

DISCOVER OUR

# TAPPING



# Summary application chart-TAPPING

## CROMSON High Performance Taps

Select the proper tap for your application:

### CRP3 (HSSE)

General softer materials (ductile) below 25 HRc  
Low carbon steel  
Medium carbon steel  
Brass  
Copper  
Aluminum  
Cast iron

### CRPS (HSSE)

Tough materials up to 35 HRc  
High carbon steel  
High alloy  
Titanium  
Aluminum

### CRM (HSSE)


Stainless steel  
Low carbon steel  
Medium carbon steel  
Alloyed high carbon

### CRS (POWDER METAL) up to 48 HRc

High tensile materials  
Tool steels  
Titanium  
Nickel alloys  
Stainless steel

### CRN (HSSE /HSS)






Aluminum including roll forming

Work material	Hardness Rockwell (HRc) Hardness Brinell (BHN) Tensile Strength (N/mm2)			material	LOW /MED CARBON STEEL	
	HRc	BHN	N/mm2	model	CRP3	
				ft. / min.	Cutting Speed SFM	
				Condition	Normalized	As Cast
Non-alloy steel, cast steel 1018, 1108, 1161, 12L14, 1522, 1572	up to 8 up to 15 over 15	up to 178 up to 205 over 205	up to 600 up to 700 over 700		20-50 20-40 20-40 	
Alloyed steel 5132, 4130, 8620, 4340, 5140, 6150 Tool Steel, 01, A2, D2, H-13, P-20.	up to 27 up to 31 over 31	up to 266 up to 297 over 297	up to 900 up to 1000 over 1000			
Stainless steel moderate 17-4PH, 15-5PH, 316L						
Stainless and acid resistant steel (Cr-Ni-Alloys) 304, 316, 17CrNi16-2						
Cast iron, grey cast iron alloys GG10-GG40, A48	up to 14 up to 24 over 24	up to 200 up to 250 over 2050	up to 680 up to 850 over 850		20-40	
Spheroidal graphite cast iron, cast iron with vermicular graphite, malleable iron GGG40, GGG80	up to 8 over 8	up to 178 over 178	up to 600 over 650			
Aluminum (Si content >10%) 6061, 2025, 208, 360						
Aluminum (Si content <10%) 413, 385, A390						
Copper, brass, bronze Beryllium copper, naval brass, AMPCO						
Titanium alloys TiAl4V						
High Temperature alloys Inconel, haynes, waspaloy, hastelloy						
Chilled cast iron	38-48				20-40	
Hardened steel 50-60 HRc	50-55 56-60 61-65					

\*\* The machining values shown are guidelines. The optimum data for a particular machining process should be determined in trials or during machining.



Highly recommended

MED /HIGH CARBON STEEL		STAINLESS STEEL		TITANIUM. NICKEL ALLOY		ALUMINUM	
CRPS		CRM		CRS		CRN	
Cutting Speed SFM		Cutting Speed SFM		Cutting Speed SFM		Cutting Speed SFM	
Normalized	Annealed	Annealed	Hardened	Annealed/hard.	Hardened	Cutting	Roll Form
20-30		25-50					20-50
20-30 	15-25	20-30		10-20	15-20		
20-30		20-35 	15-20				
		20-35 	15-20		12-20		
						25-60	30-60
						30-80 	30-80 
		20-30				30-80	30-80
15-30				8-15 			
					5-20		

## TECHNICAL DETAILS

General application	Ferrous and non-ferrous
Machine or manual	Manual
Hole type	Through bore or blind hole
Surface treatment	Bright
Materials to be machined	<b>Ferrous</b>
Other	<b>Non-ferrous</b>
Hardness	
Tap length	Standard



EDP Cromson	Cromson Description	Diam. Thread	Nb Thread	Nb Flutes	Thread Limit	OAL	Tap length	Cromson Grade
76004401	HSS - 6-32-NC	6	32	3	H3	2	0.688	HSS
76004411	HSS - 8-32-NC	8	32	4	H3	2.1/8	0.750	HSS
76004431	HSS - 10-24-NC	10	24	4	H3	2.3/8	0.875	HSS
76004441	HSS - 12-24-NC	12	24	4	H3	2.3/8	0.938	HSS
76004461	HSS - 10-32-NF	10	32	4	H3	2.3/8	0.875	HSS
76004471	HSS - 1/4-20-NC	1/4	20	4	H3	2.1/2	1.000	HSS
76004491	HSS - 1/4-28-NF	1/4	28	4	H3	2.1/2	1.000	HSS
76004511	HSS - 5/16-28-NC	5/16	18	4	H3	2.23/32	1.125	HSS
76004521	HSS - 5/16-24-NF	5/16	24	4	H3	2.23/32	1.125	HSS
76004531	HSS - 3/8-16-NC	3/8	16	4	H3	2.15/16	1.250	HSS
76004551	HSS - 3/8-24-NF	3/8	24	4	H3	2.15/16	1.250	HSS
76004561	HSS - 7/16-14-NC	7/16	14	4	H3	3.5/32	1.438	HSS
76004581	HSS - 7/16-20-NF	7/16	20	4	H3	3.5/32	1.438	HSS
76004591	HSS - 1/2-13-NC	1/2	13	4	H3	3.3/8	1.656	HSS
76004611	HSS - 1/2-20-NF	1/2	20	4	H3	3.3/8	1.656	HSS
76004621	HSS - 9/16-12-NC	9/16	12	4	H3	3.19/32	1.656	HSS
76004641	HSS - 9/16-18-NF	9/16	18	4	H3	3.19/32	1.656	HSS
76004651	HSS - 5/8-11-NC	5/8	11	4	H3	3.13/16	1.813	HSS
76004671	HSS - 5/8-18-NF	5/8	18	4	H3	3.13/16	1.813	HSS
76004681	HSS - 3/4-10-NC	3/4	10	4	H3	4.1/4	2.000	HSS
76004701	HSS - 3/4-16-NF	3/4	16	4	H3	4.1/4	2.000	HSS

TECHNICAL DETAILS

General application      Ferrous and non-ferrous  
 Machine or manual      Manual  
 Hole type                  Through bore or blind hole  
 Surface treatment        Bright  
 Materials to be machined **Ferrous**  
 Other                        **Non-ferrous**  
 Hardness  
 Tap length                 Standard



EDP Cromson	Cromson Description	Diam. Thread	Nb Thread	Nb Flutes	Thread Limit	OAL	Tap length	Cromson Grade
76004801	HSS - M3-0.5	M3	0.5	3	D3	1.15/16	5/8	HSS
76004811	HSS - M4-0.7	M4	0.7	3	D4	2.1/8	3/4	HSS
76004831	HSS - M5-0.8	M5	0.8	3	D4	2. 3/8	7/8	HSS
76004841	HSS - M6-1	M6	1	4	D5	2.1/2	1	HSS
76004861	HSS - M8-1.25	M8	1.25	4	D5	2.23/32	1.1/8	HSS
76004871	HSS - M10-1.25	M10	1.25	4	D5	2.15/16	1.1/4	HSS
76004891	HSS - M10-1.5	M10	1.5	4	D6	2.15/16	1.1/4	HSS
76004901	HSS - M12-1.75	M12	1.75	4	D6	3.3/8	1.21/32	HSS

## TECHNICAL DETAILS

General application	Ferrous and non-ferrous
Machine or manual	Manual
Hole type	Through bore or blind hole
Surface treatment	Bright
Materials to be machined	<b>Ferrous</b>
Other	<b>Non-ferrous</b>
Hardness	
Tap length	Standard



EDP Cromson	Cromson Description	Type of finish	Diam. Thread	Nb Thread	Nb Flutes	Thread Limit	OAL	Tap length	Cromson Grade
76004400	HSS - 6-32 -NC1	HAND TAPS HSS TAPER	6	32	3	H3	2	0.688	HSS
76004405	HSS - 6-32 -NC2	HAND TAPS HSS PLUG	6	32	3	H3	2	0.688	HSS
76004410	HSS - 6-32 -NC3	HAND TAPS HSS BOTTOMING	6	32	3	H3	2	0.688	HSS
76004415	HSS - 8-32 -NC1	HAND TAPS HSS TAPER	8	32	4	H3	2.1/8	0.750	HSS
76004420	HSS - 8-32 -NC2	HAND TAPS HSS PLUG	8	32	4	H3	2.1/8	0.750	HSS
76004425	HSS - 8-32 -NC3	HAND TAPS HSS BOTTOMING	8	32	4	H3	2.1/8	0.750	HSS
76004430	HSS - 10-24 -NC1	HAND TAPS HSS TAPER	10	24	4	H3	2.3/8	0.875	HSS
76004435	HSS - 10-24 -NC2	HAND TAPS HSS PLUG	10	24	4	H3	2.3/8	0.875	HSS
76004440	HSS - 10-24 -NC3	HAND TAPS HSS BOTTOMING	10	24	4	H3	2.3/8	0.875	HSS
76004445	HSS - 12-24 -NC1	HAND TAPS HSS TAPER	12	24	4	H3	2.3/8	0.938	HSS
76004450	HSS - 12-24 -NC2	HAND TAPS HSS PLUG	12	24	4	H3	2.3/8	0.938	HSS
76004455	HSS - 12-24 -NC3	HAND TAPS HSS BOTTOMING	12	24	4	H3	2.3/8	0.938	HSS
76004460	HSS - 10-32 -NF1	HAND TAPS HSS TAPER	10	32	4	H3	2.3/8	0.875	HSS
76004465	HSS - 10-32 -NF2	HAND TAPS HSS PLUG	10	32	4	H3	2.3/8	0.875	HSS
76004470	HSS - 10-32 -NF3	HAND TAPS HSS BOTTOMING	10	32	4	H3	2.3/8	0.875	HSS
76004475	HSS - 1/4-20 -NC1	HAND TAPS HSS TAPER	1/4	20	4	H3	2.1/2	1.000	HSS
76004480	HSS - 1/4-20 -NC2	HAND TAPS HSS PLUG	1/4	20	4	H3	2.1/2	1.000	HSS
76004485	HSS - 1/4-20 -NC3	HAND TAPS HSS BOTTOMING	1/4	20	4	H3	2.1/2	1.000	HSS
76004490	HSS - 1/4-28 -NF1	HAND TAPS HSS TAPER	1/4	28	4	H3	2.1/2	1.000	HSS
76004495	HSS - 1/4-28 -NF2	HAND TAPS HSS PLUG	1/4	28	4	H3	2.1/2	1.000	HSS
76004500	HSS - 1/4-28 -NF3	HAND TAPS HSS BOTTOMING	1/4	28	4	H3	2.1/2	1.000	HSS
76004505	HSS - 5/16-18 -NC1	HAND TAPS HSS TAPER	5/16	18	4	H3	2.23/32	1.125	HSS
76004510	HSS - 5/16-18 -NC2	HAND TAPS HSS PLUG	5/16	18	4	H3	2.23/32	1.125	HSS
76004515	HSS - 5/16-18 -NC3	HAND TAPS HSS BOTTOMING	5/16	18	4	H3	2.23/32	1.125	HSS
76004520	HSS - 5/16-24 -NF1	HAND TAPS HSS TAPER	5/16	24	4	H3	2.23/32	1.125	HSS
76004525	HSS - 5/16-24 -NF2	HAND TAPS HSS PLUG	5/16	24	4	H3	2.23/32	1.125	HSS
76004530	HSS - 5/16-24 -NF3	HAND TAPS HSS BOTTOMING	5/16	24	4	H3	2.23/32	1.125	HSS
76004535	HSS - 3/8-16 -NC1	HAND TAPS HSS TAPER	3/8	16	4	H3	2.15/16	1.250	HSS
76004540	HSS - 3/8-16 -NC2	HAND TAPS HSS PLUG	3/8	16	4	H3	2.15/16	1.250	HSS
76004545	HSS - 3/8-16 -NC3	HAND TAPS HSS BOTTOMING	3/8	16	4	H3	2.15/16	1.250	HSS
76004550	HSS - 3/8-24 -NF1	HAND TAPS HSS TAPER	3/8	24	4	H3	2.15/16	1.250	HSS
76004555	HSS - 3/8-24 -NF2	HAND TAPS HSS PLUG	3/8	24	4	H3	2.15/16	1.250	HSS
76004560	HSS - 3/8-24 -NF3	HAND TAPS HSS BOTTOMING	3/8	24	4	H3	2.15/16	1.250	HSS
76004565	HSS - 7/16-14 -NC1	HAND TAPS HSS TAPER	7/16	14	4	H3	3.5/32	1.438	HSS
76004570	HSS - 7/16-14 -NC2	HAND TAPS HSS PLUG	7/16	14	4	H3	3.5/32	1.438	HSS

EDP Cromson	Cromson Description	Type of finish	Diam. Thread	Nb Thread	Nb Flutes	Thread Limit	OAL	Tap length	Cromson Grade
76004575	HSS - 7/16-14 -NC3	HAND TAPS HSS BOTTOMING	7/16	14	4	H3	3.5/32	1.438	HSS
76004580	HSS - 7/16-20 -NF1	HAND TAPS HSS TAPER	7/16	20	4	H3	3.5/32	1.438	HSS
76004585	HSS - 7/16-20 -NF2	HAND TAPS HSS PLUG	7/16	20	4	H3	3.5/32	1.438	HSS
76004590	HSS - 7/16-20 -NF3	HAND TAPS HSS BOTTOMING	7/16	20	4	H3	3.5/32	1.438	HSS
76004595	HSS - 1/2-13 -NC1	HAND TAPS HSS TAPER	1/2	13	4	H3	3.3/8	1.656	HSS
76004600	HSS - 1/2-13 -NC2	HAND TAPS HSS PLUG	1/2	13	4	H3	3.3/8	1.656	HSS
76004605	HSS - 1/2-13 -NC3	HAND TAPS HSS BOTTOMING	1/2	13	4	H3	3.3/8	1.656	HSS
76004610	HSS - 1/2-20 -NF1	HAND TAPS HSS TAPER	1/2	20	4	H3	3.3/8	1.656	HSS
76004615	HSS - 1/2-20 -NF2	HAND TAPS HSS PLUG	1/2	20	4	H3	3.3/8	1.656	HSS
76004620	HSS - 1/2-20 -NF3	HAND TAPS HSS BOTTOMING	1/2	20	4	H3	3.3/8	1.656	HSS
76004625	HSS - 9/16-12 -NC1	HAND TAPS HSS TAPER	9/16	12	4	H3	3.19/32	1.656	HSS
76004630	HSS - 9/16-12 -NC2	HAND TAPS HSS PLUG	9/16	12	4	H3	3.19/32	1.656	HSS
76004635	HSS - 9/16-12 -NC3	HAND TAPS HSS BOTTOMING	9/16	12	4	H3	3.19/32	1.656	HSS
76004640	HSS - 9/16-18 -NF1	HAND TAPS HSS TAPER	9/16	18	4	H3	3.19/32	1.656	HSS
76004645	HSS - 9/16-18 -NF2	HAND TAPS HSS PLUG	9/16	18	4	H3	3.19/32	1.656	HSS
76004650	HSS - 9/16-18 -NF3	HAND TAPS HSS BOTTOMING	9/16	18	4	H3	3.19/32	1.656	HSS
76004655	HSS - 5/8-11 -NC1	HAND TAPS HSS TAPER	5/8	11	4	H3	3.13/16	1.813	HSS
76004660	HSS - 5/8-11 -NC2	HAND TAPS HSS PLUG	5/8	11	4	H3	3.13/16	1.813	HSS
76004665	HSS - 5/8-11 -NC3	HAND TAPS HSS BOTTOMING	5/8	11	4	H3	3.13/16	1.813	HSS
76004670	HSS - 5/8-18 -NF1	HAND TAPS HSS TAPER	5/8	18	4	H3	3.13/16	1.813	HSS
76004675	HSS - 5/8-18 -NF2	HAND TAPS HSS PLUG	5/8	18	4	H3	3.13/16	1.813	HSS
76004680	HSS - 5/8-18 -NF3	HAND TAPS HSS BOTTOMING	5/8	18	4	H3	3.13/16	1.813	HSS
76004685	HSS - 3/4-10 -NC1	HAND TAPS HSS TAPER	3/4	10	4	H3	4.1/4	2.000	HSS
76004690	HSS - 3/4-10 -NC2	HAND TAPS HSS PLUG	3/4	10	4	H3	4.1/4	2.000	HSS
76004695	HSS - 3/4-10 -NC3	HAND TAPS HSS BOTTOMING	3/4	10	4	H3	4.1/4	2.000	HSS
76004700	HSS - 3/4-16 -NF1	HAND TAPS HSS TAPER	3/4	16	4	H3	4.1/4	2.000	HSS
76004705	HSS - 3/4-16 -NF2	HAND TAPS HSS PLUG	3/4	16	4	H3	4.1/4	2.000	HSS
76004710	HSS - 3/4-16 -NF3	HAND TAPS HSS BOTTOMING	3/4	16	4	H3	4.1/4	2.000	HSS



## TECHNICAL DETAILS

General application	Ferrous and non-ferrous
Machine or manual	Manual
Hole type	Through bore or blind hole
Surface treatment	Bright
Materials to be machined	<b>Ferrous</b>
Other	<b>Non-ferrous</b>
Hardness	
Tap length	Standard



EDP Cromson	Cromson Description	Type of finish	Diam. Thread	Nb Thread	Nb Flutes	Thread Limit	OAL	Tap length	Cromson Grade
76004800	HSS - M3-0.5 -1	HAND TAPS HSS TAPER	M3	0.5	3	D3	1.15/16	5/8	HSS
76004805	HSS - M3-0.5 -2	HAND TAPS HSS PLUG	M3	0.5	3	D3	1.15/16	5/8	HSS
76004810	HSS - M3-0.5 -3	HAND TAPS HSS BOTTOMING	M3	0.5	3	D3	1.15/16	5/8	HSS
76004815	HSS - M4-0.7 -1	HAND TAPS HSS TAPER	M4	0.7	3	D4	2.1/8	3/4	HSS
76004820	HSS - M4-0.7 -2	HAND TAPS HSS PLUG	M4	0.7	3	D4	2.1/8	3/4	HSS
76004825	HSS - M4-0.7 -3	HAND TAPS HSS BOTTOMING	M4	0.7	3	D4	2.1/8	3/4	HSS
76004830	HSS - M5-0.8 -1	HAND TAPS HSS TAPER	M5	0.8	3	D4	2.3/8	7/8	HSS
76004835	HSS - M5-0.8 -2	HAND TAPS HSS PLUG	M5	0.8	3	D4	2.3/8	7/8	HSS
76004840	HSS - M5-0.8 -3	HAND TAPS HSS BOTTOMING	M5	0.8	3	D4	2.3/8	7/8	HSS
76004845	HSS - M6-1 -1	HAND TAPS HSS TAPER	M6	1	4	D5	2.1/2	1	HSS
76004850	HSS - M6-1 -2	HAND TAPS HSS PLUG	M6	1	4	D5	2.1/2	1	HSS
76004855	HSS - M6-1 -3	HAND TAPS HSS BOTTOMING	M6	1	4	D5	2.1/2	1	HSS
76004860	HSS - M8-1.25 -1	HAND TAPS HSS TAPER	M8	1.25	4	D5	2.23/32	1.1/8	HSS
76004865	HSS - M8-1.25 -2	HAND TAPS HSS PLUG	M8	1.25	4	D5	2.23/32	1.1/8	HSS
76004870	HSS - M8-1.25 -3	HAND TAPS HSS BOTTOMING	M8	1.25	4	D5	2.23/32	1.1/8	HSS
76004875	HSS - M10-1.25 -1	HAND TAPS HSS TAPER	M10	1.25	4	D5	2.15/16	1.1/4	HSS
76004880	HSS - M10-1.25 -2	HAND TAPS HSS PLUG	M10	1.25	4	D5	2.15/16	1.1/4	HSS
76004885	HSS - M10-1.25 -3	HAND TAPS HSS BOTTOMING	M10	1.25	4	D5	2.15/16	1.1/4	HSS
76004890	HSS - M10-1.5 -1	HAND TAPS HSS TAPER	M10	1.5	4	D6	2.15/16	1.1/4	HSS
76004895	HSS - M10-1.5 -2	HAND TAPS HSS PLUG	M10	1.5	4	D6	2.15/16	1.1/4	HSS
76004900	HSS - M10-1.5 -3	HAND TAPS HSS BOTTOMING	M10	1.5	4	D6	2.15/16	1.1/4	HSS
76004905	HSS - M12-1.75 -1	HAND TAPS HSS TAPER	M12	1.75	4	D6	3.3/8	1.21/32	HSS
76004910	HSS - M12-1.75 -2	HAND TAPS HSS PLUG	M12	1.75	4	D6	3.3/8	1.21/32	HSS
76004915	HSS - M12-1.75 -3	HAND TAPS HSS BOTTOMING	M12	1.75	4	D6	3.3/8	1.21/32	HSS