## HIGH SPEED STEEL

## HAND EXPANSION REAMERS

ICS USA

**GENERAL PURPOSE** 

RIGHT HAND CUT







HELICAL FLUTE, LEFT HAND HELIX (Reaming keyways & interrupted cut holes)

High Speed Steel Hand Expansion Reamers are designed to enlarge reamed holes by a few thousandths. The pilot and guide on these reamers are ground slightly undersize for clearance and to guide reamer. The flutes also have a ground starting taper to help guide reamer into hole. Reamer can be expanded slightly by turning adjusting screw on end of reamer.

				FLUTE			
	DEC.	FLUTE	<b>OVERALL</b>	STRAIGHT	HELICAL		
SIZE	EQUIV.	LENGTH	LENGTH	HERSF	HERHF		
3/16	.1875	1-1/8	3-3/8	67.20	67.20		
1/4	.2500	1-7/16	4-1/4	73.50	86.24		
5/16	.3125	1-3/4	4-1/2	84.00	88.88		
3/8	.3750	1-3/4	5	94.04	100.42		
13/32	.4062	1-3/4	5	98.84	103.74		
7/16	.4375	1-3/4	5	100.42	105.42		
15/32	.4688	1-13/16	5-1/2	101.86	106.98		
1/2	.5000	1-13/16	5-1/2	100.84	105.88		
17/32	.5312	2-1/8	6	106.94	112.32		
9/16	.5629	2-1/8	6	110.12	105.14		
19/32	.5938	2-1/2	6	140.50	154.74		
5/8	.6250	2-1/2	6-1/2	119.32	124.74		
21/32	.6562	2-1/2	7	157.00	178.42		
11/16	.6875	2-1/2	6-3/4	136.22	143.02		
23/32	.7188	2-11/16	7	172.76	197.32		
3/4	.7500	2-11/16	7-1/16	150.70	158.22		
25/32	.7812	3-1/16	8	192.78	209.16		
13/16	.8125	3-1/16	7-9/16	169.56	178.00		
27/32	.8438	3-5/16	8	212.06	224.66		

				FLUTE				
	DEC.	FLUTE	<b>OVERALL</b>	STRAIGHT	HELICAL			
SIZE	EQUIV.	LENGTH	LENGTH	HERSF	HERHF			
7/8	.8750	3-5/16	8	182.58	191.70			
29/32	.9062	3-9/16	9	238.14	269.52			
15/16	.9375	3-9/16	8-3/8	208.66	219.08			
31/32	.9688	3-3/4	9	266.00	280.98			
1	1.0000	3-3/4	8-7/8	222.18	233.32			
1-1/16	1.0625	4	9-3/16	231.84	243.44			
1-1/8	1.1250	4-1/8	9-1/2	251.16	263.72			
1-3/16	1.1875	4-1/4	9-7/8	256.00	268.80			
1-1/4	1.2500	4-3/8	10-1/4	261.46	275.90			
1-5/16	1.3125	4-1/2	10-5/8	275.32	289.10			
1-3/8	1.3750	4-9/16	11	299.46	314.46			
1-7/16	1.4375	4-3/4	11-3/8	328.44	344.86			
1-1/2	1.5000	4-13/16	11-5/8	378.00	395.60			
1-9/16	1.5625	4-13/16	11-7/8	397.04	416.90			
1-5/8	1.6250	4-7/8	12	407.66	428.02			
1-3/4	1.7500	5	12-3/8	469.48	492.96			
1-7/8	1.8750	5	12-3/4	511.98	537.60			
2	2.0000	5	13-1/16	598.92	628.88			

The maximum expansion on these reamers is as follows: .006 inch up to 7/16" sizes, .010 inch up to 15/16" sizes and .012 inch up to 1-1/2" sizes.

## **ADJUSTABLE TAP AND REAMER WRENCHES**

ICS USA

**GENERAL PURPOSE** 

STRAIGHT TYPE



Solid Die Cast Adjustable Tap and Reamer Wrenches are solidly built for a lifetime of industrial service under normal conditions. Size 0 to 7 wrenches have solid handles, one of which is forged integral with the body. The other handles turn for size adjustment. Size 7-1/2 to 8 wrenches have solid handles which are removable. One handle turns for size adjustment.

CAPACITY								
OVERALL	SCREW	HAND	MACHINE	PIPE	HAND	ADJUSTABLE HAND	ITEM	
LENGTH	EXTRACTOR	TAPS	TAPS	TAPS	REAMERS	REAMERS	NO.	PRICE
6-1/2	#1 - 3	1/16 - 1/4	0 - 14	-	1/8 - 21/64	8A - A	TW-0	9.18
9	#4	1/16 - 3/8	0 - 14	-	1/8 - 25/64	8A - C	TW-4	12.84
10	#5	5/32 - 1/2	7 - 14	1/8 - 1/4	11/64 - 7/16	8A - F	TW-5	15.52
13-1/2	#6	5/32 - 3/4	7 - 14	1/8 - 1/4	11/64 - 41/64	8A - G	TW-6	20.00
19	#7	1/4 - 1-1/8	-	1/8 - 3/4	9/32 - 29/32	3A - K	TW-7	35.18
31	#8	1/2 - 1-3/8	-	1/8 - 1	3/4 - 1-5/32	B - L	TW-7.5	96.44
40	#10	3/4 - 1-5/8	-	3/8 - 1-1/4	37/64 - 1-11/32	C - M	TW-8	147.00
54	#11 - 12	1 - 2-1/2	-	3/4 - 2	7/8 - 2-1/8	J - O	TW-9.5	177.94