

1 TAP

10^{'s} of MATERIALS

100^{'s} of JOBS

1000^{'s} of THREADS

INTRODUCING **MultiTAP™** by **EMUGE**

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The industry's first general purpose, high performance tap.

MultiTAP will cut a wide range of materials including carbon steel, steel alloys, stainless steel, aluminum, cast iron, copper, brass, and bronze. MultiTAP is also uniquely designed to produce threads within both 2B and 3B classes of fit, eliminating the guesswork required when calculating H-limits.

Emuge is widely known for manufacturing high performance application specific taps, thread mills and end mills for high production output. However, now Emuge has designed MultiTAP to offer job shops and other manufacturers an **affordable**, yet high performance tapping solution.

MultiTAP is the ideal tap for a job shop or a manufacturer who works with short- and medium-run threading applications across a wide spectrum of materials. It will significantly improve thread quality and boost output while reducing production costs, because one high performance MultiTAP will handle most common materials and applications. MultiTAP eliminates the need to stock numerous types of taps in the tool crib.



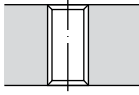
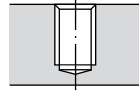
**Made in Germany
by Emuge**



Exclusive Geometric Design


MultiTAP™ is the result of collective years of Emuge's extensive tapping expertise and application research. It features a completely new, innovative geometric design and a special base material and surface treatment, allowing it to handle numerous materials and applications.

- ▶ MultiTAP is constructed of a proprietary grade of high speed steel (HSS-E), nitrided with an Ne2 surface treatment
- ▶ *All taps are made with Emuge's trademark long shanks – DIN length for extra reach.* UNC and UNF taps are DIN length – ANSI shanks, metric taps are DIN length – DIN shanks
- ▶ Full range of tap sizes for UNC or UNF threads, from a #4-40 to 3/4-16 for inch sizes, to metric sizes from M 4x0.7 to M 16x2.0


TECHNICAL CHARACTERISTICS		
Tool type	straight flute, spiral point	spiral flute, right hand
Surface treatment	Ne2	Ne2
Tool material	HSS-E	HSS-E
Threads in chamfer	4-5	2-3
Ideal thread depth	up to 2.5D	up to 2.5D
Ideal material hardness	up to 35Rc	up to 35Rc
Class of fit	2B / 3B	2B / 3B
Hole type		

MultiTAP MATERIAL SAMPLING		
Main Group	Sub-Group	Example
Aluminum	Casting	356T6, 380, 390, 6061, 7075
	Cast Iron	Grey iron High strength Nodular, Ductile
Steel	Carbon, all grades	1010, 1018, 1045
	Free cutting	12L14, 1215
	Constructual	A36, T1 plate
	Alloyed	4140, 4130, 8620
Stainless Steel	Cast, or Forged	
	Tool / Mold / Die	D2, S7, P20, H13
	Austenitic	303, 304, 316
	Ferritic	405, 409, 430
Copper	Martensitic	416, 420, 440
	Zinc alloy	Brass
	Tin alloy	Bronze





MultiTAP – SPIRAL POINT – DIN LENGTH							
Size		Order Number	List \$	Size		Order Number	List \$
#4-40	UNC	BU497300.5003	\$15.40	7/16-20	UNF	CU497300.5046	\$22.60
#6-32	UNC	BU497300.5005	\$13.20	1/2-20	UNF	CU497300.5047	\$27.00
#8-32	UNC	BU497300.5006	\$13.20	9/16-18	UNF	CU497300.5048	\$39.60
#10-24	UNC	BU497300.5007	\$13.80	5/8-18	UNF	CU497300.5049	\$48.50
1/4-20	UNC	BU497300.5009	\$13.80	3/4-16	UNF	CU497300.5050	\$76.00
5/16-18	UNC	BU497300.5010	\$14.90	SPIRAL POINT METRIC / COARSE			
3/8-16	UNC	BU497300.5011	\$17.10	M 4X0.7		B1577300.0040	\$15.40
7/16-14	UNC	CU497300.5012	\$22.00	M 5X0.8		B1577300.0050	\$15.40
1/2-13	UNC	CU497300.5013	\$26.50	M 6X1.0		B1577300.0060	\$16.60
9/16-12	UNC	CU497300.5014	\$37.40	M 8X1.25		B1577300.0080	\$18.80
5/8-11	UNC	CU497300.5015	\$45.10	M 10X1.5		B1577300.0100	\$23.70
3/4-10	UNC	CU497300.5016	\$69.30	M 12X1.75		C1577300.0112	\$28.80
#10-32	UNF	BU497300.5041	\$13.80	M 16X2.0		C1577300.0116	\$49.50
1/4-28	UNF	BU497300.5043	\$13.80	<ul style="list-style-type: none"> • Inch taps handle 2B and 3B classes of fit • Metric taps handle 6H class of fit 			
5/16-24	UNF	BU497300.5044	\$15.40				
3/8-24	UNF	BU497300.5045	\$17.60				



MultiTAP – SPIRAL FLUTE – DIN LENGTH							
Size		Order Number	List \$	Size		Order Number	List \$
#4-40	UNC	BU533200.5003	\$20.90	7/16-20	UNF	CU533200.5046	\$32.50
#6-32	UNC	BU533200.5005	\$18.10	1/2-20	UNF	CU533200.5047	\$38.60
#8-32	UNC	BU533200.5006	\$18.10	9/16-18	UNF	CU533200.5048	\$63.90
#10-24	UNC	BU533200.5007	\$18.80	5/8-18	UNF	CU533200.5049	\$72.10
1/4-20	UNC	BU533200.5009	\$19.80	3/4-16	UNF	CU533200.5050	\$94.60
5/16-18	UNC	BU533200.5010	\$22.60	SPIRAL FLUTE METRIC / COARSE			
3/8-16	UNC	BU533200.5011	\$25.30	M 4X0.7		B4933200.0040	\$18.80
7/16-14	UNC	CU533200.5012	\$32.50	M 5X0.8		B4933200.0050	\$18.80
1/2-13	UNC	CU533200.5013	\$38.60	M 6X1.0		B4933200.0060	\$19.80
9/16-12	UNC	CU533200.5014	\$58.40	M 8X1.25		B4933200.0080	\$24.80
5/8-11	UNC	CU533200.5015	\$66.10	M 10X1.5		B4933200.0100	\$27.00
3/4-10	UNC	CU533200.5016	\$90.20	M 12X1.75		C4933200.0112	\$34.10
#10-32	UNF	BU533200.5041	\$18.80	M 16X2.0		C4933200.0116	\$55.00
1/4-28	UNF	BU533200.5043	\$19.80	<ul style="list-style-type: none"> • Inch taps handle 2B and 3B classes of fit • Metric taps handle 6H class of fit 			
5/16-24	UNF	BU533200.5044	\$22.60				
3/8-24	UNF	BU533200.5045	\$25.30				

Emuge Corp. 2012. Pricing and specifications subject to change without notice.

All prices are U.S. List.



*If you could have
only one tap,*

***MultiTAP
is the ONE.***

MultiTAP™ is GUARANTEED!

Put it to the test yourself:

If MultiTAP doesn't outperform your current taps in a range of common materials, Emuge will refund your money.

***See MultiTAP in action online at:
www.emuge.com/multitap***

Emuge – The Leader in Thread Cutting Technology For More Than 90 Years.



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Emuge's state-of-the-art North American headquarters where demonstrations, training and applications solutions are managed and over 12,000 types of tools are stocked for prompt shipment.

Ask for a FREE full line catalog at www.emuge.com where you can also view products online.

Contact Emuge today for a FREE analysis of your application.

SFM Specifications					MultiTAP	
Material Group	Hardness Range			Material Example	SFM	
	HRC	BHN	N/mm ²			
1 Steel Materials						
1.1	Cold-extrusion steels, Magnetic soft iron	-	≤ 120	≤ 400	1008 / 1010	15 - 80
1.2	Free cutting steels, General construction steels	-	≤ 180	≤ 600	1008 / 1010 / 12L14 / A36 11L17 / 1149 / 12L15	15 - 80
1.3	Free cutting steels, Construction steels, Alloyed steels, Steel castings	≤ 25	≤ 250	≤ 850	1018 / 1060 / 4130 / 4140 / 41L30 41L45 / 86L20 / 86L40 / 1045	15 - 65
1.4	Crome alloy steel, Cold work steels, Heat-treatable steels, Nitriding steels	≤ 36	≤ 320	≤ 1100	5115 / A29 / A519 / J404 / 4130 / 8030 4140 / 4330 / Nitrally 125, 135, 230	5 - 35
1.1	Corrosion/ acid-proof steels, Heat-resistant steels	≤ 25	≤ 250	≤ 850	303 / 304 / 316 / 316L / 416 / 420	5 - 35
1.11	Corrosion/ acid-proof steels, Heat-resistant steels	≤ 35	≤ 320	≤ 1100	410 / 420 / Cf8m / 17-4PH	5 - 25
2 Cast Materials						
2.1	Cast iron	-	≤ 280	-	ASTM A48 / SAE J431c / 1800	35 - 65
2.2	Cast iron with nodular graphite	-	-	≤ 1000	ASTM A48 class 20, 30, 35, 40	15 - 65
2.3	Cast iron with vermicular graphite	-	≤ 280	-	-	15 - 50
2.4	Malleable cast iron	-	-	≤ 700	ASTM A47 grade 32510, 35018	35 - 65
3 Copper, Copper Alloys, Bronze, Brass						
3.1	Pure Copper and low alloyed copper	-	≤ 150	≤ 500	-	15 - 65
3.2	Copper-zinc alloys (brass, long chipping)	-	-	-	-	35 - 130
3.3	Copper-zinc alloys (brass, short chipping)	-	-	-	-	35 - 130
3.4	Copper-aluminum alloys (alubronze, long chipping) Copper-tin alloys (bronze, long chipping)	-	-	-	-	5 - 35
3.5	Copper-tin alloys (bronze, short chipping)	-	-	-	-	15 - 65
5 Aluminum Alloys						
5.1	Aluminum wrought alloys	-	-	-	2014 / 2117 / 5050 / 6061 / 7004	35 - 65
5.2	Aluminum cast alloys ≤ 5% Si	-	-	-	201 / 213 / 295 / 435.3 / 511.0	35 - 65
5.3	Aluminum cast alloys 5% < Si ≤ 12%	-	-	-	319 / 333 / 343 / 356 / 369 / 380	35 - 65
5.4	Aluminum cast alloys 12% < Si ≤ 17%	-	-	-	390 / 393 / 413	15 - 50

EMUGE

HIGH PERFORMANCE TOOLS

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