25 HRC

Nominal Size & Pitch	No. of Flutes	Thread Limits	OAL	Thread Length	SPIRAL POINT		SPIRAL FLUTE	
					Part Number	Price Each	Part Number	Price Each
M2 X .4	2	D3	1-3/4	.433	SOWA-119-750	\$14.16	-	-
M2.5 X .45	2	D3	1-13/16	.512	SOWA-119-751	\$11.36	-	-
M3 X .5	3	D3	1-15/16	.433	SOWA-119-752	\$9.60	SOWA-119-840	\$16.00
M3.5 X .6	3	D4	2	.512	SOWA-119-753	\$7.66	SOWA-119-841	\$16.00
M4 X .7	3	D4	2-1/8	.512	SOWA-119-754	\$7.66	SOWA-119-842	\$16.00
M4.5 X .75	3	D4	2-3/8	.512	SOWA-119-755	\$7.66	-	-
M5 X .8	3	D4	2-3/8	.512	SOWA-119-756	\$8.80	SOWA-119-843	\$16.00
M6 X 1	3	D5	2-1/2	.630	SOWA-119-757	\$8.80	SOWA-119-844	\$16.00
M7 X 1	3	D5	2-23/32	.630	SOWA-119-758	\$11.22	SOWA-119-845	\$19.72
M8 X 1	3	D5	2-23/32	.748	SOWA-119-759	\$11.22	SOWA-119-846	\$19.72
M8 X 1.25	3	D5	2-23/32	.748	SOWA-119-760	\$11.22	SOWA-119-847	\$19.72
M10 X 1.25	3	D5	2-15/16	.748	SOWA-119-761	\$16.28	SOWA-119-848	\$29.44
M10 X 1.5	3	D6	2-15/16	.748	SOWA-119-762	\$16.28	SOWA-119-849	\$29.44
M12 X 1.25	3	D5	3-3/8	.945	SOWA-119-763	\$20.33	SOWA-119-850	\$32.16
M12 X 1.75	3	D6	3-3/8	.945	SOWA-119-764	\$20.33	-	-
M14 X 1.5	3	D6	3-19/32	.984	SOWA-119-765	\$30.41	SOWA-119-852	\$43.16
M14 X 2	3	D7	3-19/32	.984	SOWA-119-766	\$30.41	SOWA-119-853	\$43.16
M16 X 1.5	3	D6	3-13/16	1.102	SOWA-119-767	\$35.82	SOWA-119-854	\$51.48
M16 X 2	3	D7	3-13/16	1.102	SOWA-119-768	\$35.82	SOWA-119-855	\$51.48
M18 X 1.5	3	D6	4-1/32	1.102	SOWA-119-769	\$44.53	SOWA-119-856	\$74.48
M18 X 2.5	3	D7	4-1/32	1.102	SOWA-119-770	\$44.53	SOWA-119-857	\$74.48
M20 X 1.5	3	D5	4-15/32	1.220	SOWA-119-771	\$57.20	SOWA-119-858	\$103.40
M20 X 2.5	3	D6	4-15/32	1.220	SOWA-119-772	\$57.20	SOWA-119-859	\$103.40



Spiral Point



Spiral Flute

## HSSE-V3 3% Vanadium Metric Taps Orange Ring

Designed for high-speed tapping applications. Developed to withstand the high stress and high heat associated with high-speed CNC production tapping. Features a unique free-cutting design with a special tempering and geometry which contributes to extra tool life.

### Applications and Features:

- Orange Ring:
- For **STAINLESS STEELS**
- Up to 35 HRC



Spiral Point



Spiral Flute



Nominal Size & Pitch	No. of Flutes	Thread Limits	OAL	Thread Length	SPIRAL POINT		SPIRAL FLUTE	
					Part Number	Price Each	Part Number	Price Each
M3 X .5	3	D3	1-15/16	.433	SOWA-124-955	\$10.56	SOWA-124-988	\$17.76
M4 X .7	3	D4	2-1/8	.512	SOWA-124-956	\$8.45	SOWA-124-989	\$17.76
M5 X .8	3	D4	2-3/8	.512	SOWA-124-957	\$9.86	SOWA-124-990	\$17.76
M6 X 1	3	D5	2-1/2	.630	SOWA-124-958	\$9.86	SOWA-124-991	\$17.76
M8 X 1.25	3	D5	2-23/32	.748	SOWA-124-959	\$12.41	SOWA-124-992	\$21.76
M10 X 1.25	3	D5	2-15/16	.748	SOWA-124-960	\$18.00	SOWA-124-993	\$32.40
M10 X 1.5	3	D6	2-15/16	.748	SOWA-124-961	\$18.00	SOWA-124-994	\$32.40
M12 X 1.75	3	D6	3-3/8	.945	SOWA-124-962	\$22.44	SOWA-124-995	\$35.52
M14 X 2	3	D6	3-19/32	.984	SOWA-124-897	\$33.53	SOWA-124-996	\$47.52
M16 X 2	3	D7	3-13/16	1.102	SOWA-124-899	\$39.42	SOWA-124-997	\$56.72
M18 X 2.5	3	D7	4-1/32	1.102	SOWA-124-901	\$53.06	SOWA-124-998	\$111.41
M20 X 2.5	3	D6	4-1/4	1.220	SOWA-124-903	\$63.54	SOWA-124-999	\$113.84
M22 X 2.5	3	D6	4-11/16	1.339	SOWA-124-905	\$75.06	SOWA-124-943	\$122.96
M24 X 3	3	D7	4-29/32	1.339	SOWA-124-907	\$99.35	SOWA-124-944	\$145.46

**Full Line Available!**  
Please call for more information.

## METRIC SPIRAL POINT HAND TAPS Standard HSS, Ground Thread Plug Chamfer

- Spiral point taps are used for through hole tapping
- Taper taps are designed for easier starts with less torque
- Reduced loading and clogging
- Additional metric sizes available
- Made in the USA



Size	Pitch Dia Limits	No. of Flutes	Thread Length	OAL	TAPER Part Number	Price Each
M1.6 X 0.35	D3	2	5/16	1-5/8	WE-31631-03	\$19.29
M2 X 0.4	D3	2	7/16	1-3/4	WE-31632-03	\$18.38
M2.5 X 0.45	D3	2	1/2	1-13/16	WE-31633-07	\$15.20
M3 X 0.5	D3	2	5/8	1-15/16	WE-31600-03	\$6.13
M3.5 X 0.6	D4	2	11/16	2	WE-31601-04	\$5.42
M4 X 0.7	D4	2	3/4	2-1/8	WE-31602-04	\$5.32
M4.5 X 0.75	D4	2	7/8	2-3/8	WE-31603-04	\$5.23
M5 X 0.8	D4	2	7/8	2-3/8	WE-31604-04	\$5.32
M6 X 1	D5	2	1	2-1/2	WE-31606-05	\$5.42
M7 X 1	D5	2	1-1/8	2-23/32	WE-31607-05	\$6.27
M8 X 1.25	D5	2	1-1/8	2-23/32	WE-31609-05	\$6.27
M10 X 1.5	D6	3	1-1/4	2-15/16	WE-31612-06	\$10.21
M12 X 1.75	D6	3	1-21/32	3-3/8	WE-31615-06	\$12.35

**Call Us Today For All Of Your Machine Tool Needs!**

CHUCK JAWS  
LATHE WORKHOLDING

MACHINE VISES  
MAGNETIC CHUCKS

RETENTION KNOBS  
ER, DA, TG COLLETS

TOOLHOLDERS  
TAP HOLDERS

INDEXABLE DRILLS  
TURNING & BORING

ENDMILLS, DRILLS  
TAPS & REAMERS

ABRASIVES  
MEASURING TOOLS

MRO & SAFETY  
FLAT STOCK/DRILL ROD

# HAND TAPS

C

## Hand Taps Fractional Sizes Standard HSS, Ground Thread

Hand taps are the most commonly used general purpose tap. They are recommended for tapping free machining steels, stainless steels, aluminum, zinc and ductile material. Hand taps are utilized in either through or blind hole tapping.

**When ordering, please add:**  
 "P" at end of part number for Plug  
 "B" at end of part number for Bottoming  
 "T" at end of part number for Taper

- FEATURES:**
- Plug: 3-5 thread chamfer is most versatile choice for through or blind holes
  - Taper: 7-10 thread chamfer have the longest standard chamfer for easier starts and less torque
  - Bottoming: 1-2 thread chamfer is designed for threading near the bottom of blind holes

### MASTER TAP DISPENSERS

- Holds most common NC/NF sizes from 1/4" to 1/2".
- Holds metric from 2.5 mm to 30 mm.
- Holds machine screw size 2-56 thru 12-28 taper, plug, bottom and spiral.
- Extruded vinyl drawer dividers protect taps.
- Top Drawer has 20 compartments.
- Second drawer has 78 compartments.
- Third drawer has 21 compartments.
- Fourth Drawer has 13 compartments.
- Stackable for lager inventories.
- Lockable.

**Dimensions:**  
 26"W X 12"D X 12-1/2" H.  
**Weight:** 46lbs.



Description	Part Number	Price
Master Series Tap Cabinet	HU-13585	\$426.55



Please specify "P" for Plug, "B" for Bottom or "T" for Taper at end of part number.

Size	Thread Limits	No. of Flutes	Standard		TiN Coated	
			Part Number	Price Each	Part Number	Price Each
1/4-20	H3	4	MH-77-1/4-20_	\$3.40	MH-77T-1/4-20_	\$8.30
1/4-28	H3	4	MH-77-1/4-28_	\$3.40	MH-77T-1/4-28_	\$8.30
5/16-18	H3	4	MH-77-5/16-18_	\$4.46	MH-77T-5/16-18_	\$10.74
5/16-24	H3	4	MH-77-5/16-24_	\$4.46	MH-77T-5/16-24_	\$10.74
3/8-16	H3	4	MH-77-3/8-16_	\$5.06	MH-77T-3/8-16_	\$11.36
3/8-24	H3	4	MH-77-3/8-24_	\$5.06	MH-77T-3/8-24_	\$11.36
7/16-14	H3	4	MH-77-7/16-14_	\$8.65	MH-77T-7/16-14_	\$15.11
7/16-20	H3	4	MH-77-7/16-20_	\$8.65	MH-77T-7/16-20_	\$15.11
1/2-13	H3	4	MH-77-1/2-13_	\$9.05	MH-77T-1/2-13_	\$15.69
1/2-20	H3	4	MH-77-1/2-20_	\$10.25	MH-77T-1/2-20_	\$16.93
9/16-12	H3	4	MH-77-9/16-12_	\$15.19	MH-77T-9/16-12_	\$27.42
9/16-18	H3	4	MH-77-9/16-18_	\$15.19	MH-77T-9/16-18_	\$27.42
5/8-11	H3	4	MH-77-5/8-11_	\$18.24	MH-77T-5/8-11_	\$30.81
5/8-18	H3	4	MH-77-5/8-18_	\$18.24	MH-77T-5/8-18_	\$30.81
11/16-11	H3	4	MH-77-11/16-11_	\$22.63	MH-77T11/16-11_	\$35.88
11/16-16	H3	4	MH-77-11/16-16_	\$22.63	MH-77T11/16-16_	\$35.88
3/4-10	H3	4	MH-77-3/4-10_	\$25.50	MH-77T-3/4-10_	\$39.64
3/4-16	H3	4	MH-77-3/4-16_	\$25.50	MH-77T-3/4-16_	\$39.64
7/8-9	H4	4	MH-77-7/8-9_	\$35.60	MH-77T-7/8-9_	\$52.19
7/8-14	H4	4	MH-77-7/8-14_	\$35.60	MH-77T-7/8-14_	\$52.19
1"-8	H4	4	MH-77-1IN-8_	\$47.30	MH-77T-1IN-8_	\$71.83
1"-12	H4	4	MH-77-1IN-12_	\$48.84	MH-77T-1IN-12_	\$74.63
1"-14	H4	4	MH-77-1IN-14_	\$48.84	MH-77T-1IN-14_	\$71.55
1-1/8-7	H4	4	MH-77-1-1/8-7_	\$76.65	MH-77T-1-1/8-7_	\$99.39
1-1/8-12	H4	4	MH-77-1-1/8-12_	\$81.15	MH-77T1-1/8-12_	\$109.67
1-1/4-7	H4	4	MH-77-1-1/4-7_	\$100.72	MH-77T-1-1/4-7_	\$150.24
1-1/4-12	H4	6	MH-77-1-1/4-12_	\$102.35	MH-77T1-1/4-12_	\$152.33
1-3/8-6	H4	4	MH-77-1-3/8-6_	\$126.73	MH-77T-1-3/8-6_	\$233.22
1-3/8-12	H4	6	MH-77-1-3/8-12_	\$127.60	MH-77T1-3/8-12_	\$235.25
1-1/2-6	H4	4	MH-77-1-1/2-6_	\$141.70	MH-77T-1-1/2-6_	\$253.21
1-1/2-12	H4	6	MH-77-1-1/2-12_	\$144.13	MH-77T1-1/2-12_	\$257.99

## Hand Taps Machine Screw Sizes Standard HSS, Ground Thread

Hand taps are the most commonly used general purpose tap. They are recommended for tapping free machining steels, stainless steels, aluminum, zinc and ductile material. Hand taps are utilized in either through or blind hole tapping.

**When ordering, please add:**  
 "P" at end of part number for Plug  
 "B" at end of part number for Bottoming  
 "T" at end of part number for Taper

- FEATURES:**
- Plug: 3-5 thread chamfer is most versatile choice for through or blind holes
  - Taper: 7-10 thread chamfer have the longest standard chamfer for easier starts and less torque
  - Bottoming: 1-2 thread chamfer is designed for threading near the bottom of blind holes

**Full Line Available!**  
 Please call for more information.



Please specify "P" for Plug, "B" for Bottom or "T" for Taper at end of part number.

Size	Thread Limits	No. of Flutes	Standard		TiN Coated	
			Part Number	Price Each	Part Number	Price Each
0-80	H1	2	MH-77-0-80_	\$8.20	MH-77T-0-80_	\$10.92
1-64	H1	2	MH-77-1-64_	\$7.68	MH-77T-1-64_	\$10.12
1-72	H2	2	MH-77-1-72_	\$7.68	MH-77T-1-72_	\$10.12
2-56	H2	3	MH-77-2-56_	\$6.58	MH-77T-2-56_	\$9.04
2-64	H2	3	MH-77-2-64_	\$7.13	MH-77T-2-64_	\$10.10
3-48	H2	3	MH-77-3-48_	\$5.06	MH-77T-3-48_	\$7.48
3-56	H2	3	MH-77-3-56_	\$5.64	MH-77T-3-56_	\$7.97
4-36	H2	3	MH-77-4-36_	\$4.48	MH-77T-4-36_	\$6.79
4-40	H2	3	MH-77-4-40_	\$4.15	MH-77T-4-40_	\$6.44
4-48	H2	3	MH-77-4-48_	\$4.46	MH-77T-4-48_	\$6.79
5-40	H2	3	MH-77-5-40_	\$4.15	MH-77T-5-40_	\$6.44
5-44	H2	3	MH-77-5-44_	\$4.46	MH-77T-5-44_	\$6.74
6-32	H3	3	MH-77-6-32_	\$3.20	MH-77T-6-32_	\$5.56
6-40	H2	3	MH-77-6-40_	\$3.38	MH-77T-6-40_	\$5.63
8-32	H3	4	MH-77-8-32_	\$3.30	MH-77T-8-32_	\$7.46
8-36	H2	4	MH-77-8-36_	\$3.38	MH-77T-8-36_	\$7.65
10-24	H3	4	MH-77-10-24_	\$3.38	MH-77T-10-24_	\$7.65
10-32	H3	4	MH-77-10-32_	\$3.38	MH-77T-10-32_	\$7.65
12-24	H3	4	MH-77-12-24_	\$3.55	MH-77T-12-24_	\$7.61
12-28	H3	4	MH-77-12-28_	\$3.90	MH-77T-12-28_	\$8.63

Call Us Or Visit Our Website For Our Complete Selection!

LATHE CHUCKS  
LIVE CENTERS

VICE JAWS  
VICE ACCESSORIES

STRAIGHT SHANK  
COLLET HOLDERS

LATHE BUSHINGS  
DRILL CHUCKS

CARBIDE INSERTS  
THREADING/GROOVING

CUTTING TOOLS  
MACHINERY

PRECISION TOOLS  
DEBURRING

COOLANT/FLUIDS  
TOOL STORAGE

# TAPS-SPIRAL POINT

## SPIRAL POINT TAPS Fractional Sizes

Standard HSS, Ground Thread  
Plug Chamfer

Spiral Pointed Taps are used to solve the problem of tap breakage in through hole tapping in a wide variety of materials. They are very effective, because they shoot the chips ahead of the tap thereby reducing loading and clogging in the flutes.



**Full Line Available!**  
Please call for more information.

Size	Thread Limits	No. of Flutes	Standard		TiN Coated	
			Part Number	Price Each	Part Number	Price Each
1/4-20	H3	2	MH-78-1/4-20	\$3.98	MH-78T-1/4-20	\$7.93
1/4-28	H3	2	MH-78-1/4-28	\$3.98	MH-78T-1/4-28	\$7.93
5/16-18	H3	2	MH-78-5/16-18	\$4.50	MH-78T-5/16-18	\$7.48
5/16-24	H3	2	MH-78-5/16-24	\$4.50	MH-78T-5/16-24	\$7.48
3/8-16	H3	3	MH-78-3/8-16	\$5.35	MH-78T-3/8-16	\$9.56
3/8-24	H3	3	MH-78-3/8-24	\$5.83	MH-78T-3/8-24	\$9.56
7/16-14	H3	3	MH-78-7/16-14	\$9.14	MH-78T-7/16-14	\$15.28
7/16-20	H3	3	MH-78-7/16-20	\$9.14	MH-78T-7/16-20	\$15.28
1/2-13	H3	3	MH-78-1/2-13	\$9.32	MH-78T-1/2-13	\$18.07
1/2-20	H3	3	MH-78-1/2-20	\$9.90	MH-78T-1/2-20	\$18.07
9/16-12	H3	3	MH-78-9/16-12	\$19.30	MH-78T-9/16-12	\$22.91
9/16-18	H3	3	MH-78-9/16-18	\$19.30	MH-78T-9/16-18	\$22.91
5/8-11	H3	3	MH-78-5/8-11	\$20.83	MH-78T-5/8-11	\$34.45
5/8-18	H3	3	MH-78-5/8-18	\$20.83	MH-78T-5/8-18	\$34.45
3/4-10	H3	3	MH-78-3/4-10	\$29.39	MH-78T-3/4-10	\$48.75
3/4-16	H3	3	MH-78-3/4-16	\$29.39	MH-78T-3/4-16	\$48.75
7/8-9	H4	3	MH-78-7/8-9	\$40.33	MH-78T-7/8-9	\$63.70
7/8-14	H4	3	MH-78-7/8-14	\$40.33	MH-78T-7/8-14	\$63.70
1"-8	H4	3	MH-78-1IN-8	\$55.95	MH-78T-1IN-8	\$89.05
1"-14	H4	3	MH-78-1IN-14	\$55.95	MH-78T-1IN-14	\$89.05
1"-12	H4	3	MH-78-1IN-12	\$55.95	MH-78T-1IN-12	\$89.05

## SPIRAL POINT TAPS Machine Screw Sizes

Standard HSS, Ground Thread  
Plug Chamfer

Spiral Pointed Taps are used to solve the problem of tap breakage in through hole tapping in a wide variety of materials. They are very effective, because they shoot the chips ahead of the tap thereby reducing loading and clogging in the flutes.



**Full Line Available!**  
Please call for more information.

Size	Thread Limits	No. of Flutes	Standard		TiN Coated	
			Part Number	Price Each	Part Number	Price Each
0-80	H1	2	MH-78-0-80	\$10.10	MH-78T-0-80	\$16.74
1-64	H1	2	MH-78-1-64	\$9.10	MH-78T-1-64	\$16.74
1-72	H2	2	MH-78-1-72	\$9.10	MH-78T-1-72	\$16.74
2-56	H2	2	MH-78-2-56	\$7.80	MH-78T-2-56	\$12.80
2-64	H2	2	MH-78-2-64	\$8.83	MH-78T-2-64	\$12.80
3-48	H2	2	MH-78-3-48	\$6.23	MH-78T-3-48	\$10.34
3-56	H2	2	MH-78-3-56	\$6.75	MH-78T-3-56	\$10.34
4-36	H2	2	MH-78-4-36	\$5.83	MH-78T-4-36	\$8.26
4-40	H2	2	MH-78-4-40	\$5.03	MH-78T-4-40	\$8.26
4-48	H2	2	MH-78-4-48	\$5.81	MH-78T-4-48	\$8.26
5-40	H2	2	MH-78-5-40	\$4.98	MH-78T-5-40	\$8.26
5-44	H2	2	MH-78-5-44	\$5.83	MH-78T-5-44	\$8.26
6-32	H3	2	MH-78-6-32	\$4.18	MH-78T-6-32	\$6.96
6-40	H2	2	MH-78-6-40	\$4.75	MH-78T-6-40	\$6.96
8-32	H3	2	MH-78-8-32	\$4.18	MH-78T-8-32	\$6.96
8-36	H2	2	MH-78-8-36	\$4.75	MH-78T-8-36	\$6.96
10-24	H3	2	MH-78-10-24	\$4.18	MH-78T-10-24	\$6.96
10-32	H3	2	MH-78-10-32	\$4.18	MH-78T-10-32	\$6.96
12-24	H3	2	MH-78-12-24	\$4.75	MH-78T-12-24	\$7.93
12-28	H3	2	MH-78-12-28	\$4.75	MH-78T-12-28	\$7.93
14-20	H3	2	MH-78-14-20	\$6.25	MH-78T-14-20	\$7.93

## TAPER PIPE TAPS-NPT HSS AND CARBON CUT THREADS

- Ideal for cutting internal pipe, pipe fittings and holes where pipe is to be attached
- HSS or carbon with cut threads
- Made in the USA



Size TPI	No. of Flutes	Thread Length	OAL	HSS		Carbon	
				Part Number	Price Each	Part Number	Price Each
1/16-27	4	11/16	2-1/8	WE-21400	\$10.93	WE-11400	\$5.65
1/8-27	4	3/4	2-1/8	WE-21401	\$10.93	WE-11401	\$5.65
1/4-18	4	1-1/16	2-7/16	WE-21402	\$12.26	WE-11402	\$6.60
3/8-18	4	1-1/16	2-9/16	WE-21403	\$15.68	WE-11403	\$8.79
1/2-14	4	1-3/8	3-1/8	WE-21404	\$26.51	WE-11404	\$11.45
3/4-14	5	1-3/8	3-1/4	WE-21405	\$36.53	WE-11405	\$18.29
1- 11-1/2	5	1-3/4	3-3/4	WE-21406	\$55.10	WE-11406	\$27.08
1-1/4 -1 1-1/2	5	1-3/4	4	WE-21407	\$78.38	WE-11407	\$34.44
1-1/2 - 11-1/2	6	1-3/4	4-1/4	WE-21408	\$105.88	WE-11408	\$45.74
2 - 11-1/2	6	1-3/4	4-1/2	WE-21409	\$143.40	WE-11409	\$69.26



## TAPER PIPE TAP 6 PIECE SET



Contains one each of NPT Pipe Tap sizes 1/8", 1/4", 3/8", 3/4" and 1". HSS taps have ground threads for a more precise tolerance than cut threads and last longer. Furnished in a convenient plastic pouch.

Description	Part Number	Price Each
Carbon Steel, Cut-Thread Set	WE-2765A42	\$158.33
HSS, Cut-Thread Set	WE-2765A43	\$255.31
HSS, Ground Thread Set	WE-2765A44	\$300.02

Call Us Today For All Of Your Machine Tool Needs!

CHUCK JAWS  
LATHE WORKHOLDING

MACHINE VISES  
MAGNETIC CHUCKS

RETENTION KNOBS  
ER, DA, TG COLLETS

TOOL HOLDERS  
TAP HOLDERS

INDEXABLE DRILLS  
TURNING & BORING

ENDMILLS, DRILLS  
TAPS & REAMERS

ABRASIVES  
MEASURING TOOLS

MRO & SAFETY  
FLAT STOCK/DRILL ROD

# COMBINED DRILL AND TAP/STI TAPS

C

LATHES CHUCKS  
LIVE CENTERS

WISE ACCESSORIES  
WISE JAWS

STRAIGHT SHANK  
COLLET HOLDERS

LATHES BUSHINGS  
DRILL CHUCKS

CARBIDE INSERTS  
THREADING/GROOVING

CUTTING TOOLS  
MACHINERY

PRECISION TOOLS  
DEBURRING

COOLANT/FLUIDS  
TOOL STORAGE

## UNION BUTTERFIELD

### 118° COMINATION DRILL AND TAP Helical Point



#### FEATURES:

- List 1994 Series
- High Speed Steel, 2 Flute
- Pitch diameter and thread tolerances are designed to produce a 2B class of fit
- Combination tool helps reduce the number of operations, to reduce costs
- Tap drill diameter has been calculated to produce 65% depth of thread which is ideal for most applications

**Full Line Available!**  
Please call for more information.

UNC TAP	UNF TAP	OAL	Thread Length	Shank Dia	Size of Square	Drill Len	Drill Dia	Part Number	Price Each
4-40	-	1-7/8	3/8	0.141	0.110	1/4	0.0910	UB-1110010	\$12.69
-	4-48	1-7/8	3/8	0.141	0.110	1/4	0.0945	UB-1110012	\$13.72
5-40	-	1-15/16	13/32	0.141	0.110	9/32	0.1040	UB-1110020	\$12.69
-	5-44	1-15/16	13/32	0.141	0.110	9/32	0.1060	UB-1110024	\$13.72
6-32	-	2	7/16	0.141	0.110	5/16	0.1110	UB-1110030	\$12.69
-	6-40	2	7/16	0.141	0.110	5/16	0.1170	UB-1110034	\$13.72
8-32	-	2-1/8	1/2	0.168	0.131	3/8	0.1375	UB-1110040	\$12.69
-	8-36	2-1/8	1/2	0.168	0.131	3/8	0.1400	UB-1110044	\$13.72
10-24	-	2-3/8	5/8	0.194	0.152	13/32	0.1545	UB-1110050	\$12.69
-	10-32	2-3/8	5/8	0.194	0.152	13/32	0.1635	UB-1110054	\$13.72
12-24	-	2-3/8	21/32	0.220	0.165	15/32	0.1800	UB-1110060	\$12.69
-	12-28	2-3/8	21/32	0.220	0.165	15/32	0.1860	UB-1110064	\$13.72
1/4-20	-	2-1/2	25/32	0.255	0.191	17/32	0.2080	UB-1110080	\$12.69
-	1/4-28	2-1/2	25/32	0.255	0.191	17/32	0.2200	UB-1110084	\$12.69
5/16-18	-	2-27/32	15/16	0.318	0.238	11/16	0.2660	UB-1110090	\$18.68
-	5/16-24	2-27/32	15/16	0.318	0.238	11/16	0.2770	UB-1110094	\$18.68
3/8-16	-	3-3/8	1-1/16	0.381	0.286	13/16	0.3225	UB-1110100	\$22.04
-	3/8-24	3-3/8	1-1/16	0.381	0.286	13/16	0.3395	UB-1110104	\$22.04
7/16-14	-	3-3/4	1-1/4	0.323	0.242	1	0.3770	UB-1110110	\$26.43
-	7/16-20	3-3/4	1-1/4	0.323	0.242	1	0.3955	UB-1110114	\$26.43
1/2-13	-	4-1/16	1-3/8	0.367	0.275	1-1/8	0.4350	UB-1110120	\$30.64
-	1/2-20	4-1/16	1-3/8	0.367	0.275	1-1/8	0.4580	UB-1110124	\$30.64

### SCREW THREAD INSERT (S.T.I) TAPS

Hand Tap-Plug/Bottom  
Spiral Point-Plug



Tap Size	No. Of Flutes	Thread Limits	Hand Tap Plug/Bottom	Price Each	Spiral Point Plug	Price Each
4-40	3	H-2	MH-770STI-4-40	\$18.61	MH-780STI-4-40	\$19.72
6-32	3	H-3	MH-770STI-6-32	\$18.61	MH-780STI-6-32	\$19.72
8-32	3	H-3	MH-770STI-8-32	\$18.61	MH-780STI-8-32	\$19.72
10-24	3	H-3	MH-770STI-10-24	\$19.97	MH-780STI-10-24	\$21.17
10-32	3	H-3	MH-770STI-10-32	\$19.97	MH-780STI-10-32	\$21.17
1/4-20	3	H-3	MH-770STI-25-20	\$20.56	MH-780STI-25-20	\$21.79
1/4-28	3	H-3	MH-770STI-25-28	\$20.56	MH-780STI-25-28	\$21.79
5/16-18	4	H-3	MH-770STI-31-18	\$22.35	MH-780STI-31-18	\$23.69
5/16-24	4	H-3	MH-770STI-31-24	\$22.35	MH-780STI-31-24	\$23.69
3/8-16	4	H-3	MH-770STI-37-16	\$27.61	MH-780STI-37-16	\$29.27
3/8-24	4	H-3	MH-770STI-37-24	\$27.61	MH-780STI-37-24	\$29.27
1/2-13	4	H-3	MH-770STI-50-13	\$38.50	MH-780STI-50-13	\$40.81
1/2-20	4	H-3	MH-770STI-50-20	\$38.50	MH-780STI-50-20	\$40.81
3/4-10	4	H-3	MH-770STI-75-10	\$50.06	MH-780STI-75-10	-
1-8	4	H-3	MH-770STI-1-8	\$61.20	MH-780STI-1-8	-

### SCREW THREAD INSERT (S.T.I) TAPS

Hand Tap-Plug/Bottom

- STI taps are oversize to rethread damaged threads
- HSS with ground threads
- Also available in spiral point
- Available in plug and bottoming style only
- Made in the USA



**Full Line Available!**  
Please call for more information.

Tap Size	H Limit	No. of Flutes	Thread Length	OAL	Plug		Price Each
					Part Number	Part Number	
4-40 UNC	2	3	9/16	1-7/8	WE-31001-22	WE-31001-32	\$6.56
4-48 UNF	2	3	9/16	1-7/8	WE-31002-22	WE-31002-32	\$6.56
6-32 UNC	2	3	11/16	2	WE-31005-22	WE-31005-32	\$5.32
6-40 UNF	2	3	11/16	2	WE-31006-23	WE-31006-33	\$5.32
8-32 UNC	3	4	3/4	2-1/8	WE-31007-23	WE-31007-33	\$5.46
10-24 UNC	3	4	7/8	2-3/8	WE-31009-23	WE-31009-33	\$5.61
10-32 UNF	3	4	7/8	2-3/8	WE-31010-23	WE-31010-33	\$5.61
12-24 UNC	3	4	15/16	2-3/8	WE-31011-23	WE-31011-33	\$5.94
12-28 UNF	3	4	15/16	2-3/8	WE-31012-23	WE-31012-33	\$5.94
1/4-20 UNC	3	4	1	2-1/2	WE-31013-23	WE-31013-33	\$5.61
1/4-28 UNF	3	4	1	2-1/2	WE-31014-23	WE-31014-33	\$5.61
5/16-18 UNC	3	4	1-1/8	2-23/32	WE-31015-23	WE-31015-33	\$6.89
5/16-24 UNF	3	4	1-1/8	2-23/32	WE-31016-23	WE-31016-33	\$6.89
3/8-16 UNC	3	4	1-1/4	2-15/16	WE-31017-23	WE-31017-33	\$7.79
3/8-24 UNF	3	4	1-1/4	2-15/16	WE-31018-23	WE-31018-33	\$7.79
1/2-13 UNC	3	4	1-21/32	3-3/8	WE-31021-23	WE-31021-33	\$14.06
1/2-20 UNF	3	4	1-21/32	3-3/8	WE-31022-23	WE-31022-33	\$14.06
5/8-11 UNC	3	4	1-13/16	3-13/16	WE-31025-23	WE-31025-33	\$27.65
5/8-11 UNF	3	4	1-13/16	3-13/16	WE-31026-23	WE-31026-33	\$27.65
3/4-10 UNC	3	4	2	4-1/4	WE-31029-23	WE-31029-33	\$38.81
3/4-16 UNF	3	4	2	4-1/4	WE-31030-23	WE-31030-33	\$38.81
1-8 UNC	4	4	2-1/2	5-1/8	WE-31033-24	WE-31033-34	\$70.06
1-12 UNF	4	4	2-1/2	5-1/8	WE-31034-24	WE-31034-34	\$70.06

Call Us Or Visit Our Website For Our Complete Selection!