

# Easy Hole Making Attained

You can enjoy a smooth cutting with this hole saw having blade shape of our own.

## Carbide Tipped Hole Saw

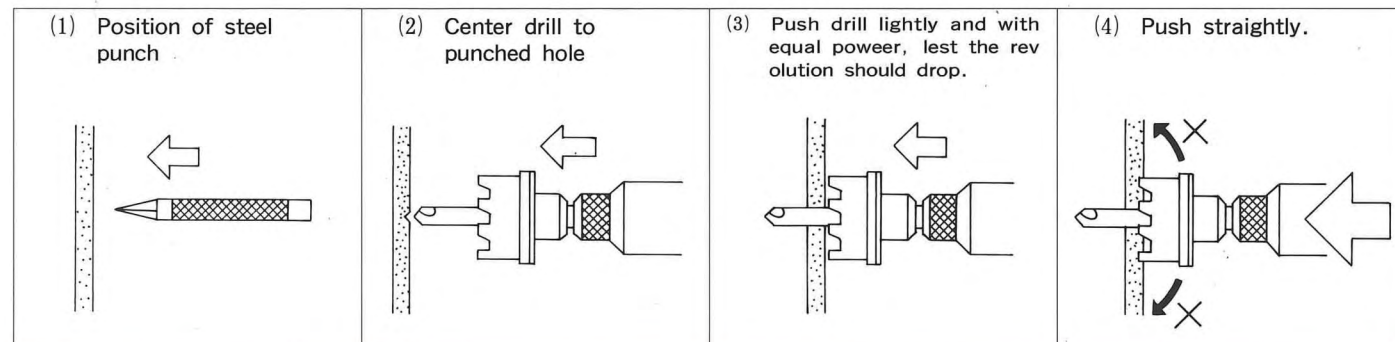
We developed carbide tipped hole saw that will make a hole into hard material such as stainless, enamelled ironware, cast steel, and steel sheet, aluminum sheet and plastic sheed, etc. High speed steel of SKH-51 is used for Center Drill.

Bladi Dia (φ <sub>m</sub> )	
15~25	
26~30	
31~35	
36~40	
41~45	
46~50	
51~55	
56~59	
60~65	
66~70	
71~75	
76~80	
81~85	
89~90	
91·92·95	
100	
102·105	
110	
115	
120	

## High Speed Steel Hold Saw

Steel material of blade is high speed steel SKH-51. It has an ideal tip angle and ousts steel scraps at high speed, Blade interchangeable. Easily attached to drilling machines. Suitable for thin steel sheet as well as for alloy steel sheets of various kinds. Recommendable for electic engineering in hole making job.

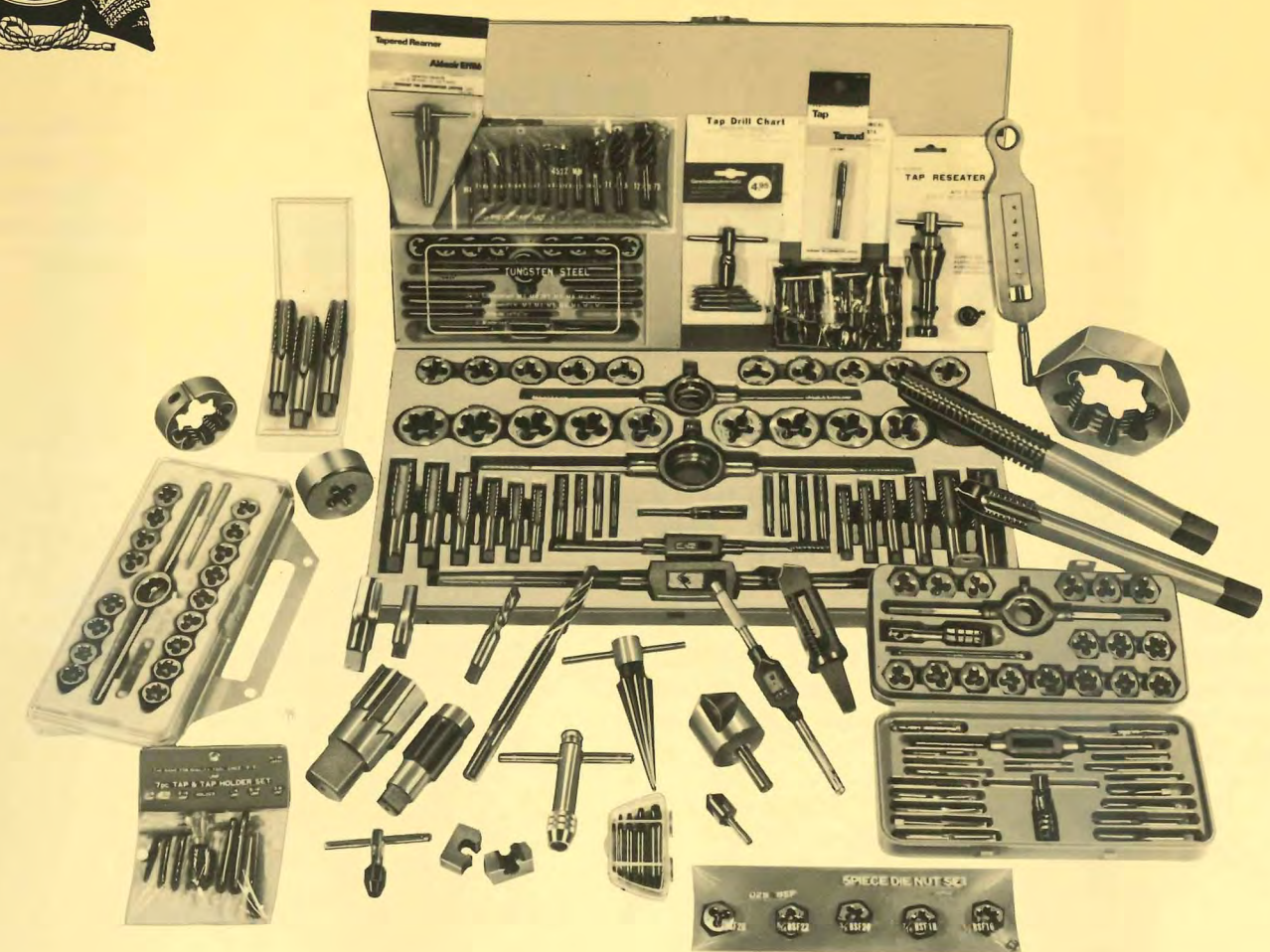
Bladi Dia (φ <sub>m</sub> )	
15	
16~19	
20~24	
25~27	
28~32	
33~36	
37~42	
43~46	
47~55	
56~65	
70	
75	
80	
85	
90	
95	
100	



**GUARANTEED QUALITY!!**

# TAPS DIES & ACCESSORIES POPULAR TAP & DIE SET

**No.995**



**SKC THREAD TOOL MFG. CO.,LTD.**  
**OSAKA JAPAN**

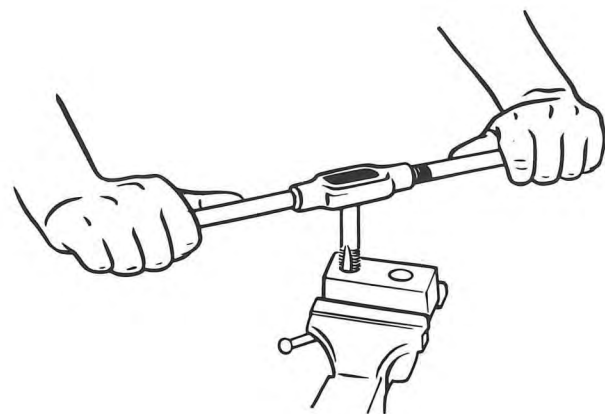
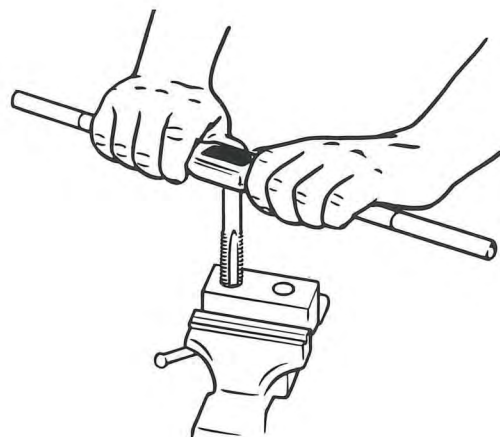
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Tel : + 81-725-58-6095 Fax : + 81-725-58-6097  
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# TIPS ON CUTTING THREADS

## Starting Tap

After tap drill size hole has been made, hold piece securely with hole in upright position. Apply good grade of cutting oil to tap. If using large tap wrench, grasp wrench with both hands near the tap and place tap in hole. (Grasp smaller wrenches with hand directly over tap). Press down and start tap clockwise into hole, turning tap forward. When resistance is felt, relieve by turning back to break chip. *Make sure tap is square with surface of the work.*

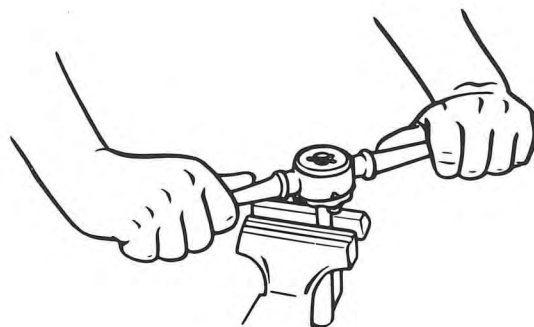


## Holding Tap Wrench after Thread is Started

Once the thread is started properly, the tap will draw itself into the work. A downward pressure is no longer needed. Grasp wrench by both handles and with slow steady movement continue turning tap into hole. When resistance is felt, relieve by turning back to break chip. Do not force tap.

## Starting Die

Before cutting threads on rod or pipe, grind or file small bevel on edge of piece to be threaded. This makes starting easier. Place die in stock with size marking visible. Tighten set screw(s) in die stock. Adjust die stock guide by turning cam plate so that guide pins are against work to be threaded. Fasten work and apply good grade cutting oil. Grasp die stock with both hands near the die and place tapered side of die over end of rod or pipe. Press down firmly and work die back and forth, just as you work a tap. *Be sure die goes on squarely.*



## Holding Die Stock after Thread is Started

After thread is started, grasp die stock by both handle ends and with steady back and forth movement continue turning die onto work, advancing only slightly with each turn. It is no longer necessary to press down because the die will draw itself onto the work when turned.

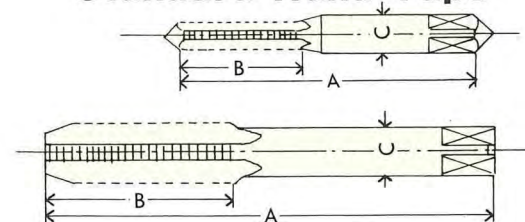
# HAND TAPS

HANDGEWINDEOHRER  
MACHOS DE ROSCAR A MANO  
TARAUDS

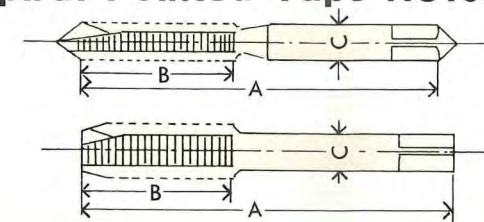
# METRIC STANDARD

ART NO.801

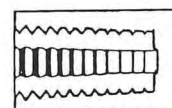
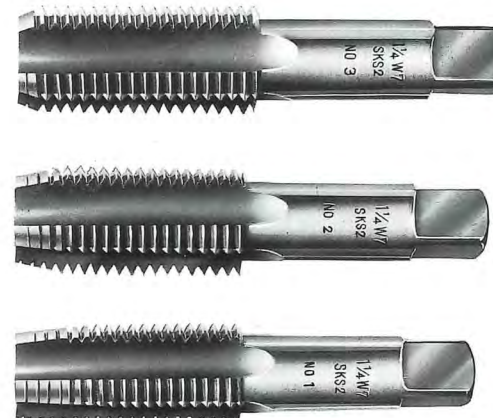
## Standard Hand Taps



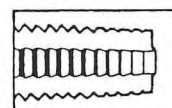
## Spiral Pointed Taps NO.803PO



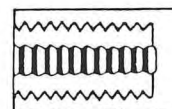
## High Speed Steel Tungsten Steel ALLOY Steel



**TAPER**  
8 to 10 threads chamfered for easy thread starting in rough materials.



**PLUG**  
3 to 5 threads chamfered—general use when tapping to bottom of holes is not critical. (This is the most widely-used type of tap.)



**BOTTOMING**  
1.1/2 threads chamfered—use after threads have been started for tapping to bottom of hole.

3 pc one set  
METRIC 1.0mm up—to 12 mm in plastic case and 14mm and up in Printed box.

INCH1/16inch up—to 1/2inch in plastic case and 9/16inch and up in Printed box.

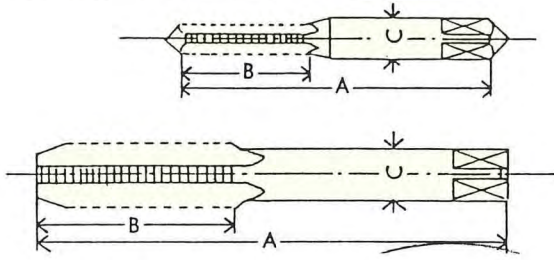
Nominal Diameter (mm)	Pitch (mm)	Length		Shank Dia C(mm)	Weight Per Set (g)
		A(mm)	B(mm)		
1	0.25	30	8	3	8
1.2	0.25	32	9	3	10
1.4	0.3	34	11	3	10
1.7	0.35	36	13	3	10
2	0.4	40	15	3	12
2.3	0.4	42	15	3	12
2.6	0.45	44	16	3	12
3	0.6	46	18	4	15
3	0.5	46	18	4	18
3.5	0.6	48	18	4	18
4	0.75	52	20	5	20
4	0.7	52	20	5	20
4.5	0.75	55	20	5	25
5	0.9	60	22	5.5	30
5	0.8	60	22	5.5	30
5.5	0.9	60	22	5.5	35
6	1	62	24	6	40
7	1	65	26	6.2	50
8	1.25	70	30	6.2	70
9	1.25	72	30	7	75
10	1.5	75	32	7	80
11	1.5	80	38	8	110
12	1.75	82	38	8.5	135
14	2	88	42	10.5	185
16	2	95	45	12.5	250
18	2.5	100	48	14	360
20	2.5	105	50	15	400
22	2.5	115	55	17	650
24	3	120	58	19	850
27	3	130	62	20	1180
30	3.5	135	65	23	1500
33	3.5	145	70	25	1980
36	4	155	75	28	2640
39	4	165	80	30	2920
42	4.5	175	85	32	3520
45	4.5	180	85	35	4090
48	5	185	90	38	5480
52	5	195	90	42	5900
56	5.5	205	95	44	8300
60	5.5	215	100	46	9750
64	6	225	105	48	11250
68	6	235	110	52	12980

## INGREDIENT SPECIFICATION

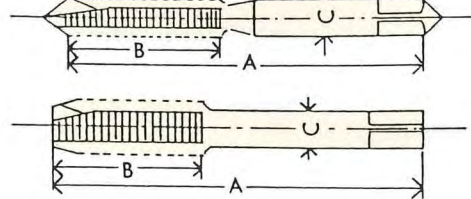
Type of Steel	Elements	Chemical Composition										
		C % × 100	Si % × 100	Mn % × 100	P % × 1000	S % × 1000	Cu % × 100	Ni % × 100	Cr % × 100	Mo % × 100	W % × 100	V % × 100
SKH <sub>2</sub>		70~85	MAX 40	MAX 40	MAX 30	MAX 30			380~450		1700~1900	80~120
SKH <sub>1</sub>		80~90	MAX 40	MAX 40	MAX 30	MAX 30			380~450	450~550	550~670	160~220
SKS <sub>11</sub>		120~130	MAX 35	MAX 50	MAX 30	MAX 30			20~50		300~400	10~30
SKS <sub>2</sub>		100~110	MAX 35	MAX 80	MAX 30	MAX 30			50~100		100~150	
GSS <sub>1</sub>		97	MAX 18	MAX 97	MAX 24	MAX 17	9		48	21		
ALLOY		0.95~1.10	MAX 35	MAX 90	MAX 27	MAX 20			13~165			



**Standard Hand Taps**



**Spiral Pointed Taps**



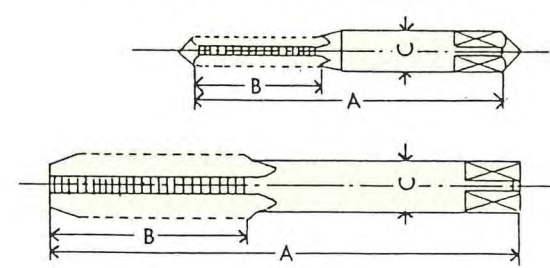
**High Speed Steel  
Tungsten Steel  
ALLOY Steel**

Nominal Diameter (mm)	Pitch (mm)	Length		Shank Dia C (mm)
		A (mm)	B (mm)	
1	0.2	30	8	3
1.2	0.2	32	9	3
1.4	0.2	34	11	3
1.7	0.25	36	13	3
2.0	0.25	40	15	3
2.3	0.25	42	15	3
2.6	0.35	44	16	3
3	0.35	46	18	4
3.5	0.35	48	18	4
4	0.5	52	20	5
4.5	0.5	55	20	5
5	0.5	60	22	5.5
5.5	0.5	60	22	5.5
6	0.5	62	24	6
7	0.5	65	26	6.2
8	0.5	70	30	6.2
9	0.5	72	30	7
10	0.5	75	32	7
11	0.5	80	38	8
12	0.5	82	38	8.5
13	0.5	85	40	9.5
14	0.5	88	42	10.5
15	0.5	90	42	10.5
16	0.5	95	42	12.5
18	0.5	100	48	14
20	0.5	105	50	15
22	0.5	115	55	17
24	0.5	120	58	19
25	0.5	135	60	19
26	0.5	125	60	20
28	0.5	130	62	21
30	0.5	135	65	23
32	0.5	140	68	24
34	0.5	150	73	26
36	0.5	155	75	28
38	0.5	160	78	28
6	0.75	62	24	6
7	0.75	65	26	6.2
8	0.75	70	30	6.2
9	0.75	72	30	7
10	0.75	75	32	7
11	0.75	80	38	8

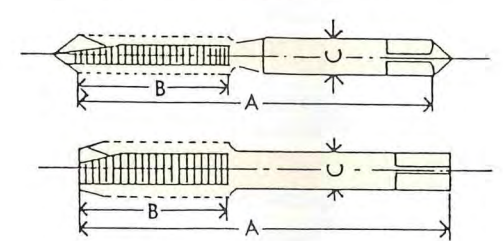
Nominal Diameter (mm)	Pitch (mm)	Length		Shank Dia C (mm)
		A (mm)	B (mm)	
8	1.0	70	30	6.2
9	1.0	72	30	7
10	1.0	75	32	7
11	1.0	80	38	8
12	1.0	82	38	8.5
13	1.0	85	40	9.5
14	1.0	88	42	10.5
15	1.0	90	42	10.5
16	1.0	95	42	12.5
17	1.0	100	45	13
18	1.0	100	48	14
20	1.0	105	50	15
22	1.0	115	55	17
24	1.0	120	58	19
25	1.0	125	60	19
26	1.0	125	60	20
27	1.0	130	62	20
28	1.0	130	62	21
30	1.0	135	65	23
32	1.0	140	68	24
34	1.0	150	73	26
36	1.0	155	75	28
38	1.0	160	78	28
40	1.0	170	83	30
42	1.0	175	85	32
45	1.0	180	85	35
48	1.0	185	90	38
50	1.0	190	90	40
52	1.5	195	90	42
55	1.5	205	95	44
56	1.5	205	95	44
58	1.5	215	100	46
60	1.5	215	100	46
62	1.5	225	105	48
64	1.5	225	105	48
65	1.5	225	105	50
68	1.5	235	110	52
70	1.5	240	115	55
72	1.5	240	115	55
75	1.5	245	115	58
76	1.5	245	115	58
78	1.5	245	115	58
80	1.5	245	115	58
82	1.5	245	115	60
85	1.5	245	115	60
88	1.5	245	115	60
90	1.5	250	120	60
92	1.5	250	120	60
95	1.5	250	120	65
98	1.5	250	120	60
100	1.5	250	120	65
18	2	100	48	14
20	2	105	50	15
22	2	115	55	17
24	2	120	58	19
25	2	125	60	19
26	2	125	60	20
27	2	130	62	20
28	2	130	62	21
30	2	135	65	23
32	2	140	68	24
33	2	145	70	25
34	2	150	73	26
36	2	155	75	28
38	2	160	78	28
39	2	165	80	30

Nominal Diameter (mm)	Pitch (mm)	Length		Shank Dia C (mm)
		A (mm)	B (mm)	
32	1.5	140	68	24
33	1.5	145	70	25
34	1.5	150	73	26
35	1.5	150	73	26
36	1.5	155	75	28
38	1.5	160	78	28
39	1.5	165	80	30
40	1.5	170	83	30
42	1.5	175	85	32
45	1.5	180	85	35
48	1.5	185	90	38
50	1.5	190	90	40
52	1.5	195	90	42
55	1.5	205	95	44
56	1.5	205	95	44
58	1.5	215	100	46
60	1.5	215	100	46
62	1.5	225	105	48
64	1.5	225	105	48
65	1.5	225	105	50
68	1.5	235	110	52
70	1.5	240	115	55
72	1.5	240	115	55
75	1.5	245	115	58
76	1.5	245	115	58
78	1.5	245	115	58
80	1.5	245	115	58
82	1.5	245	115	60
85	1.5	245	115	60
88	1.5	245	115	60
90	1.5	250	120	60
92	1.5	250	120	60
95	1.5	250	120	65
98	1.5	250	120	60
100	1.5	250	120	65
18	2	100	48	14
20	2	105	50	15
22	2	115	55	17
24	2	120	58	19
25	2	125	60	19
26	2	125	60	20
27	2	130	62	20
28	2	130	62	21
30	2	135	65	23
32	2	140	68	24
33	2	145	70	25
34	2	150	73	26
36	2	155	75	28
38	2	160	78	28
39	2	165	80	30

**Standard Hand Taps**



**Spiral Pointed Taps**



**High Speed Steel  
Tungsten Steel  
ALLOY Steel**



Nominal Diameter	Thread per inch					Length		Shank Dia C (mm)	Weight per set (g)
	(u)NC	(u)NF	(u)NS	BSW	BSF	A (mm)	B (mm)		
1/16	60		64.72	60		36	13	3	12
3/32	48		56	48		42	16	3	12
1/8	40	44	40.44	40	44	46	18	4	15
5/32	32	36	32.36	32	36	52	20	5	20
3/16	24	32	24.32	24	32	60	22	5.5	30
7/32	24	32	24.32	24		60	22	5.5	35
1/4	20	28	24.32	20	26	62	24	6	40
9/32	20		28.32	20		62	24	6	60
5/16	18	24	32	18	22	70	30	6.1	70
3/8	16	24	32	16	20	75	35	7	75
7/16	14	20	28	14	18	80	38	8	110
1/2	13	20	32.28	12	16	85	42	9	135
9/16	12	18	27	12	16	90	42	10.5	185
5/8	11	18	32	11	14	95	45	12	250
11/16	11	16	11.16	11	14	95	45	12	350
3/4	10	16	32	10	12	105	50	14	380
7/8	9	14	12.18	9	11	115	55	17	600
1	8	12	14.20	8	10	125	60	20	830
1 1/8	7	12	18	7	9	135	65	22	1270
1 1/4	7	12	18	7	9	145	70	24	1610
1 3/8	6	12	18	6	8	155	75	26	1980
1 1/2	6	12	18	6	8	160	78	30	2740
1 5/8	5	12	5 1/2	5	8	170	82	32	3560
1 3/4	5	12	6	5	7	175	85	35	4080
1 7/8	4 1/2	12	5	4 1/2	7	185	90	38	4690
2	4 1/2	12	4	4 1/2	7	195	92	40	6130
2 1/4	4 1/2	12	4 1/2	4	6	210	100	45	8500
2 1/2	4		4	4	6	225	105	48	11100
2 3/4	4		3 1/2	6	6	235	110	55	13500
3	4		3 1/2	5	6	250	115	58	14500
3 1/4	3 1/2		3 1/4			260	120	60	21500
3 1/2	3 1/4		3 1/4			270	124	62	25200
3 3/4	3		3			280	128	65	29000
4	3		3			295	132	72	33700
4 1/4			2 7/8			300	134	76	40700
4 1/2			2 7/8			310	136	80	46500
4 3/4			2 3/4			325	138	84	53000
5			2 3/4			335	140	88	63000
5 1/4			2 5/8			350	142	92	71500
5 1/2			2 5/8			360	144	95	79400
5 3/4			2 1/2			370	146	98	92500
6			2 1/2			380	150	100	104000
Angel of Thread	60°	60°	60°	55°	55°				

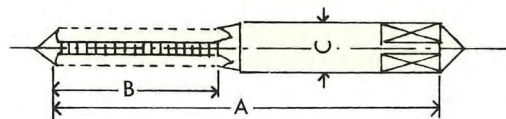


# HAND TAPS

HANDGEWINDEOHRER  
MACHOS DE ROSCAR A MANO  
TARAUDS

ART NO.802

## Machine Screw Taps

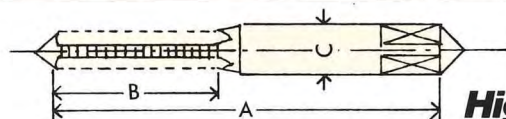
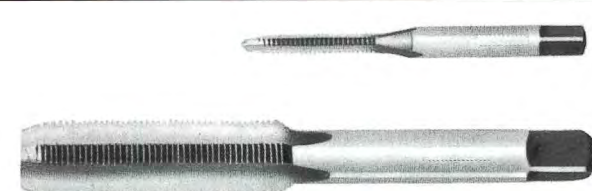


**High Speed Steel**  
**Tungsten Steel**  
**ALLOY Steel**

Size No.	Nominal Diameter		Thread Per inch			Length		Shank Dia	Weight
	inch	mm	(u)NC	(u)NF	(u)NS	A(mm)	B(mm)	C(mm)	per pc(g)
0	0.060	1.524		80		34	11	3	4
1	0.073	1.854	64	72	56	36	13	3	4
2	0.086	2.184	56	64		40	15	3	4
3	0.099	2.515	48	56		44	16	3	5
4	0.112	2.845	40	48	32-36	44	16	4	5
5	0.125	3.175	40	44		46	18	4	5
6	0.138	3.505	32	40	36	48	18	4	6
8	0.164	4.166	32	36	40	52	20	5	6
10	0.190	4.826	24	32	30	60	22	5.5	10
12	0.216	5.486	24	28	32	60	22	5.5	14
14	0.242	6.147	20	24		62	24	6	15

# SEWING MACHINE TAPS

ART NO.818



**High Speed Steel**  
**Tungsten Steel**  
**ALLOY Steel**

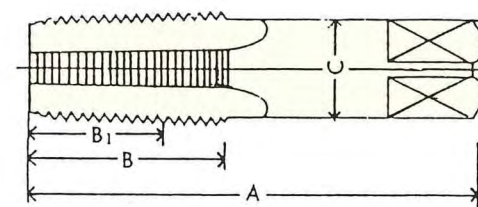
Nominal Diameter inch	Thread per inch	Length A(mm)	Length B(mm)	Shank Dia C(mm)
SM 1/16	80	36	13	3
SM 5/64	64	40	15	3
SM 3/32	100	42	15	3
SM 3/32	56	42	15	3
SM 1/8	48	46	18	4
SM 1/8	44	46	18	4
SM 1/8	40	46	18	4
SM 9/64	40	48	18	4
SM 11/64	40	55	20	5
SM 11/64	32	55	20	5
SM 3/16	40	60	22	5.5
SM 3/16	32	60	22	5.5
SM 3/16	28	60	22	5.5
SM 3/16	24	60	22	5.5
SM 13/64	32	60	22	5.5
SM 7/32	32	60	22	5.5
SM 15/64	28	62	24	6
SM 1/4	40	62	24	6
SM 1/4	28	62	24	6
SM 1/4	24	62	24	6

Nominal Diameter(mm)	Thread per inch	Length A(mm)	Length B(mm)	Shank Dia C(mm)
SM 9/32	28	65	26	6.5
SM 9/32	20	65	26	6.5
SM 5/16	28	70	30	6.1
SM 5/16	24	70	30	6.1
SM 5/16	18	70	30	6.1
SM 11/32	28	70	30	7
SM 3/8	28	70	30	7
SM 3/8	18	75	35	7
SM 7/16	28	70	30	8
SM 7/16	16	80	38	8
SM 1/2	28	70	30	9
SM 1/2	20	85	42	9
SM 1/2	12	85	42	9
SM 9/16	20	90	42	10.5
SM 1 3/16	24	105	35	23

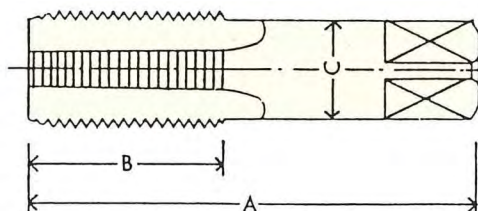
# PIPE TAPS



ART NO.804BT  
BSPT (BRITISH STANDARD PIPE TAPER THREAD)  
ART NO.805BS  
BSPS (BRITISH STANDARD PARALLEL THREAD)



BSPT



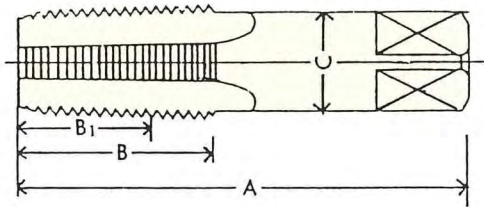
BSPS

**High Speed Steel** {Ground Thread  
**Tungsten Steel** {Cut Thread  
**ALLOY Steel**

Nominal Diameter	Thread Per	Basic Pitch Diameter	Regular				Weight Per Pc (g)
			A(mm)	B(mm)	Bl(mm)	C(mm)	
1/16	28	7.753	55	17.5	12	8	15
1/8	28	9.728	55	19	13	8	20
1/4	19	13.157	62	28	21	11	40
3/8	19	16.662	65	28	21	14	80
1/2	14	20.955	80	35	25	18	140
5/8	14	22.912	85	35	25	20	160
3/4	14	26.441	85	35	25	23	240
7/8	14	30.202	90	40	28	24	340
1"	11	33.249	95	45	32	26	420
1 1/8	11	37.898	105	45	32	30	580
1 1/4	11	41.910	105	45	32	32	660
1 3/8	11	44.325	110	45	32	35	770
1 1/2	11	47.803	110	45	32	38	890
1 5/8	11	51.990	115	45	32	40	1000
1 3/4	11	53.748	115	45	32	40	1200
2	11	59.614	120	50	35	46	1350
2 1/4	11	65.712	130	55	40	50	2100
2 1/2	11	75.184	145	65	50	55	2800
2 3/4	11	81.537	150	65	52	60	3500
3	11	87.884	155	65	52	65	4200
3 1/4	11	93.984	165	68	52	68	5100
3 1/2	11	100.330	165	68	52	70	6000
3 3/4	11	106.684	170	70	55	72	7700
4	11	113.030	170	70	55	75	8600



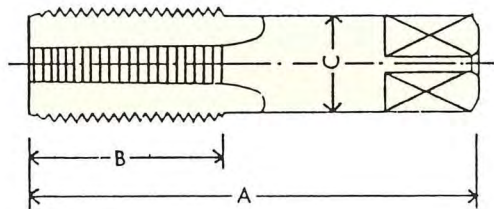
# PIPE TAPS



NPT  
NPTF

- ART NO. 804NT**  
NPT (AMERICAN NATIONAL TAPER PIPE THREAD)
- ART NO. 804PF**  
NPTF (DRYSEAL AMERICAN NATIONAL TAPER PIPE THREAD)
- ART NO. 805NS**  
NPS (AMERICAN NATIONAL STRAIGHT PIPE THREAD)
- ART NO. 804SF**  
NPSF (DRYSEAL AMERICAN NATIONAL STRAIGHT PIPE THREAD)

**High Speed Steel** (Ground Thread / CUT Thread)  
**Tungsten Steel**  
**ALLOY Steel**



NPS  
NPSF

Nominal Diameter	Thread	Basic Pitch	Regular				Weight Per Pc (g)
			A(mm)	B(mm)	Bl(mm)	C(mm)	
1/16	27	7.142	55	17.5	11.99	8	15
1/8	27	9.489	55	19	12.03	8	20
1/4	18	12.487	62	28	17.44	11	40
3/8	18	15.926	65	28	17.63	14	80
1/2	14	19.772	80	35	22.83	18	140
3/4	14	25.117	85	35	22.96	23	240
1	11 1/2	31.461	95	45	27.38	26	400
1 1/4	11 1/2	40.218	105	45	28.09	32	650
1 1/2	11 1/2	46.287	110	45	28.42	38	890
2	11 1/2	58.325	120	50	28.02	46	1350
2 1/2	8	70.159	145	65	40.82	55	2800
3	8	86.068	155	65	42.95	65	4200
3 1/2	8	98.776	165	68	44.68	70	6000
4	8	111.433	170	70	45.57	75	8600

ASA Standard				Number of Flutes
A(mm)	B(mm)	Bl(mm)	C(mm)	
54.0	17.5	11.99	7.938	4
54.0	19.1	12.03	11.113	4
61.9	27.0	17.44	14.288	4
65.1	27.0	17.63	17.780	4
79.4	34.9	22.83	17.463	4
82.6	34.9	22.96	23.020	5
95.3	44.5	27.38	28.575	5
101.6	44.5	28.09	33.338	5
108.0	44.5	28.42	38.100	7
114.3	44.5	28.02	47.625	7
139.7	65.1	40.82	57.150	8
152.4	66.7	42.95	66.675	8
165.1	68.3	44.68	71.438	9
171.4	69.8	45.57	76.200	9

# INTERRUPTED TAPER PIPE TAPS

HIGH SPEED STEEL GROUND THREAD

ART NO. 891

## INTERRUPTED THREAD



**High Speed Steel**

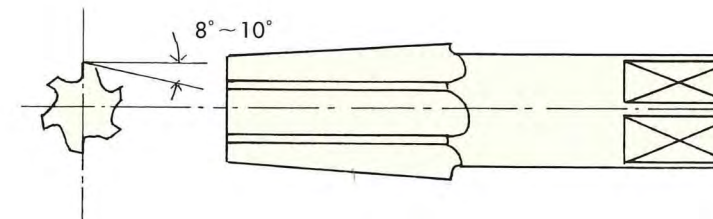
## Taper Pipe Taps—NPT Dryseal—NPTF

Nominal Diameter	Thread	Basic Pitch	Overall Length	Thread Length	Shank Dia	Number of Flutes
INCH	INCH	Diameter	mm	mm	mm	Interrupted
1/16	27	7.142	54.0	17.5	7.938	5
1/8	27	9.489	54.0	19.1	11.113	5
1/4	18	12.487	61.9	27.0	14.288	5
3/8	18	15.926	65.1	27.0	17.780	5
1/2	14	19.772	79.4	34.9	17.463	5
3/4	14	25.117	82.6	34.9	23.020	5
1	11 1/2	31.461	95.3	44.5	28.575	5
1 1/4	11 1/2	40.218	101.6	44.5	33.338	5
1 1/2	11 1/2	46.287	108.0	44.5	38.100	7
2	11 1/2	58.325	114.3	44.5	47.625	7

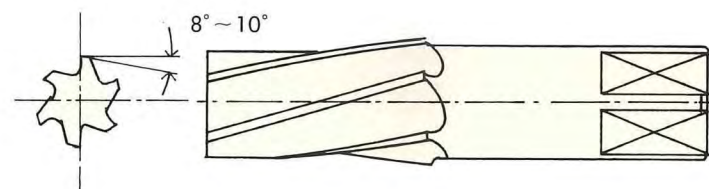
# TAPER PIPE REAMER

ART NO. 897

## Straight Flutes



## Spiral Flutes



**High Speed Steel**



Nominal Diameter	Thread	Basic Pitch	Overall Length	Thread Length	Shank Dia	Number of Flutes
INCH	INCH	Diameter	mm	mm	mm	Regular
1/16	27	7.142	54.0	17.5	7.938	4
1/8	27	9.489	54.0	19.1	11.113	4
1/4	18	12.487	61.9	27.0	14.288	4
3/8	18	15.926	65.1	27.0	17.780	4
1/2	14	19.772	79.4	34.9	17.463	4
3/4	14	25.117	82.6	34.9	23.020	5
1	11 1/2	31.461	95.3	44.5	28.575	5
1 1/4	11 1/2	40.218	101.6	44.5	33.338	5
1 1/2	11 1/2	46.287	108.0	44.5	38.100	6
2	11 1/2	58.325	114.3	44.5	47.625	6
2 1/2	8	70.159	139.7	65.1	57.150	8
3	8	86.068	152.4	66.7	66.675	8
3 1/2	8	98.776	165.1	68.3	71.438	8
4	8	111.433	171.4	69.8	76.200	8



# COMBINED TAPS and DRILLS

HIGH SPEED STEEL GROUND THREAD

ART NO.811PD

## Combined Taper Pipe Taps and Drills



**High Speed Steel  
Ground Thread**

Size	Pitch	Number of Flutes	Overall Length	Drill Length	Drill		D Thread Length	E Square Length	F Diameter Shank	G Square
					C Size	I Decimal				
1/16	27	4	2 13/16	1 11/16	D	0.2460	1 11/16	3/8	0.312	0.234
1/8	27	4	2 7/8	3/4	R	0.3390	3/4	3/8	0.437	0.328
1/4	18	4	3 5/16	7/8	7/16	0.4375	1 1/16	7/16	0.562	0.421
3/8	18	4	3 1/2	15/16	37/64	0.5781	1 1/16	1/2	0.700	0.531
1/2	14	4	4 3/8	1 1/4	45/64	0.7031	1 3/8	5/8	0.687	0.515
3/4	14	4	4 9/16	1 5/16	59/64	0.9219	1 3/8	1 1/16	0.906	0.679
1	11 1/2	4	5 3/8	1 5/8	1 5/32	1.1563	1 3/4	1 5/16	1.125	0.843

# SPIRAL DRILL TAPS

ART NO.811



**High Speed Steel  
Ground Thread  
Cut Thread**

Size	Thread Per Inch	Overall Length	Thread Length	Drill Length	Drill Size	Number of Flutes
4	40-NC	1 7/8	9/16	1/4	0.89	2
4	48-NF	1 7/8	9/16	1/4	0.93	2
5	40-NC	1 15/16	5/8	9/32	0.1015	2
5	44-NF	1 15/16	5/8	9/32	0.104	2
6	32-NC	2	1 1/16	5/16	0.1095	2
6	40-NF	2	1 1/16	5/16	0.115	2
8	32-NC	2 1/8	3/4	3/8	0.136	2
8	36-NF	2 1/8	3/4	3/8	0.1385	2
10	24-NC	2 3/8	7/8	13/32	0.152	2
10	32-NF	2 3/8	7/8	13/32	0.161	2
12	24-NC	2 3/8	7/8	15/32	0.177	2
12	28-NF	2 3/8	7/8	15/32	0.1835	2
1/4	20-NC	2 1/2	1 5/16	1 1/32	0.201	2
1/4	28-NF	2 1/2	1 5/16	1 1/32	0.2175	2
5/16	18-NC	3	1 1/8	1 1/16	0.257	2
5/16	24-NF	3	1 1/8	1 1/16	0.272	2
3/8	16-NC	3 1/2	1 1/4	13/16	0.3125	2
3/8	24-NF	3 1/2	1 1/4	13/16	0.3345	2
7/16	14-NC	3 7/8	1 7/16	1	0.368	2
7/16	20-NF	3 7/8	1 7/16	1	0.389	2
1/2	13-NC	4 1/4	1 21/32	1 1/8	0.425	2
1/2	20-NF	4 1/4	1 21/32	1 1/8	0.451	2

# HAND TAPS SPECIAL SERIES

ART NO.902

## Sparking Plug

Taper  
Plug(intermediate)  
Bottoming

60° thread form

SIZE (mm)	Pitch (mm)	Overall Length (mm)	Thread Length (mm)	Shank Diameter (mm)	No. of Flutes
10.0	1.00	70.0	30.0	7.0	4
12.0	1.25	80.0	38.0	8.5	4
14.0	1.25	80.0	38.0	10.5	4
18.0	1.5	95.0	45.0	14.0	4

# BRITISH STANDARD BRASS

ART NO.903

Taper  
Plug(intermediate)  
Bottoming

55° thread form

SIZE INCH	Thread per INCH	Shank Diameter INCH	Thread Length INCH	Overall Length INCH	Size of Square INCH	No. of Flutes
1/4	26	0.255	1	2 1/2	0.191	4
5/16	26	0.318	1 1/8	2 23/32	0.238	4
3/8	26	0.381	1 1/4	2 15/16	0.286	4
7/16	26	0.323	1 1/4	3	0.242	4
1/2	26	0.367	1 1/4	3	0.275	4
9/16	26	0.429	1 1/4	3	0.322	4
5/8	26	0.480	1 1/4	3	0.360	4
3/4	26	0.590	1 1/2	3 1/4	0.442	4
7/8	26	0.697	1 1/2	3 1/4	0.523	4
1	26	0.800	1 1/2	3 1/4	0.600	4

**High Speed Steel  
Tungsten Steel  
ALLOY Steel**

# BRITISH STANDARD CONDUIT

ART NO.904

Taper  
Plug(intermediate)  
Bottoming

55° thread form

SIZE INCH	Thread per INCH	Shank Diameter INCH	Thread Length INCH	Overall Length INCH	Size of Square INCH	No. of Flutes
5/8	18	0.480	1 1/4	3	0.360	4
3/4	16	0.590	1 1/2	3 1/4	0.442	4
1	16	0.800	1 1/2	3 1/4	0.600	4
1 1/4	16	1.021	1 1/2	4	0.766	4
1 1/2	14	1.233	1 1/2	4	0.925	4
2	14	1.644	2	5	1.233	6

# METRIC CONDUIT

ART NO.905

Taper  
Plug(intermediate)  
Bottoming

60° thread form

SIZE mm	Pitch mm	Shank Diameter mm	Thread Length mm	Overall Length mm	Size of Square mm	No. of Flutes
16	1.5	12.20	32	76	9.15	4
20	1.5	15.00	38	83	11.25	4
25	1.5	20.40	38	83	15.30	4
32	1.5	26.00	38	102	19.50	4
40	1.5	31.40	38	102	23.55	4
50	1.5	41.90	51	127	31.40	6

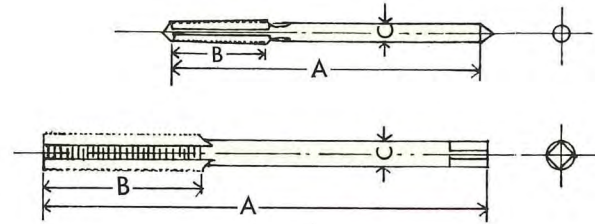


# MACHINE NUT TAPS

**METRIC  
BSW. UNC. UNF**

ART NO.807

**High Speed Steel  
Tungsten Steel**



Nominal size (mm)	Pitch (mm)	A(mm)		B (mm)	C (mm)	W/T PC (g)	Nominal size (mm)	Pitch (mm)	A(mm)		B (mm)	Nominal Size (mm)	Thread per inch			A(mm)		B (mm)	C (mm)	
		LONG TAP	SHORT TAP						LONG TAP	SHORT TAP			BSW	NC	NF	LONG TAP	SHORT TAP			
2.6	0.45	85	50	15	2	3	2.6	0.35	85	50	15	NO. 2	56	64	80	48	15	1.5		
3	0.6	90	55	20	2.1	4	3	0.35	90	55	15	NO. 3	48	56	85	50	18	1.7		
3	0.5	90	55	20	2.1	4	3.5	0.35	95	55	15	NO. 4	40	48	90	55	22	1.8		
3.5	0.6	95	55	20	2.6	4.2	4	0.5	100	60	18	NO. 5	40	44	90	55	22	2.1		
4	0.75	100	60	25	2.8	4.3	4.5	0.5	105	60	18	NO. 6	32	40	95	58	28	2.2		
4	0.7	100	60	25	2.8	4.3	5	0	110	70	20	NO. 8	32	36	105	60	28	2.9		
4.5	0.75	105	60	25	3.3	4.5	5.5	0.5	115	70	20	NO.10	24	32	110	70	35	3.3		
5	0.9	110	70	30	3.6	11	6	0.75	120	75	28	NO.12	24	28	115	75	35	3.8		
5	0.8	110	70	30	3.6	11	7	0.75	120	75	30	1/8	40	40	44	90	55	22	2.2	
5.5	0.9	115	70	30	4.1	13	8	0.75	120	75	30	5/32	32	32	36	100	60	28	2.8	
6	1	120	75	35	4.5	16	9	0.75	125	75	30	3/16	24	24	32	110	70	35	3.3	
7	1	130	75	35	5.5	21	10	0.75	130	80	30	7/32	24	24	32	115	75	35	4	
8	1.25	140	85	40	6.2	29	11	0.75	130	80	30	1/4	20	20	28	125	85	42	4.5	
9	1.25	150	90	45	7.2	41	8	1.0	140	85	38	5/16	18	18	24	140	95	50	5.9	
10	1.5	160	100	50	7.8	53	9	1.0	140	90	38	3/8	16	16	24	155	100	55	7.3	
11	1.5	165	110	55	8.8	72	10	1.0	140	90	38	7/16	14	14	20	165	110	60	8.5	
12	1.75	170	115	60	9	110	11	1.0	140	90	40	1/2	12	13	20	180	120	65	9.5	
14	2	190	125	65	11	165	12	1.0	140	95	40	9/16	12	12	18	190	130	70	11	
16	2	200	135	70	13	185	14	1.0	150	100	40	5/8	11	11	18	200	140	75	12.5	
18	2.5	220	145	80	14	235	15	1.0	160	105	42	3/4	10	10	16	230	150	85	15	
20	2.5	230	155	85	16	285	16	1.0	160	105	42	7/8	9	9	14	250	165	95	18	
22	2.5	250	165	90	18	425	17	1.0	170	105	42	1	8	8	14	270	180	105	20.5	
24	3	260	175	100	19	610	18	1.0	170	105	42	1 1/8	7	7	12	290	200	120	23	
27	3	280	190	110	22	750	20	1.0	175	115	45	1 1/4	7	7	12	300	215	125	26	
30	3.5	300	200	120	24	910	22	1.0	190	120	45	1 3/8	6	6	12	320	230	135	28	
33	4	310	210	130	27	1210	24	1.0	190	120	45	1 1/2	6	6	12	330	240	140	31	
36	4	330	220	140	29	1610	25	1.0	190	125	45	1 5/8	5	5	12	370	270	170	33	
39	4	340	230	145	32	2110	27	1.0	200	135	48	1 3/4	5	5	12	390	280	175	36	
42	4.5	370	250	155	34	2330	28	1.0	210	135	48	1 7/8	4 1/2	4 1/4	12	410	300	190	39	
45	5	390	260	160	37	2560	30	1.0	210	140	48	2	4 1/2	4 1/4	12	420	310	195	42	
48	5	410	270	170	40	3150	10	1.25	160	100	48	2 1/4	4	4 1/4		440	330	210	47	
52	5.5	420	290	180	44		12	1.25	170	115	48	2 1/2	4	4		460	350	220	53	
56	5.5	440	300	190	47		14	1.25	190	125	48	2 3/4	3 1/2	4		480	380	240	58	
60	6	450	320	200	51		12	1.5	190	115	58	3	3 1/2	4		500	400	250	65	
64	6	460	330	210	54		14	1.5	200	125	58	3 1/4	3 1/4	4		510	420	260	70	
68	6	470	340	215	58		15	1.5	210	130	58	3 1/2	3 1/4	4		520	440	270	76	
							16	1.5	220	135	58									
							17	1.5	230	140	58									
							18	1.5	250	145	60									
							20	1.5	260	155	60									
							22	1.5	260	165	60									
							24	1.5		175	60									
							25	1.5		180	62									

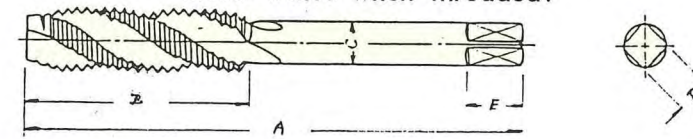
# SPIRAL FLUTED TAPS

SPIRAL GROOVES MAKE IT EASY TO OUST METAL WASTE WHEN THREADED

ART NO.812

**BSW NF N.C  
METRIC**

Spiral grooves make it easy to oust metal waste when threaded.



**High Speed Steel  
Ground Thread**

DIA	THREAD PER INCH			OVERALL LENGTH	THREAD LENGTH	SHANK	SQUARE 3 LENGTH	SQUARE 4 LENGTH
	BSW	NF	NC					
3/16"	24	32	24	60	22	5.5	7	4.5
1/4"	20	28	20	62	24	6	7	4.5
5/16"	18	24	18	70	30	6.1	8	5
3/8"	16	24	16	75	35	7	9	5.5
7/16"	14	20	14	80	38	8	10	6
1/2"	12	20	13	85	42	9	11	7
9/16"	12	18	12	90	42	10.5	12	8
5/8"	11	18	11	95	45	12	14	9
3/4"	10	16	10	105	50	14	16	11
7/8"	9	14	9	115	55	17	18	13
1"	8	14	8	125	60	20	20	15
1 1/8"	7	12	7	135	65	22	22	17
1 1/4"	7	12	7	145	70	24	24	19
1 3/8"	6	12	6	155	75	26	26	21
1 1/2"	6	12	6	160	78	30	30	23
3M	0.6	0.35	0.50	46	18	4	6	3.2
4M	0.75	0.50	0.70	52	20	5	7	4
5M	0.90	0.50	0.80	60	22	5.5	7	4.5
6M	1.0	0.75	0.50	62	24	6	7	4.5
7M	1.0	0.75	0.50	65	26	6.2	8	5
8M	1.25	1.0	0.75	70	30	6.5	8	5
10M	1.50	1.25	1.0	75	32	7	8	5.5
12M	1.75	1.50	1.0	82	38	8.5	9	6.5
14M	2.0	1.50	1.0	88	42	10.5	11	8
16M	2.0	1.50	1.0	95	45	12.5	13	10
18M	2.5	1.50	1.0	100	48	14	14	11
20M	2.5	1.50	1.0	105	50	15	15	12

# BURRING REAMERS

ONE PC. A CARTON BOX

ART NO.848

**High Speed Steel  
Tungsten Steel**



#	Point Dia.	Pipe Dia.	Blade Length	Pipes Applicable	Weight (approx.)
#0	6.0 <sup>m/m</sup>	27 <sup>m/m</sup>	43 <sup>m/m</sup>	1/8"~1"	100g
1	7.0	36	46	1/4"~1 1/4	210
1 1/2	7.0	46	60	1/4"~1 1/2	410
2	8.0	53	95	1/4"~2	800

# TAPER REAMER

ONE SET IN A VINYL KIT

ART NO.750

**High Speed Steel  
Tungsten Steel**



	HANDLE	DIMENSIONS—INCH & M/M					ONE PC. WT	
		CAPA—LARGE CITY	DIA LARGE END	DIA POINT	PER CASE	G. W.		MEAS' T
NO. 1	1/8"~1/2"	1/2"	1/8"	5DOZ	4K200	1.1CFT	CARTON	70g
NO. 2	M3~M16	M16	M3	5DOZ	6K200	1.1CFT	CARTON	100
NO. 3	4~ 22	22	4	5DOZ	11K100	1.3CFT	CARTON	185
NO. 4	4~ 32	32	4	5DOZ	23K100	1.3CFT	CARTON	385



# HAND TAPS BA.

ART NO.809

# PULLEY TAPS

ART NO.810

ART NO.810PO

BA(British Association Thread)

**High Speed Steel  
ALLOY STEEL**



47.5° thread form

- Taper
- Plug(Second)
- Bottoming
- Sets(3per set)

Nominal BA Size	Basic Major Diameter	Pitch mm	Thread Length mm	Overall Length mm	Shank Diameter mm	Weight Per Set(g)
BA NO.14	1.0	0.23	8	32	3	8
BA NO.13	1.2	0.25	8	32	3	10
BA NO.12	1.3	0.28	8	40	3	10
BA NO.11	1.5	0.31	8	40	3	10
BA NO.10	1.7	0.35	8	40	3	11
BA NO.9	1.9	0.39	10	42	3	11
BA NO.8	2.2	0.43	11	44	3	12
BA NO.7	2.5	0.48	13	46	3	13
BA NO.6	2.8	0.53	15	48	4	15
BA NO.5	3.2	0.59	16	50	4	17
BA NO.4	3.6	0.66	18	50	4	20
BA NO.3	4.1	0.73	20	52	5	20
BA NO.2	4.7	0.81	22	60	5.5	23
BA NO.1	5.3	0.90	22	60	5.5	30
BA NO.0	6.0	1.00	24	62	6	35

ART NO.810 Pulley Taps

ART NO.810PO Spiral Point Pulley Taps



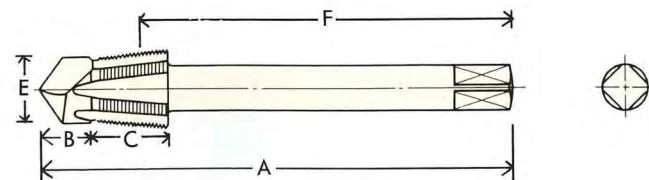
**PLUG CHAMFER ONLY**

**High Speed Steel**

SIZE	Thread Per INCH	Overall Length INCH	Overall Length INCH	Over Length INCH	Over Length INCH
NO. 6	32	6			
NO. 8	32	6			
NO. 10	24	6			
3/16	24	6			
1/4	20	6	8	10	12
5/16	18	6	8	10	12
3/8	16	6	8	10	12
7/16	14	6	8	10	12
1/2	13	6	8	10	12
9/16	12	6	8	10	12
5/8	11	6	8	10	12
3/4	10	6	8	10	12
7/8	9	6	8	10	12
1	8	6	8	10	12
1 1/8	7	6	8	10	12
1 1/4	7	6	8	10	12
1 3/8	6	6	8	10	12
1 1/2	6	6	8	10	12

# COMBINED PIPE TAPS and DRILLS

ART NO.817



**High Speed Steel** { Ground Thread  
**Tungsten Steel** { Cut Thread

Nominal Size Inches	Basic Major Diameter(mm)	Thread Per Inch	A mm	B mm	C mm	E mm	F mm
3/4	26.441	14	290	28	42	23.134	232
1	33.249	11	290	27	43	29.183	232
1 1/4	41.910	11	305	40	45	37.954	232
1 1/2	47.803	11	305	40	45	43.847	232
2	59.614	11	320	55	45	55.534	232
2 1/2	75.184	11	340	55	45	70.855	252

# LONG TAPER PIPE TAPS

ART NO.814



**High Speed Steel**

Nominal Diameter INCH	Thread Per INCH	Overall Length INCH	Overall Length INCH	Overall Length INCH	Overall Length INCH	Overall Length INCH
1/16	27	4	6	8	10	12
1/8	27	4	6	8	10	12
1/4	18	4	6	8	10	12
3/8	18		6	8	10	12
1/2	14		6	8	10	12
5/8	14		6	8	10	12
3/4	14		6	8	10	12
7/8	14		6	8	10	12
1	11 1/2		6	8	10	12
1 1/4	11 1/2		6	8	10	12
1 1/2	11 1/2		6	8	10	12



# "ACME" THREAD TAPS

ART NO.898

## Acme Taps High Speed Steel

Tandem



A INCH	B INCH	C INCH	D INCH	E INCH	F INCH	
1/2-10	5	2 <sup>9</sup> / <sub>16</sub>	2	.367	7 <sup>7</sup> / <sub>16</sub>	.275
5/8-8	6 1/4	3 <sup>3</sup> / <sub>16</sub>	2 1/2	.480	9 <sup>9</sup> / <sub>16</sub>	.360
3/4-6	7 <sup>15</sup> / <sub>16</sub>	4 <sup>9</sup> / <sub>16</sub>	3	.573	5 <sup>5</sup> / <sub>8</sub>	.430
7/8-6	8 5/8	4 3/8	3 1/2	.697	3/4	.524
1-5	10 1/8	5 1/4	4	.730	7/8	.547
1 1/8-5	10 3/4	5 1/4	4 1/2	.862	1	.646
1 1/4-5	11 1/8	5 1/4	4 3/4	.959	1 1/8	.719
1 3/8-4	12 1/4	5 7/8	5 1/8	1.108	1 1/4	.831
1 1/2-4	12 5/8	5 7/8	5 1/2	1.233	1 1/4	.925

Roughing

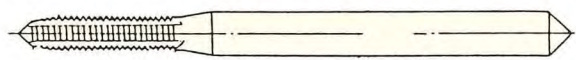


Finishing



# SPECIALITY TAPS

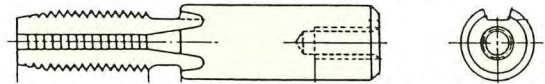
## MICRO PLUG TAPS



## LONG TAPS



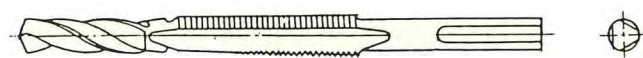
## PEARL TAPPER TAPS



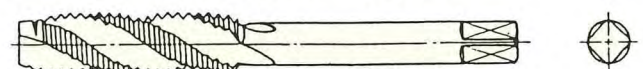
## SERIAL MACHINE TAPS



## DRILL TAPS



## SPIRAL FLUTED TAPS



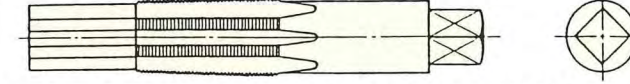
## STAY BOLT TAPS



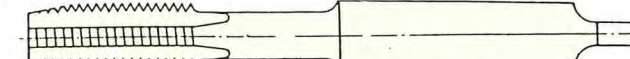
## GUIDE TAPS



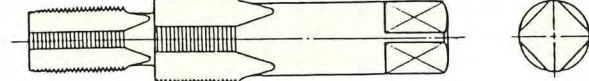
## REAMER SECTION TAPS



## MORSE TAPER SHANK TAPS



## MULTI-DIAMETER TAPS



# ROUND DIES

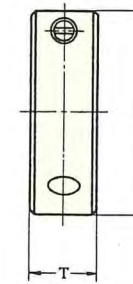
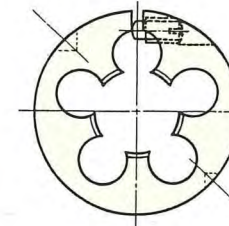
RUNDE SCHNEIDEISEN  
HILERAS DE ROSCAR REDONDAS  
FILIERES

METRIC

ART NO.822

## Round Adjustable Dies

Metric sizes



High Speed Steel  
Tungsten Steel  
ALLOY Steel

Nominal Diameter (mm)	Coarse Pitch (mm)	Fine-1 Pitch (mm)	Fine-2 Pitch (mm)	Fine-3 Pitch (mm)	Fine-4 Pitch (mm)	Outside Diameter and Thickness												
						13/16(20)	1(25)	1 1/4(33)	1 1/2(38)	2(50)	2 1/4(57)	2 1/2(63)	2 3/4(70)	3(75)	4(100)	5(127)		
						× 1/4	× 3/8	× 7/16	× 1/2	× 5/8	× 3/4	× 3/4	× 1	× 1	× 1 1/4	× 1 1/2		
1	0.25	0.2				13/16	1											
1.2	0.25	0.2				13/16	1											
1.4	0.3	0.2				13/16	1											
1.7	0.35	0.25	0.2			13/16	1											
2	0.4	0.25				13/16	1	1 5/16	1 1/2									
2.3	0.4	0.25				13/16	1	1 5/16	1 1/2									
2.6	0.45	0.35				13/16	1	1 5/16	1 1/2									
3	0.6	0.35				13/16	1	1 5/16	1 1/2									
3	0.5					13/16	1	1 5/16	1 1/2									
3.5	0.6	0.35				13/16	1	1 5/16	1 1/2									
4	0.75	0.5				13/16	1	1 5/16	1 1/2									
4	0.7					13/16	1	1 5/16	1 1/2									
4.5	0.75	0.5				13/16	1	1 5/16	1 1/2									
5	0.9	0.5				13/16	1	1 5/16	1 1/2									
5	0.8					13/16	1	1 5/16	1 1/2	2								
5.5	0.9	0.5				13/16	1	1 5/16	1 1/2	2								
6	1	0.75	0.5			13/16	1	1 5/16	1 1/2	2								
7	1	0.75	0.5			13/16	1	1 5/16	1 1/2	2								
8	1.25	1	0.75	0.5		13/16	1	1 5/16	1 1/2	2								
9	1.25	1	0.75	0.5		13/16	1	1 5/16	1 1/2	2								
10	1.5	1.25	1.0	0.75			1	1 5/16	1 1/2	2								
11	1.5	1.25	1.0	0.75			1	1 5/16	1 1/2	2								
12	1.75	1.5	1.25	1.0	0.5		1	1 5/16	1 1/2	2								
13	1.75	1.5	0.5						1 1/2	2								
14	2	1.5	1.25	1.0	0.5				1 1/2	2								
15	2	1.5	1.0	0.5					1 1/2	2	2 1/4	2 1/2						
16	2	1.5	1.0	0.5					1 1/2	2	2 1/4	2 1/2						
17	2	1.5	1.0	0.5					1 1/2	2	2 1/4	2 1/2						
18	2.5	2	1.5	1.0	0.5				1 1/2	2	2 1/4	2 1/2						
20	2.5	2	1.5	1.0	0.5				2	2 1/4	2 1/2							
22	2.5	2	1.5	1.0	0.5				2	2 1/4	2 1/2							
24	3	2	1.5	1.0	0.5				2	2 1/4	2 1/2							
25	3	2	1.5	1.0	0.5				2	2 1/4	2 1/2							
26	3	2	1.5	1.0	0.5				2	2 1/4	2 1/2							
27	3	2	1.5	1.0	0.5				2	2 1/4	2 1/2							
28	3	2	1.5	1.0	0.5				2	2 1/4	2 1/2	2 3/4	3					
30	3.5	2	1.5	1.0	0.5				2	2 1/4	2 1/2	2 3/4	3					
32	3.5	2	1.5	1.0	0.5				2	2 1/4	2 1/2	2 3/4	3					
33	3.5	2	1.5						2	2 1/4	2 1/2	2 3/4	3					
34	3.5	2	1.5	1.0	0.5				2	2 1/4	2 1/2	2 3/4	3					
36	4	2	1.5	1.0	0.5							2 3/4	3					
38	4	2	1.5	1.0	0.5							2 3/4	3					
39	4	2	1.5									2 3/4	3					
40	4	2	1.5	1.0								2 3/4	3					
42	4.5	3	1.5									2 3/4	3					
45	4.5	3	1.5										3	4				
48	5	3	1.5										3	4				
50	5	3	1.5										3	4				
52	5	3	1.5										3	4				
55	5	3	1.5										3	4				
56	5.5	3	1.5											4				
58	5.5		1.5											4				
60	5.5		1.5															
62	6.0		1.5															
64	6		1.5															
65	6		1.5															
68	6		1.5															
Angle of Thread	60°					12(g)	25(g)	80(g)	90(g)	180(g)	250(g)	330(g)	400(g)	600(g)	950(g)	1850(g)		

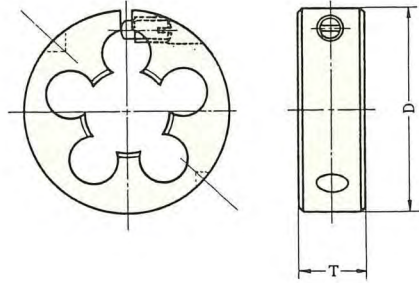


# ROUND DIES

RUNDE SCHNEIDEISEN  
HILERAS DE ROSCAR REDONDAS  
FILIERES

ART NO.820

## Gas Pipe Round Adjustable Dies BSPT BSPT NPT NPS



High Speed Steel  
Tungsten Steel  
ALLOY Steel

Cutting Size Per inch	Thread To in BSPT BSPT	Thread To in NPT NPS	Outside Diameter and Thickness									
			1 3/8	1 1/2	2 5/8	2 3/4	2 1/2 3/4	3 1	4 1 3/16	5 1 3/8		
1/16	28	27	1	1 1/2								
1/8	28	27	1	1 1/2								
1/4	19	18		1 1/2	2							
3/8	19	18		1 1/2	2							
1/2	14	14		1 1/2	2	2 1/4						
5/8	14	14			2	2 1/4						
3/4	14	14			2	2 1/4	2 1/2					
7/8	14	11 1/2				2 1/4	2 1/2	3				
1	11	11 1/2				2 1/4	2 1/2	3	4			
1 1/8	11	11 1/2					2 1/2	3	4			
1 1/4	11	11 1/2					2 1/2	3	4	5		
1 3/8	11	11 1/2						3	4	5		
1 1/2	11	11 1/2						3	4	5		
1 5/8	11	11 1/2						3	4	5		
1 3/4	11	11 1/2						3	4	5		
2	11	11 1/2						4	5			
2 1/4	11	11 1/2							5			
2 1/2	11	8								5		
2 3/4	11	8										
3	11	8										
3 1/4	11	8										
3 1/2	11	8										
3 3/4	11	8										
4	11	8										

## British Standard Brass Dies

Size inch	Thread per inch	Outside Diameter inch			
1/4	26	1	1 1/2		
5/16	26	1	1 1/2		
3/8	26	1	1 1/2		
7/16	26	1	1 1/2		
1/2	26	1	1 1/2		2
9/16	26	1	1 1/2		2
5/8	26		1 1/2		2
3/4	26		1 1/2		2
7/8	26				2
1	26				2

## British Standard Conduit Dies

Size inch	Thread per inch	Outside Diameter inch			
5/8	18	1 5/8	2 1/4		
3/4	16	1 5/8	2 1/4		
1	16	1 5/8	2 1/4		
1 1/4	16		2 1/4		
1 1/2	14				3 3/16
2	14				3 3/16

## Metric Conduit Dies

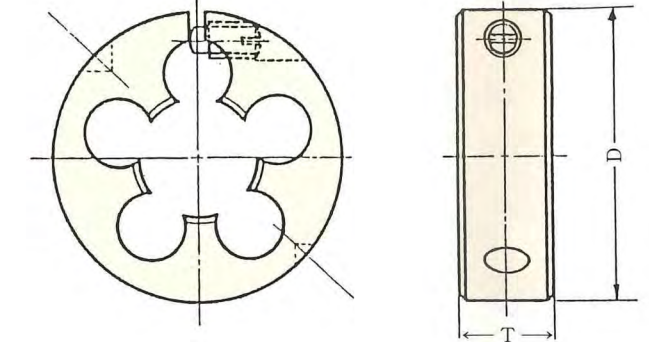
Size mm	Pitch mm	Outside Diameter inch			
16	1.5	1 5/8	2 1/4		
20	1.5	1 5/8	2 1/4		
25	1.5	1 5/8	2 1/4		
32	1.5		2 1/4		
40	1.5		2 1/4		3 3/16
50	1.5		2 1/4		3 3/16

# ROUND DIES

RUNDE SCHNEIDEISEN  
HILERAS DE ROSCAR REDONDAS  
FILIERES

ART NO.819

## Round Adjustable Dies Inch Sizes NC NF NS BSW BSF



High Speed Steel  
Tungsten Steel  
ALLOY Steel

Nominal Diameter inch	Thread per inch					Outside Diameter and Thickness										
						1 3/16(20)	1"(25)	1 5/16(33)	1 1/2(38)	2"(50)	2 1/4(57)	2 1/2(63)	2 3/4(70)	3"(75)	4"(100)	
	(u)NC	(u)NF	(u)NS	BSW	BSF	1/4	3/8	7/16	1/2	5/8	3/4	3/4	1	1	1 3/16	
1/16	60	64	64.72	60		13/16	1									
3/32	48	56	56	48		13/16	1									
1/8	40	44	40.44	40	44	13/16	1	1 5/16	1 1/2							
5/32	32	36	32.36	32	36	13/16	1	1 5/16	1 1/2							
3/16	24	32	24.32	24	32	13/16	1	1 5/16	1 1/2							
7/32	24	32	24.32	24		13/16	1	1 5/16	1 1/2							
1/4	20	28	24.32	20	26	13/16	1	1 5/16	1 1/2	2	2 1/4					
9/32	20		28.32	20			1	1 5/16	1 1/2	2	2 1/4					
5/16	18	24	32	18	22		1	1 5/16	1 1/2	2	2 1/4					
3/8	16	24	32	16	20		1	1 5/16	1 1/2	2	2 1/4					
7/16	14	20	28	14	18		1	1 5/16	1 1/2	2	2 1/4					
1/2	13	20	28.32	12	16		1	1 5/16	1 1/2	2	2 1/4	2 1/2				
9/16	12	18	27	12	16				1 1/2	2	2 1/4	2 1/2				
5/8	11	18	32	11	14				1 1/2	2	2 1/4	2 1/2				
1 1/16	11	16	11.16	11	14				1 1/2	2	2 1/4	2 1/2				
3/4	10	16	32	10	12				1 1/2	2	2 1/4	2 1/2	2 3/4			
7/8	9	14	12.18	9	11					2	2 1/4	2 1/2	2 3/4	3		
1	8	12	14.20	8	10					2	2 1/4	2 1/2	2 3/4	3	4	
1 1/8	7	12	18	7	9						2 1/4	2 1/2	2 3/4	3	4	
1 1/4	7	12	18	7	9						2 1/4	2 1/2	2 3/4	3	4	
1 3/8	6	12	18	6	8								2 1/2	2 3/4	3	4
1 1/2	6	12	18	6	8								2 1/2	2 3/4	3	4
1 5/8	5			5	8									2 3/4	3	4
1 3/4	5			5	7										3	4
1 7/8	4 1/2			4 1/2	7										3	4
2	4 1/2			4 1/2	7										3	4
2 1/4	4 1/2			4	6											4
2 1/2	4			4	6											
2 3/4	4			3 1/2	6											
3	4			3 1/2	5											
Angle of Thread	60°	60°	60°	55°	55°	12(g)	25(g)	80(g)	90(g)	180(g)	320(g)	330(g)	400(g)	600(g)	950(g)	



# ROUND DIES

RUNDE SCHNEIDEISEN  
HILERAS DE ROSCAR REDONDAS  
FILIERES

ART NO.821

# DIES SPECIAL THREAD

High Speed Steel

ALLOY STEEL

ART NO.840

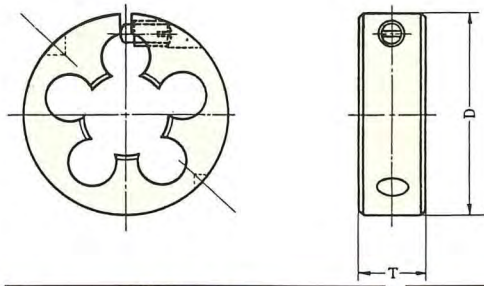


Machine Screw sizes  
Metric sizes  
BA sizes  
Sewing Machine sizes



## Round Adjustable Dies

Outside Diameter  $1\frac{3}{16}$  inch  
Thickness  $\frac{1}{4}$  inch



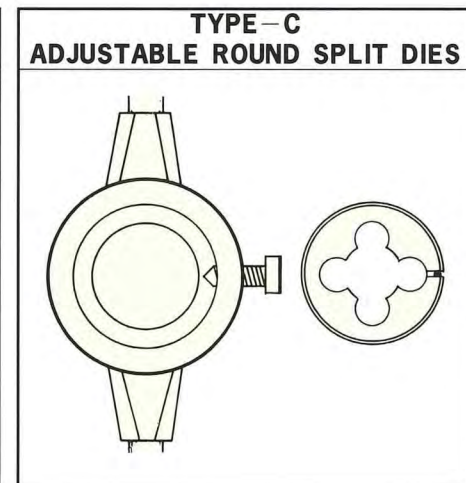
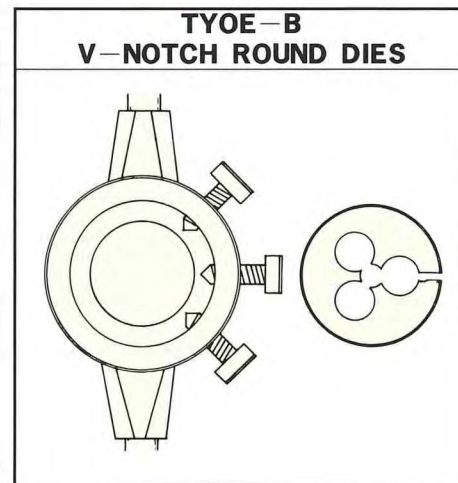
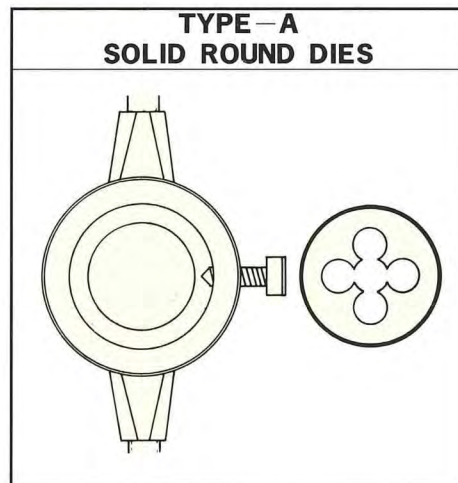
High Speed Steel  
Tungsten Steel  
ALLOY Steel

Machine Screw Sizes			
Size No.	(u)NC	Thread per inch (u)NF	(u)NS
0		80	
1	64	72	56
2	56	64	
3	48	56	
4	40	48	32-36
5	40	44	
6	32	40	36
8	32	36	40
10	24	32	30
12	24	28	32
14	20	24	

Size	Metric sizes	
	pitch Coarse	Pitch Fine
1.0	0.25	0.2
1.1	0.25	0.2
1.2	0.25	0.2
1.4	0.3	0.2
1.6	0.35	0.2
1.7	0.35	0.2
1.8	0.35	0.2
2.0	0.4	0.25
2.2	0.4/0.45	0.25
2.3	0.4	0.25
2.5	0.45	0.25
2.6	0.45	0.25
3.0	0.5	0.35
3.5	0.6	0.35
4.0	0.7	0.50

Sewing Machine Sizes	
Nominal Diameter inch	Thread per inch
SM $\frac{1}{16}$	80
SM $\frac{5}{64}$	64
SM $\frac{3}{32}$	100
SM $\frac{1}{8}$	48
SM $\frac{1}{8}$	44
SM $\frac{9}{64}$	40
SM $\frac{11}{64}$	40
SM $\frac{11}{64}$	40
SM $\frac{11}{64}$	32
SM $\frac{3}{16}$	40
SM $\frac{3}{16}$	32
SM $\frac{3}{16}$	28
SM $\frac{3}{16}$	24
SM $\frac{13}{64}$	32
SM $\frac{7}{32}$	32
SM $\frac{15}{64}$	28
SM $\frac{1}{4}$	40
SM $\frac{1}{4}$	28
SM $\frac{1}{4}$	24

Sewing Machine Sizes	
Nominal Diameter inch	Thread per inch
SM $\frac{1}{16}$	80
SM $\frac{5}{64}$	64
SM $\frac{3}{32}$	100
SM $\frac{1}{8}$	48
SM $\frac{1}{8}$	44
SM $\frac{9}{64}$	40
SM $\frac{11}{64}$	40
SM $\frac{11}{64}$	40
SM $\frac{11}{64}$	32
SM $\frac{3}{16}$	40
SM $\frac{3}{16}$	32
SM $\frac{3}{16}$	28
SM $\frac{3}{16}$	24
SM $\frac{13}{64}$	32
SM $\frac{7}{32}$	32
SM $\frac{15}{64}$	28
SM $\frac{1}{4}$	40
SM $\frac{1}{4}$	28
SM $\frac{1}{4}$	24



## INGREDIENT SPECIFICATION

Type of Steel	Chemical Composition										
	C %×100	Si %×100	Mn %×100	P %×1000	S %×1000	Cu %×100	Ni %×100	Cr %×100	Mo %×100	W %×100	V %×100
SKH2	70~85	MAX 40	MAX 40	MAX 30	MAX 30			380~450		1700~1900	80~120
SKH9	80~90	MAX 40	MAX 40	MAX 30	MAX 30			380~450	450~550	550~670	160~220
SKS11	120~130	MAX 35	MAX 50	MAX 30	MAX 30			20~50		300~400	10~30
SKS2	100~110	MAX 35	MAX 80	MAX 30	MAX 30			50~100		100~150	
GSS2	97	MAX 18	MAX 97	MAX 24	MAX 17	9		48	21		
ALLOY	095~1.10	MAX 35	MAX 90	MAX 27	MAX 20			13~165			

JIS(Japanese Industrial Standard)	SKH2	SKH9	SKS11	SKS2	SK3
ASTM(American Society for Testing and Material)	T <sub>1</sub>	M <sub>2</sub>	F <sub>2</sub>		W1-10
AISI(American Iron and Steel Institute)					
BS(British Standard)	BT <sub>1</sub>	BM <sub>2</sub>			BW1B
DIN(Deutsche Industrie Normen)					
VDEh(Verein Deutscher Eisenhüttenleute)		S6-5-2		105WCr6	C105W1

## Fractional Sizes Round Dies

Machine Screw Size	Threads per inch	Outside Diameter	Size	Threads per inch	Outside Diameter	Size	Threads per inch	Outside Diameter	Size	Threads per inch	Outside Diameter	Size	Threads per inch	Outside Diameter	Size									
0	96	$\frac{13}{16}$	$\frac{1}{16}$	64	$\frac{13}{16}$	1			$\frac{3}{8}$	36	1	$\frac{1}{2}$	2	$\frac{11}{16}$	18	2	$\frac{2}{2}$	1	36	2	$\frac{2}{2}$	3		
1	56	$\frac{13}{16}$	$\frac{3}{32}$	48	$\frac{13}{16}$	1			$\frac{3}{8}$	40	1	$\frac{1}{2}$	2	$\frac{11}{16}$	20	2	$\frac{2}{2}$	1	40	2	$\frac{2}{2}$	3		
1	80	$\frac{13}{16}$	$\frac{1}{8}$	40	$\frac{13}{16}$	1			$\frac{3}{8}$	48	1	$\frac{1}{2}$	2	$\frac{11}{16}$	24	2	$\frac{2}{2}$	1	48	2	$\frac{2}{2}$	3		
2	72	$\frac{13}{16}$	$\frac{1}{8}$	48	$\frac{13}{16}$	1			$\frac{3}{8}$	56	1	$\frac{1}{2}$	2	$\frac{11}{16}$	27	2	$\frac{2}{2}$	1	56	2	$\frac{2}{2}$	3		
2	80	$\frac{13}{16}$	$\frac{9}{64}$	40	$\frac{13}{16}$	1			$\frac{3}{8}$	64	1	$\frac{1}{2}$	2	$\frac{11}{16}$	28	2	$\frac{2}{2}$	$\frac{1}{16}$	10		$\frac{2}{2}$	3	4	
3	64	$\frac{13}{16}$	$\frac{5}{32}$	32	$\frac{13}{16}$	1			$\frac{3}{8}$	72	1	$\frac{1}{2}$	2	$\frac{11}{16}$	32	2	$\frac{2}{2}$	$\frac{1}{16}$	12		$\frac{2}{2}$	3	4	
3	72	$\frac{13}{16}$	$\frac{5}{32}$	36	$\frac{13}{16}$	1			$\frac{3}{8}$	80	1	$\frac{1}{2}$	2	$\frac{11}{16}$	36	2	$\frac{2}{2}$	$\frac{1}{16}$	14		$\frac{2}{2}$	3	4	
3	80	$\frac{13}{16}$	$\frac{5}{32}$	40	$\frac{13}{16}$	1			$\frac{13}{32}$	32		$\frac{1}{2}$	2	$\frac{11}{16}$	40	2	$\frac{2}{2}$	$\frac{1}{16}$	16		$\frac{2}{2}$	3	4	
4	32	$\frac{13}{16}$	$\frac{3}{16}$	24	$\frac{13}{16}$	1			$\frac{7}{16}$	16		$\frac{1}{2}$	2	$\frac{3}{4}$	14	2	$\frac{2}{2}$	$\frac{1}{16}$	18		$\frac{2}{2}$	3	4	
4	56	$\frac{13}{16}$	$\frac{3}{16}$	32	$\frac{13}{16}$	1			$\frac{7}{16}$	18		$\frac{1}{2}$	2	$\frac{3}{4}$	18	2	$\frac{2}{2}$	$\frac{1}{16}$	20		$\frac{2}{2}$	3	4	
4	64	$\frac{13}{16}$	$\frac{3}{16}$	40	$\frac{13}{16}$	1			$\frac{7}{16}$	24		$\frac{1}{2}$	2	$\frac{3}{4}$	20	2	$\frac{2}{2}$	$\frac{1}{16}$	24		$\frac{2}{2}$	3	4	
4	72	$\frac{13}{16}$	$\frac{3}{16}$	48	$\frac{13}{16}$	1			$\frac{7}{16}$	27		$\frac{1}{2}$	2	$\frac{3}{4}$	20	2	$\frac{2}{2}$	$\frac{1}{16}$	27		$\frac{2}{2}$	3	4	
4	80	$\frac{13}{16}$	$\frac{3}{16}$	24	$\frac{13}{16}$	1			$\frac{7}{16}$	28		$\frac{1}{2}$	2	$\frac{3}{4}$	24	2	$\frac{2}{2}$	$\frac{1}{16}$	32		$\frac{2}{2}$	3	4	
5	32	$\frac{13}{16}$	$\frac{7}{32}$	28	$\frac{13}{16}$	1			$\frac{7}{16}$	30		$\frac{1}{2}$	2	$\frac{3}{4}$	27	2	$\frac{2}{2}$	$\frac{1}{8}$	8		$\frac{2}{2}$	3	4	
5	36	$\frac{13}{16}$	$\frac{7}{32}$	32	$\frac{13}{16}$	1			$\frac{7}{16}$	32		$\frac{1}{2}$	2	$\frac{3}{4}$	27	2	$\frac{2}{2}$	$\frac{1}{8}$	10		$\frac{2}{2}$	3	4	
5	48	$\frac{13}{16}$	$\frac{7}{32}$	36	$\frac{13}{16}$	1			$\frac{7}{16}$	36		$\frac{1}{2}$	2	$\frac{3}{4}$	28	2	$\frac{2}{2}$	$\frac{1}{8}$	14		$\frac{2}{2}$	3	4	
5	56	$\frac{13}{16}$	$\frac{7}{32}$	40	$\frac{13}{16}$	1			$\frac{7}{16}$	40		$\frac{1}{2}$	2	$\frac{3}{4}$	30	2	$\frac{2}{2}$	$\frac{1}{8}$	16		$\frac{2}{2}$	3	4	
5	60	$\frac{13}{16}$	$\frac{1}{4}$	16	$\frac{13}{16}$	1	$\frac{1}{2}$		$\frac{7}{16}$	48		$\frac{1}{2}$	2	$\frac{3}{4}$	32	2	$\frac{2}{2}$	$\frac{1}{8}$	18		$\frac{2}{2}$	3	4	
5	64	$\frac{13}{16}$	$\frac{1}{4}$	18	$\frac{13}{16}$	1	$\frac{1}{2}$		$\frac{7}{16}$	56		$\frac{1}{2}$	2	$\frac{3}{4}$	32	2	$\frac{2}{2}$	$\frac{1}{8}$	20		$\frac{2}{2}$	3	4	
5	72	$\frac{13}{16}$	$\frac{1}{4}$	24	$\frac{13}{16}$	1	$\frac{1}{2}$		$\frac{7}{16}$	64		$\frac{1}{2}$	2	$\frac{3}{4}$	40	2	$\frac{2}{2}$	$\frac{1}{8}$	24		$\frac{2}{2}$	3	4	
5	80	$\frac{13}{16}$	$\frac{1}{4}$	24	$\frac{13}{16}$	1	$\frac{1}{2}$		$\frac{15}{32}$	24		$\frac{1}{2}$	2	$\frac{3}{4}$	48	2	$\frac{2}{2}$	$\frac{1}{8}$	27		$\frac{2}{2}$	3	4	
6	30	$\frac{13}{16}$	1	$\frac{1}{4}$	24		1	$\frac{1}{2}$	$\frac{15}{32}$	32		$\frac{1}{2}$	2	$\frac{3}{4}$	56	2	$\frac{2}{2}$	$\frac{1}{8}$	32		$\frac{2}{2}$	3	4	
6	36	$\frac{13}{16}$	1	$\frac{1}{4}$	27		1	$\frac{1}{2}$	$\frac{15}{32}$	40		$\frac{1}{2}$	2	$\frac{3}{4}$	64	2	$\frac{2}{2}$	$\frac{13}{16}$	12		$\frac{2}{2}$	3	4	
6	48	$\frac{13}{16}$	1	$\frac{1}{4}$	30		1	$\frac{1}{2}$	$\frac{1}{2}$	12		$\frac{1}{2}$	2	$\frac{13}{16}$	10	2	$\frac{2}{2}$	$\frac{13}{16}$	16		$\frac{2}{2}$	3	4	
6	56	$\frac{13}{16}$	1	$\frac{1}{4}$	32		1	$\frac{1}{2}$	$\frac{1}{2}$	14		$\frac{1}{2}$	2	$\frac{13}{16}$	12	2	$\frac{2}{2}$	$\frac{13}{16}$	18		$\frac{2}{2}$	3	4	
6	60	$\frac{13}{16}$	1	$\frac{1}{4}$	32		1	$\frac{1}{2}$	$\frac{1}{2}$	16		$\frac{1}{2}$	2	$\frac{13}{16}$	14	2	$\frac{2}{2}$	$\frac{13}{16}$	20		$\frac{2}{2}$	3	4	
6	64	$\frac{13}{16}$	1	$\frac{1}{4}$	32		1	$\frac{1}{2}$	$\frac{1}{2}$	18		$\frac{1}{2}$	2	$\frac{13}{16}$	16	2	$\frac{2}{2}$	$\frac{13}{16}$	24		$\frac{2}{2}$	3	4	
6	72	$\frac{13}{16}$	1	$\frac{1}{4}$	36		1	$\frac{1}{2}$	$\frac{1}{2}$	24		$\frac{1}{2}$	2	$\frac{13}{16}$	18	2	$\frac{2}{2}$	$\frac{13}{16}$	32		$\frac{2}{2}$	3	4	
6	80	$\frac{13}{16}$	1	$\frac{1}{4}$	40		1	$\frac{1}{2}$	$\frac{1}{2}$	26		$\frac{1}{2}$	2	$\frac{13}{16}$	20	2	$\frac{2}{2}$	$\frac{1}{4}$	8		$\frac{2}{2}$	3	4	
7	32	$\frac{13}{16}$	1	$\frac{1}{4}$	48		1	$\frac{1}{2}$	$\frac{1}{2}$	27		$\frac{1}{2}$	2	$\frac{13}{16}$	24	2	$\frac{2}{2}$	$\frac{1}{4}$	10		$\frac{2}{2}$	3	4	
7	36	$\frac{13}{16}$	1	$\frac{1}{4}$	56		1	$\frac{1}{2}$	$\frac{1}{2}$	28		$\frac{1}{2}$	2	$\frac{13}{16}$	27	2	$\frac{2}{2}$	$\frac{1}{4}$	14		$\frac{2}{2}$	3	4	
7	40	$\frac{13}{16}$	1	$\frac{1}{4}$	60		1	$\frac{1}{2}$	$\frac{1}{2}$	30		$\frac{1}{2}$	2	$\frac{13}{16}$	28	2	$\frac{2}{2}$	$\frac{1}{4}$	16		$\frac{2}{2}$	3	4	
7	48	$\frac{13}{16}$	1	$\frac{1}{4}$	64		1	$\frac{1}{2}$	$\frac{1}{2}$	32		$\frac{1}{2}$	2	$\frac{13}{16}$	32	2	$\frac{2}{2}$	$\frac{1}{4}$	18		$\frac{2}{2}$	3	4	
7	64	$\frac{13}{16}$	1	$\frac{1}{4}$	72		1	$\frac{1}{2}$	$\frac{1}{2}$	36		$\frac{1}{2}$	2	$\frac{7}{8$										



# DIES SPECIAL THREAD

High Speed Steel

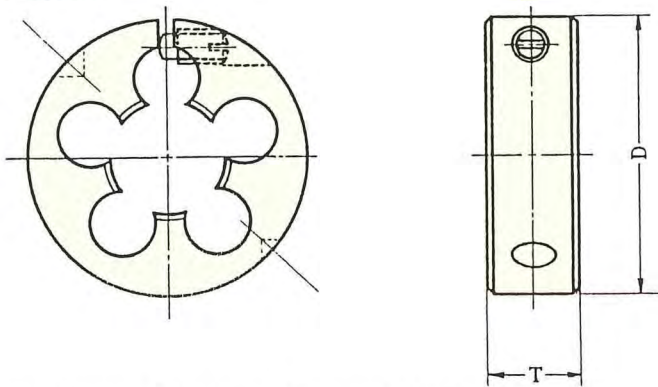
ALLOY STEEL

ART NO.840



## Fractional Sizes Round Dies

Size	Threads per inch	Outside Diameter	Size	Threads per inch	Outside Diameter
1 1/2	14	3	4	2	24
1 1/2	16	3	4	2	32
1 1/2	18	3	4	2 1/16	12
1 1/2	20	3	4	2 1/16	14
1 1/2	24	3	4	2 1/8	8
1 1/2	27	3	4	2 1/8	10
1 1/2	32	3	4	2 1/8	12
1 9/16	12	3	4	2 1/8	14
1 9/16	18	3	4	2 1/8	16
1 9/16	20	3	4	2 1/8	18
1 9/16	24	3	4	2 3/16	12
1 5/8	8	3	4	2 3/16	14
1 5/8	10	3	4	2 1/4	4 1/2
1 5/8	12	3	4	2 1/4	8
1 5/8	14	3	4	2 1/4	10
1 5/8	16	3	4	2 1/4	12
1 5/8	18	3	4	2 1/4	16
1 5/8	20	3	4	2 1/4	18
1 5/8	24	3	4	2 5/16	14
1 11/16	6	3	4	2 5/16	16
1 11/16	12	3	4	2 5/8	8
1 11/16	14	3	4	2 5/8	10
1 11/16	16	3	4	2 5/8	12
1 11/16	18	3	4	2 5/8	14
1 11/16	20	3	4	2 5/8	16
1 3/4	5	3	4	2 5/8	18
1 3/4	8	3	4	2 5/8	20
1 3/4	10	3	4	2 1/2	4
1 3/4	12	3	4	2 1/2	8
1 3/4	14	3	4	2 1/2	10
1 3/4	16	3	4	2 1/2	12
1 3/4	18	3	4	2 1/2	14
1 3/4	20	3	4	2 1/2	16
1 3/4	24	3	4	2 5/8	8
1 13/16	12	3	4	2 5/8	10
1 13/16	16	3	4	2 3/4	8
1 13/16	20	3	4	2 3/4	10
1 7/8	8	3	4	2 3/4	14
1 7/8	10	3	4	2 7/8	8
1 7/8	12	3	4	2 7/8	10
1 7/8	14	3	4	2 7/8	12
1 7/8	16	3	4	2 7/8	14
1 7/8	18	3	4	2 7/8	16
1 7/8	20	3	4	3	4
1 7/8	24	3	4	3	8
1 15/16	18	3	4	3	12
2	4 1/2	3	4	3	16
2	8	3	4		
2	10	3	4		
2	12	3	4		
2	14	3	4		
2	16	3	4		
2	18	3	4		
2	20	3	4		



## Millimeter Sizes Round Dies

mm Size	mm Pitch	Outside Diameter	mm Size	mm Pitch	Outside Diameter
1.0	.20	13/16	5.5	.90	1
1.0	.25	13/16	6.0	.50	1 1/2
1.2	.20	13/16	6.0	.75	1 1/2
1.2	.25	13/16	6.0	1.00	1 1/2
1.4	.20	13/16	6.0	1.25	1 1/2
1.4	.30	13/16	7.0	.50	1 1/2
1.5	.30	13/16	7.0	.75	1 1/2
1.5	.35	13/16	7.0	1.00	1 1/2
1.6	.35	13/16	7.0	1.25	1 1/2
1.7	.20	13/16	8.0	.75	1 1/2
1.7	.35	13/16	8.0	1.00	1 1/2
1.8	.35	13/16	8.0	1.25	1 1/2
2.0	.25	13/16	9.0	.75	1 1/2
2.0	.40	13/16	9.0	1.00	1 1/2
2.0	.45	13/16	9.0	1.25	1 1/2
2.0	.50	13/16	10.0	.75	1 1/2
2.2	.45	13/16	10.0	1.00	1 1/2
2.3	.25	13/16	10.0	1.25	1 1/2
2.3	.40	13/16	10.0	1.50	1 1/2
2.5	.45	13/16	11.0	1.50	1 1/2
2.6	.35	13/16	12.0	1.00	1 1/2
2.6	.45	13/16	12.0	1.25	1 1/2
3.0	.35	13/16	12.0	1.50	1 1/2
3.0	.50	13/16	12.0	1.75	1 1/2
3.0	.60	13/16	13.0	1.50	1 1/2
3.0	.75	13/16	14.0	1.25	1 1/2
3.5	.35	13/16	14.0	1.50	1 1/2
3.5	.60	13/16	14.0	1.75	1 1/2
4.0	.50	13/16	14.0	2.00	1 1/2
4.0	.70	13/16	16.0	1.25	1 1/2
4.0	.75	13/16	16.0	1.50	1 1/2
4.5	.50	13/16	16.0	2.00	1 1/2
4.5	.75	13/16	18.0	1.50	1 1/2
5.0	.50	13/16	18.0	2.00	1 1/2
5.0	.75	13/16	18.0	2.50	1 1/2
5.0	.80	13/16	20.0	1.50	2
5.0	.90	13/16	20.0	2.50	2
5.0	1.00	13/16	24.0	2.00	2
5.5	.70	13/16			

# HEXAGON DIES

ACROSS FLATS 1" 1 7/16 & STANDARD

ART NO.839

## Most Economical Sizes

Metric Sizes	Inch Sizes	Metric Sizes	Inch Sizes	Metric Sizes	Inch Sizes	Metric Sizes	Inch Sizes
3M0.6	4-36-NS	1/8-40-W	3M0.5	1/8-40W	4-36-NS	6M1.0	1/4-20-NC
3M0.5	4-40-NC	1/8-44-NF	3M0.60	1/8-44NF	4-40-NC	6M0.75	1/4-28-NF
4M0.75	5-40-NC	1/8-40-NC	4M0.70	1/8-40NC	4-48-NF	7M1.0	5/16-18-NC
4M0.7	6-32-NC	5/32-32-W	4M0.75	5/32-32W	5-40-NC	7M0.75	5/16-24-NF
5M0.9	8-32-NC	5/32-36-NF	5M0.80	5/32-36NF	5-44-NF	8M1.00	3/8-16-NC
5M0.8	10-24-NC	5/32-32-NC	5M0.90	5/32-32NC	6-32-NC	8M1.25	3/8-24-NF
6M0.75	10-32-NF	3/16-24-W	6M1.00	3/16-24W	6-36-NS	9M1.00	7/16-14-NC
6M1.0	12-24-NC	3/16-32-NF	6M0.75	3/16-32NF	6-40-NF	9M1.25	7/16-20-NF
	14-20-NS	3/16-24-NC	7M1.00	3/16-24NC	6-48-NS	10M1.00	1/2-13-NC
	3/16-24-NS	7/32-24-W	7M0.75	7/32-24W	8-32-NC	10M1.25	1/2-20-NF
	3/16-32-NS	7/32-32-NF	8M1.00	7/32-32NF	8-36-NF	10M1.50	1/2-24-NS
	1/4-20-NC	7/32-24-NC	8M1.25	7/32-24NC	8-40-NS	11M1.50	9/16-12-NC
	1/4-25-NF	1/4-20-W	9M0.75	1/4-20W	10-24-NC	12M1.25	9/16-18-NF
			9M1.00	5/16-18W	10-32-NF	12M1.50	5/8-11-NC
			9M1.25	3/8-16W	12-24-NC	12M1.75	5/8-18-NF
			10M1.00	7/16-14W	12-28-NF	14M1.25	11/16-11-NS
			10M1.25	1/2-12W	14-20-NS	14M1.50	11/16-16-NS
			10M1.50	1/8-28BSP	1/8-40-NS	14M2.00	3/4-10-NC
			11M1.50	1/8-28BSP	3/16-24-NS	16M1.50	3/4-16-NF
			12M1.25	1/4-19BSP	3/16-32-NS	16M2.00	7/8-9-NC
			12M1.50	1/4-19BSP	1/4-20-NC	18M1.00	7/8-14-NF
			12M1.75	1/4-24-NS	1/4-24-NS	18M1.50	1-8-NC
				1/4-28-NF	1/4-32-NEF	18M2.50	1-12-NF
				1/4-40-NS	1/4-40-NS	20M2.50	1-14-NS
				5/16-18-NC	5/16-18-NC	22M1.50	1/8-27-NPT
				5/16-24-NF	5/16-24-NF	24M3.00	1/4-18-NPT
				5/16-32-NEF	5/16-32-NEF	24M1.50	3/8-18-NPT
				3/8-16-NC	3/8-16-NC		1/2-14-NPT
				3/8-24-NF	3/8-24-NF		3/4-14-NPT
				7/16-14-NC	7/16-14-NC		
				7/16-20-NF	7/16-20-NF		
				1/2-13-NC	1/2-13-NC		
				1/2-20-NF	1/2-20-NF		
				1/2-24-NS	1/2-24-NS		
				1/8-27-NPT	1/8-27-NPT		
				1/4-18-NPT	1/4-18-NPT		

10g

30g

80g

200g



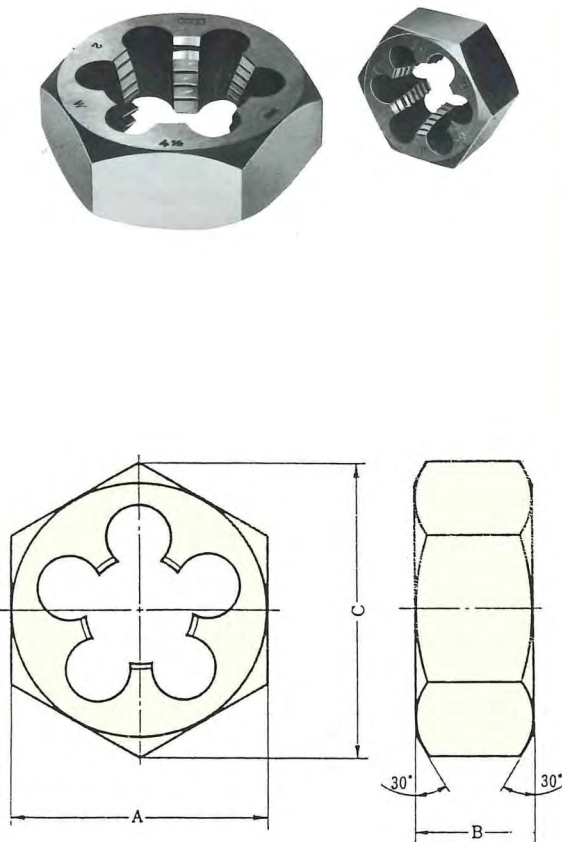
# HEXAGON RE-THREADING. DIES

19/32" THRU 7 ACROSS HEX FLATS

ART NO.839

Sizes are available  
**INCH Sizes** 3/16~5inch  
**METRIC Sizes** 6~50mm  
 please state standard such as **BSW.UNF.UNC.METRIC.GAS**

Pipe HEXAGON DIES	Metric SIZES	INCH SIZES	Across Flats	Thickness B	WEIGHT
NPT NPS	6mm	1/4-20NC 1/4-28NF	19/32	1/4	8 g
BSPT BSPS	7~ 8mm	5/16-18NC 5/16-24NF	11/16	5/16	12
1/8	9~ 10mm	3/8-16NC 3/8-24NF	25/32	3/8	16
	11mm	7/16-14NC 7/16-20NF	7/8	7/16	25
1/4	12~ 13mm	1/2-13NC 1/2-20NF	1 1/16	1/2	50
	14mm	9/16-12NC 9/16-18NF	1 1/16	1/2	55
3/8	15~ 16mm	5/8-11NC 5/8-18NF	1 1/4	5/8	75
		11/16-11NS 11/16-16NS	17/16	11/16	100
1/2	17~ 20mm	3/4-10NC 3/4-16NF	17/16	3/4	115
	21~ 23mm	7/8- 9NC 7/8-14NF	1 5/8	7/8	125
3/4	24~ 26mm	1- 8NC 1-12NF 1-14NS	1 13/16	1	200
	27~ 30mm	1 1/8- 7NC 1 1/8-12NF	2	1	280
1"	31~ 33mm	1 1/4- 7NC 1 1/4-12NF	2 3/16	1	320
	34~ 35mm	1 3/8- 6NC 1 3/8-12NF	2 3/8	1	380
1 1/4	36~ 40mm	1 1/2- 6NC 1 1/2-12NF	2 9/16	1	420
	41~ 42mm	NC& NF 1 5/8	3 1/8	1"	450
1 1/2	43~ 45mm	1 3/4	3 1/8	1"	540
	46~ 48mm	1 7/8	3 1/8	1 1/4	690
1 3/4	50~ 52mm	2	3 1/2	1 1/4	740
	53~ 57mm	2 1/4	3 1/2	1 1/4	1000
2"	58~ 60mm	2 3/8	4 1/2	1 1/2	1250
	63~ 65mm	2 1/2	4 1/2	1 1/2	1500
	65~ 68mm	2 5/8	4 1/2	1 5/8	2000
	69~ 70mm	2 3/4	4 1/2	1 5/8	2000
	70~ 72mm	2 7/8	5	1 3/4	2500
2 1/2	75~ 88mm	3 ~3 1/2	5	2	3000
3"	90~ 98mm	3 5/8~3 7/8	6	2 1/4~2 3/8	4000
	100~112mm	4 ~4 1/2	7	2 3/8	5000
	115~127mm	4 5/8~5	7	2 1/2	8800



# ADJUSTABLE TAP and REAMER WRENCH

ART NO.823



DUCTILE BODY  
STEEL HANDLE

DIE-CASTING BODY  
STEEL HANDLE

HIGH CLASS STANDARD CLASS

SKC NO.	CAPACITY (SIZE)		NOMINAL SIZE	LENGTH	NET WEIGHT
	HAND TAPS	PIPE TAPS			
0	1/16" TO 1/4"		1/4"	7"	100g
4	1/16 TO 3/8	1/8"	3/8	9	150
5	3/16 TO 1/2	1/8 TO 1/4"	1/2	11	250
6	1/4 TO 3/4	1/8 TO 3/8	3/4	15	500
7	3/8 TO 1	1/8 TO 3/4	1	19	1kg
7 1/2	5/8 TO 1 1/4	1/4 TO 1 1/8	1 1/4	31	3K600
8	3/4 TO 1 1/2	3/8 TO 1 1/4	1 1/2	40	5K650
10	7/8 TO 2	1 TO 2	2	45	5K980
22	1 TO 2 3/4	1 TO 2 1/2	2 3/4	50	6K540
24	1 3/4 TO 4	2 TO 3 1/2	4	75	11K250

NEW <b>EXCELLENT</b>	NEW <b>EXCELLENT</b>	NEW <b>EXCELLENT</b>																												
<b>DIE STOCK</b> Porte-File' res Schneideisenhalter	<b>TAP WRENCH</b> Tourne-a gaicje Verstellbare Windeisen	<b>5 PC. Screw Extractor Set</b> Jeu de 5 Extracteurs de Vis 5-teilig, Schraubenausdrehersatz																												
S/NO.ET-39DS:ROUND DIE S/NO.ET-39HEX:HEXAGON DIE ADJUSTABLE GUIDE 1" O/D 1A/F	S/NO.ET-39TW	S/NO.ET-5V PLASTIC CASE																												
<table border="1"> <thead> <tr> <th>CAPACITY INCH</th> <th>CAPACITY M/M</th> <th>N. W</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>25 φ</td> <td>250g</td> </tr> </tbody> </table>	CAPACITY INCH	CAPACITY M/M	N. W	1"	25 φ	250g	<table border="1"> <thead> <tr> <th>CAPACITY INCH</th> <th>CAPACITY M/M</th> <th>N. W.</th> </tr> </thead> <tbody> <tr> <td>1/8"~1/2"</td> <td>M3~M12</td> <td>250g</td> </tr> </tbody> </table>	CAPACITY INCH	CAPACITY M/M	N. W.	1/8"~1/2"	M3~M12	250g	<ul style="list-style-type: none"> <li>■ CHROME VANADIUM STEEL</li> <li>■ SPIRAL FINE FLUTE</li> </ul> <p>INCLUDING:</p> <table border="1"> <tbody> <tr> <td>#1 FOR 3/16 TO 1/4</td> <td>SCREW</td> </tr> <tr> <td>#2 FOR 1/4 TO 5/16</td> <td>SCREW</td> </tr> <tr> <td>#3 FOR 5/16 TO 7/16</td> <td>SCREW</td> </tr> <tr> <td>#4 FOR 7/16 TO 9/16</td> <td>SCREW</td> </tr> <tr> <td>#5 FOR 9/16 TO 3/4</td> <td>SCREW</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>PER CASE</th> <th>G. W.</th> <th>MEAS' T</th> </tr> </thead> <tbody> <tr> <td>20 doz.</td> <td>24kg</td> <td>1.1 CFT</td> </tr> </tbody> </table>	#1 FOR 3/16 TO 1/4	SCREW	#2 FOR 1/4 TO 5/16	SCREW	#3 FOR 5/16 TO 7/16	SCREW	#4 FOR 7/16 TO 9/16	SCREW	#5 FOR 9/16 TO 3/4	SCREW	PER CASE	G. W.	MEAS' T	20 doz.	24kg	1.1 CFT
CAPACITY INCH	CAPACITY M/M	N. W																												
1"	25 φ	250g																												
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#5 FOR 9/16 TO 3/4	SCREW																													
PER CASE	G. W.	MEAS' T																												
20 doz.	24kg	1.1 CFT																												



# TAP HOLDER

ART NO.868

## ■ RATCHET TYPE



## ■ SPRING TYPE



WITH 2 JAWS OF HARDENED AND TEMPERED STEEL ALL CHROME PLATED FINISH OR BLACK FINISH FOR "HEAVY DUTY OPERATION"

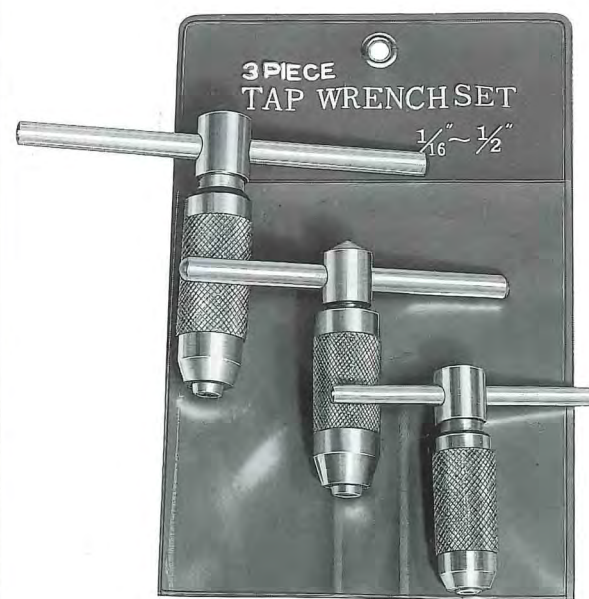
SKC NO.	CAPACITY (SIZE) HAND TAPS	(SIZE)NO. DIA OF INCH	CAPACITY SIZE M/M TAPS	WEIGHT
R1	1/8" TO 3/8"	3/8"	M3 TO M10	220g
R2	7/32 TO 1/2	1/2	5 TO 12	300

SKC NO.	CAPACITY SIZE HAND TAPS	SIZE DIA. OF INCH	CAPACITY SIZE M/M TAPS	WEIGHT
S1	1/16" TO 3/16"	3/16"	MITOM 5	80g
S2	5/32 TO 1/4	1/4	3 TO 6	110
S3	3/16 TO 3/8	3/8	5 TO 10	200
S4	1/4 TO 1/2	1/2	6 TO 12	320

# 3PC. TAP HOLDER SET

VINYL KIT OR BLISTER PACK

ART NO.703

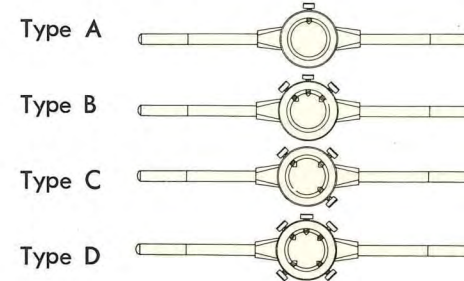


	NO.	CAPACITY (TAPS)	NET WEIGHT
"T" TYPE 3PCS. SET	T - 10	1/16" ~ 3/16"	30g
	T - 20	5/32 ~ 1/4	40
	T - 30	3/16 ~ 3/8	65
"T" TYPE 3PCS. SET	T - 40	1/4 ~ 1/2	150
	GP-100	1/16 ~ 3/16	70
	GP-200	5/32 ~ 1/4	80
G.P. TYPE 3PCS. SET	GP-300	3/16 ~ 3/8	90
	GP-400	1/4 ~ 1/2	200
PER CASE	G. W.	MEAS' T	
10 DOZ	30kg	1.1 CFT	CARTON

# STOCK FOR ROUND DIES STOCK FOR HEX DIES

ART NO.824

## Stock for Round Dies



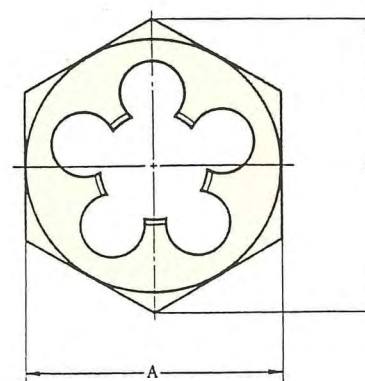
STEEL

DIE-CASTING BODY  
STEEL HANDLE

CAST-IRON BODY  
STEEL HANDLE

SKC NO.	Outside Diameter of Round Dies	Length			Net. Wt
		STEEL	DIE-CASTING BODY STEEL HANDLE	CAST-IRON BODY STEEL HANDLE	
S-1950	5/8 ( 15.8mm)	7 <sup>9</sup> / <sub>32</sub> (185mm)	DIE CASTING HANDLE 7 <sup>15</sup> / <sub>32</sub> (190mm) (D <sup>8<sup>5</sup>/<sub>16</sub>(255) S<sup>7<sup>3</sup>/<sub>16</sub>(187)</sup>)</sup>		100(g)
S-1951	13/16 ( 20 mm)	7 <sup>9</sup> / <sub>32</sub> (185mm)			100(g)
S-1952	1 ( 25 mm)	7 <sup>9</sup> / <sub>32</sub> (185mm)		12 (305mm)	100(g)
S-1955	1 1/2 ( 38 mm)	12 <sup>13</sup> / <sub>64</sub> (310mm)		12 ( 305mm)	370(g)
S-1958	2 ( 50 mm)	15 <sup>3</sup> / <sub>4</sub> (400mm)	14 <sup>9</sup> / <sub>16</sub> (375mm)	15 <sup>23</sup> / <sub>64</sub> ( 390mm)	700(g)
S-1959	2 1/4 ( 57 mm)			18 <sup>1</sup> / <sub>2</sub> ( 470mm)	1200(g)
S-1960	2 1/2 ( 63 mm)			21 <sup>1</sup> / <sub>16</sub> ( 535mm)	1400(g)
S-1961	2 3/4 ( 70 mm)			21 <sup>29</sup> / <sub>64</sub> ( 545mm)	1600(g)
S-1962	3 ( 75 mm)			21 <sup>27</sup> / <sub>32</sub> ( 555mm)	1800(g)
S-1963	4 (100 mm)			35 <sup>27</sup> / <sub>64</sub> ( 900mm)	4000(g)
S-1964	5 (127 mm)			49 <sup>7</sup> / <sub>32</sub> (1250mm)	7500(g)
S-1965	1 5/8 ( 42 mm)			16 ( 400mm)	600(g)
S-1954	1 5/16 ( 33 mm)			12 ( 305mm)	210(g)

## Stock for Hex Dies



(Across Flats)



DIE-CASTING BODY  
STEEL HANDLE

SKC NO.	Across Hex Flats A	Length		Net. Wt.
		DIE-CASTING BODY STEEL HANDLE		
S-1977	1	8 <sup>1</sup> / <sub>4</sub> (210mm)		150g
S-1978	1 7/16	12 (305mm)		295
S-1979	1 13/16	14 <sup>9</sup> / <sub>16</sub> (375mm)		590

## Die Stocks Adjustable Guide



DIE-CASTING BODY  
STEEL HANDLE

	SKC NO.	Length	Net. Wt.
Outside Diameter of Round Dies 1inch	S-1980	250mm	220(g)
Across Hex Flats A 1inch	S-1981	250mm	220(g)



# 5 PC. SCREW EXTRACTOR SET

ONE SET IN A VINYL KIT OR PLASTIC CASE

ART NO.705

# 5 PC. HEX DIE NUT SET

VINYL KIT OR BLISTER PACK

ART NO.845



45 CARBON STEEL 5 pieces a set  
HIGH CARBON STEEL  
CHROME VANADIUM STEEL  
SPIRAL FINE FLUTE  
SPIRAL COARSE FLUTE  
STRAIGHT FLUTE (SQUARE TYPE)

INCLUDING	#1 FOR	3/16	TO	1/4	SCREW
	#2 FOR	1/4	TO	5/16	SCREW
	#3 FOR	5/16	TO	7/16	SCREW
	#4 FOR	7/16	TO	9/16	SCREW
	#5 FOR	9/16	TO	3/4	SCREW

PER CASE	G.W.	MEAS' T	
20 doz	20kg	1.1CFT	CARTON



HIGH CARBON STEEL



THREAD	BSW	UNF (SAE)	UNC	BSF	METRIC
CUTTING	1/4" W20	1/4" NF28	1/4" NC20	1/4" BSF26	M 5x0.8
	5/16 W18	5/16 NF24	5/16 NC18	5/16 BSF22	6x1.0
	3/8 W16	3/8 NF24	3/8 NC16	3/8 BSF20	8x1.25
	7/16 W14	7/16 NF20	7/16 NC14	7/16 BSF18	10x1.50
	1/2 W12	1/2 NF20	1/2 NC13	1/2 BSF16	12x1.75
N.W.	180g	180g	180g	180g	180g
CONTENTS PER CARTON			G.W.	CFT	
100 SETS			18kg	1.3	

# SCREW EXTRACTOR and SET

ART NO.843

SPiral FINE FLUTE  
SPiral COarse FLUTE  
STRAIGHT FLUTE (SQUARE TYPE)

Usegd for extraction the remained screw easily without giving any damage to the screw threads when bolt or screw happends to break inside the screw hole and it is applied for detaching small coupling of iron pipe and extraction broken pipe in the screw hole of valve etc,.....

NO.OF COMBI-NATION SET	NO.OF CONTENTS	NOS	WEIGHT	REMARK
1815	801.2.3.4.5	5 Ea	200g	
1816	801.2.3.4.5.6	6	370	
1817	804.5.6	3	320	With H.S.S. Drill
1818	806.7.8.9	4	1,800	
1820	801.2.3.4.5.6	6	820	
1821	805.5 1/4. 6 3/8. 7 1/2.	4	966	
1822	805.5 1/4. 6 3/8. 7 1/2. 8. 9	6	2,400	earth 2 pcs
1829	801.2.3.4.5.6	12	750	With Stand
1830	801.2.3.4.5.5 1/4. 6	7	440	Case

NO.1830-SKC With Special Standard (With details into earth packing)



EXTRACTOR NUMBER	DIMENSIONS-INCHES				SIZE DRILL TO USE Inches	FOR SCREWS AND BOLTS, SIZES Inches	FOR PIPE SIZES Inches	WEIGHT
	Diameter Small End	Diameter Large End	Length of Thread	Length Overall				
1	1/16	1/8	1/2	2	5/64	3/16 - 1/4		5g
2	3/32	13/64	7/8	2 3/8	7/64	1/4 - 5/16		10
3	1/8	1/4	1	2 11/16	5/32	5/16 - 7/16		18
4	3/16	11/32	1 1/4	3	1/4	7/16 - 9/16		30
5	1/4	7/16	1 1/2	3 3/8	17/64	9/16 - 3/4	1/8	45
5 1/4	11/32	17/32	1 1/2	3 3/8	23/64	11/16 - 15/16	1/4	80
6	3/8	19/32	1 3/4	3 3/4	13/32	3/4 - 1	105	105
6 3/8	15/32	11/16	1 11/16	3 3/4	31/64	15/16 - 1 1/8	3/8	150
7	1/2	25/32	2 1/4	4 1/8	17/32	1 - 1 3/8		190
7 1/2	19/32	7/8	2 1/4	4 1/8	39/64	1 1/8 - 1 1/2	1/2	220
8	3/4	1 1/32	2 1/4	4 3/8	13/16	1 3/8 - 1 3/4	3/4	370
9	1	1 9/32	2 1/4	4 5/8	1 1/16	1 3/4 - 2 1/8	1	580
10	1 1/4	1 9/16	2 1/2	5	1 5/16	2 1/8 - 2 1/2	1 1/4	1000
11	1 1/2	1 7/8	3	5 5/8	1 9/16	2 1/2 - 3	1 1/2	1500
12	1 27/32	2 9/32	3 1/2	6 1/4	1 15/16	3 - 3 1/2	2	2600

# 4in1 BIT DRILL SET

W/HOLDER SET (CONCRETE STONE DRILL) VINYL KIT

ART NO.760



PLUG OR EXPANSION BOLT.  
NO.6 POINT BIT DRILL  
NO.8 POINT BIT DRILL  
NO.10 POINT BIT DRILL  
NO.12 POINT BIT DRILL  
NO.14 POINT BIT DRILL  
& HOLDER

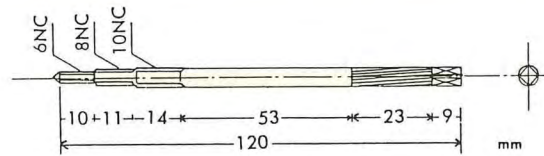
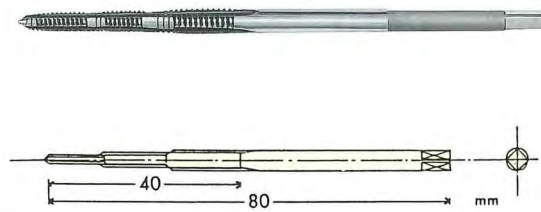
ONE SET IN A CARTON TO A BOX  
NET WEIGHT PER SET.300g



# MULTI TAPS

(TRIO TAPS)  
ONE FOR 3TAPS

ART NO.908



- Ⓐ 6/32-8/32-10/32 NC&NF
- Ⓑ 6/32-8/32-10/24 NC

- ELECTRICIANS
- CRAFTSMAN
- MECHANICS
- ONE TOOL TAPS THREE SIZE THREAD

- 1 M3×0.5·M4×0.7·M5×0.8
- 2 M3×0.6·M4×0.75·M5×0.9
- 3 NO.6-NO.8-NO.10 NC Thread
- 4 NO.6-NO.8-NO.10 NF Thread
- 5 NO.10-NO.12-1/4×20 NC Thread
- 6 NO.10-NO.12-1/4×28 NF Thread
- 7 NO.6NC-NO.8NC-NO.10NF Thread
- 8 3/32-1/8-5/32 BSW Thread
- 9 1/8-5/32-3/16 BSW Thread
- 10 5/32-3/16-1/4 BSW Thread

# 10 PC. TAP SET

ONE SET IN A VINYL KIT OR BLISTER PACK

ART NO.710

**TUNGSTEN STEEL**  
**CARBON STEEL**



1/2 doz. TO A BOX

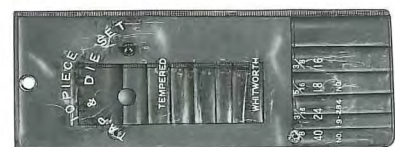
THREAD	BSW	UNC	UNF (SAE)	METRIC	BSF
CUTTING SIZE	3/32" × 48	# 6 × 32	# 6(3/32)40	M 3 × 0.5	3/32" BSF56
	1/8" × 40	# 8 × 32	# 8(1/8)36	4 × 0.7	1/8" BSF44
	5/32" × 32	#10 × 24	#10(5/32)32	5 × 0.8	5/32" BSF36
	3/16" × 24	#12 × 24	#12(3/16)28	6 × 1.0	3/16" BSF32
	7/32" × 24	#10 × 32	#10(7/32)32	7 × 1.0	7/32" BSF28
ONE PLUG TAP	1/4" × 20	1/4 × 20	1/4 × 28	8 × 1.25	1/4" BSF26
	5/16" × 18	5/16 × 18	5/16 × 24	9 × 1.25	5/16" BSF22
	3/8" × 16	3/8 × 16	3/8 × 24	10 × 1.5	3/8" BSF20
	7/16" × 14	7/16 × 14	7/16 × 20	11 × 1.5	7/16" BSF18
	1/2" × 12	1/2 × 12	1/2 × 20	12 × 1.75	1/2" BSF16
CONTENTS PER CARTON			G.W.	CFT	
120 SETS			18 kg	1.1	

# 10 PC. TAP and DIE SET

ONE SET IN A VINYL KIT OR BLISTER PACK

ART NO.761

**CARBON STEEL**



1/2 doz. TO A BOX

THREAD	METRIC	BSW	UNC	UNF(SAE)
CUTTING	M 3-0.5	1/8"-40	1/8"-40	1/8"-44
SIZE each	5-0.8	3/16-24	3/16-24	3/16-32
ONE plug	8-1.25	5/16-18	5/16-18	5/16-24
TAP&DIE	10-1.5	3/8-16	3/8-16	3/8-24
1 PC-DIE STOCK(1")1PC-TAP Wrench(#2)				
Contents Per Certon		G.W.	CFT	
60 SETS		20kg	0.6	

# 6 PC. TAP and TAP HOLDER SET

ONE SET IN A VINYL KIT OR BLISTER PACK

ART NO.706

**TUNGSTEN STEEL**  
**CARBON STEEL**  
G.P TYPE HOLDER

"T"TYPE HOLDER



THREAD	BSW	UNC	METRIC	UNF (SAE)	BSW
CUTTING SIZE	1/8" × 40	6 -32	M3 × 0.5	1/8" × 44	1/8" × 40
ONE PLUG TAP	5/32 × 32	8 -32	4 × 0.7	5/32 × 36	5/32 × 32
	3/16 × 24	10 -32	5 × 0.8	3/16 × 32	3/16 × 24
	7/32 × 24	3/16-24	6 × 1.0	7/32 × 28	1/4 × 20
	1/4 × 20	1/4-20	8 × 1.25	1/4 × 28	5/16 × 18
OLDER	"T"	"T"	"T"	"T"	"T"
HOLDER	GP	GP	GP	GP	GP
W T P E R C	120g	120g	150g	125g	150g
	PER CASE	G.W.	MEAS' T		
"T" TYPE	20DOZ	20kg	1.1CFT	CARTON	
G.P. TYPE	10DOZ	20kg	1.1CFT	CARTON	

# 7 PC. TAP and TAP HOLDER SET

ONE SET IN A VINYL KIT OR BLISTER PACK

ART NO.717

**TUNGSTEN STEEL**  
**CARBON STEEL**

**BLISTER PACK AVAILABLE**



THREAD	METRIC	BSW
CUTTING	M 3 × 0.5	1/8" W40
SIZE	4 × 0.7	5/32 W32
ONE PLUG TAP	5 × 0.8	3/16 W20
	6 × 1.0	1/4 W20
	8 × 1.25	5/16 W18
	10 × 1.50	3/8 W16
TAP HOLDER	NO. 3	NO. 3
WEIGHT	185g	185g
PER CASE	G.W.	MEAS' T
10DOZ	20kg	1.1CFT
CARTON		



# 8 PC. TAP and ADJUSTABLE TAP WRENCH SET

ONE SET IN A VINYL KIT

ART NO.866

ALLOY STEEL  
CARBON STEEL

BLISTER PACK AVAILABLE



THREAD	METRIC	METRIC	BSW	UNC	UNF(SAE)
CUTTING SIZE	M 3×0.5	M 5×0.8	1/8" W40	# 6-32	1/8" NF44
ONE PLUG TAP	4×0.7	6×1.0	3/16 W24	# 8-32	3/16 NF32
	5×0.8	7×1.0	1/4 W20	#10-24	1/4 NF28
ONE PLUG TAP	6×1.0	8×1.25	5/16 W18	1/4-20	5/16 NF24
	8×1.25	9×1.25	3/8 W16	5/16-18	3/8 NF24
ONE PLUG TAP	10×1.50	10×1.50	7/16 W14	3/8-16	7/16 NF20
	12×1.75	12×1.75	1/2 W12	1/2-13	1/2 NF20
1 PC. TAP WRENCH					
CONTENTS PER CARTON.				G. W.	CFT
60 SETS				17kg	0.7

# PIPE THREAD (GAS) TAP AND DIE SET

ART NO.831

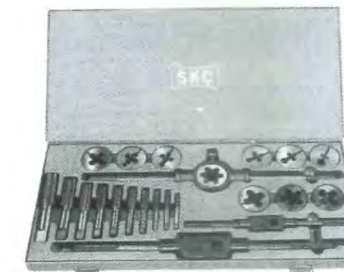
ALL STRONG METAL CASE

• CONTENTS:

SET NO.	R-1	R-2	R-3	R-4
CUTTING SIZE PER GAS THREAD ONE PIPE TAP & ONE ROUND DIE EACH PC.	1/8-28 1/4-19 3/8-19 1/2-14	1/8-28 1/4-19 3/8-19 1/2-14 5/8-14 3/4-14	1/8-28 1/4-19 3/8-19 1/2-14 5/8-14 3/4-14 7/8-14 1-11	1/8-28 1/4-19 3/8-19 1/2-14 5/8-14 3/4-14 7/8-14 1-11 1 1/8-11 1 1/4-11
DIES DIAM	2"	2"	2" 2 1/2"	2 1/2" 3"
STOCK LENGTH	20"	20"	20" 26"	20 30" 26
TAP WRENCH NO.	6	7	6 7 1/2	6 9
NET WEIGHT PER CASE	4kg	7.0kg	9.5kg	12.5kg
PER CASE	5	5	2	2

• METAL CASE BOX  
• ABS PRASTIC TRAY

ALLOY STEEL  
HIGH SPEED STEEL



# 8 PC. DIE and DIE STOCK SET

ONE SET IN A VINYL KIT OR BLISTER PACK

ART NO.867

BLISTER PACK AVAILABLE

ALLOY STEEL  
CARBON STEEL

- SOLID ROUND DIE TYPE
- ADJUSTABLE ROUND SPLIT DIE TYPE
- 5 SCREW ROUND DIE TYPE



THREAD	METRIC	METRIC	BSW	UNC	UNF(SAE)
CUTTING SIZE	M 3×0.5	M 5×0.8	1/8" W40	# 6-32	1/8" NF44
ONE ROUND DIE	4×0.7	6×1.0	3/16 W24	# 8-32	3/16 NF32
	5×0.8	7×1.0	1/4 W20	#10-24	1/4 NF28
ONE ROUND DIE	6×1.0	8×1.25	5/16 W18	1/4-20	5/16 NF24
	8×1.25	9×1.25	3/8 W16	5/16-18	3/8 NF24
ONE ROUND DIE	10×1.50	10×1.50	7/16 W14	3/8-16	7/16 NF20
	12×1.75	12×1.75	1/2 W12	1/2-13	1/2 NF20
1PC. - DIE STOCK (1"O/D)					
CONTENTS PER CARTON				G. W.	CFT
60 SETS				16kg	0.6

# SOLID SQUARE DIES

BOLT AND GAS PIPE THREAD

ART NO.836



ALLOY STEEL  
HIGH SPEED STEEL

Nominal Diameter inch	Thread per inch						Square inches and Thickness			
	Pipe Thread		(u)NC	(u)NF	(u)NS	BSW	2×2 (1/2 or 3/4)	2 1/2×2 1/2 (3/4)	3×3 (1)	4×4 (1)
	NPT	BSPT								
1/4	18	19	20	28	24.32	20	2×2	2 1/2×2 1/2		
9/32			20			20	2×2	2 1/2×2 1/2		
5/16			18	24	32	18	2×2	2 1/2×2 1/2		
3/8	18	19	16	24	32	16	2×2	2 1/2×2 1/2		
7/16			14	20	28	14	2×2	2 1/2×2 1/2		
1/2	14	14	13	20	32.28	12	2×2	2 1/2×2 1/2	3×3	
9/16			12	18		12	2×2	2 1/2×2 1/2	3×3	
5/8	14	14	11	18	32	11	2×2	2 1/2×2 1/2	3×3	
11/16			11	16	11.16	11	2×2	2 1/2×2 1/2	3×3	
3/4	14	14	10	16	32	10	2×2	2 1/2×2 1/2	3×3	
7/8	11 1/2	14	9	14		9	2×2	2 1/2×2 1/2	3×3	
1	11 1/2	11	8	12	14.20	8	2×2	2 1/2×2 1/2	3×3	4×4
1 1/8	11 1/2	11	7	12		7		2 1/2×2 1/2	3×3	4×4
1 1/4	11 1/2	11	7	12		7		2 1/2×2 1/2	3×3	4×4
1 3/8	11 1/2	11	6	12		6			3×3	4×4
1 1/2	11 1/2	11	6	12		6			3×3	4×4
1 5/8	11 1/2	11	5			5				4×4
1 3/4	11 1/2	11	5			5				4×4
1 7/8	11 1/2	11	4 1/2			4 1/2				4×4
2	11 1/2	11	4 1/2			4 1/2				4×4



HIGH QUALITY TUNGSTEN STEEL PROFESSIONAL QUALITY

# 40 PC. TAP and DIE SET

ART NO.850R

- ADJUSTABLE ROUND SPILT DIE TYPE
- SOLID ROUND DIE TYPE
- ALL POLISH



## HOW TAP SIZES ARE DESIGNATED

The first number or fraction, represents the diameter of the screw or bolt. The second, the number of threads per inch. (this is the number of revolutions the screw travels in one inch). The letters indicate the thread series in one of these five types:  
 NC(USS)—National Coarse  
 NF(SAE)—National Fine  
 NS—National Special  
 NPT—National Pipe Taper  
 NPS—National Pipe Straight  
 ISO—International Metric  
 SI—International Metric  
 SF—French Metric  
 DIN—German Metric

## PLASTIC HANDY STORAGE BOX

- 17 Round Dies
- 17 Plug Taps
- Die Stock (1 inch O.D.)
- 1 "T" Type Tap Wrench 1/8-1/4 (3 M/M-12M/M)
- 1 "T" Type Tap Wrench 1/4-1/2 (6 M/M-12M/M)
- Adjustable Tap Wrench (1/8-1/2)
- 1 Screw Pitch Gauge
- 1 Screw Driver

Contents Per Carton	G.W.	CFT
10 SETS	20kg	0.8

RD-CF	RD-WF	RD-MM	RD-WM	RD-DIN
NC&NF	BSW&SAE	METRIC&BSP	BSW&METRIC	METRIC(DIN)
4NC40 1/2NC13	1/2W40 1/8NF44	3M0.6 3M0.5	1/2W40 3M0.5	3x0.5 3x0.6
6NC32 10NF32	3/32W32 3/32NF36	4M0.75 4M0.7	1/4W20 4M0.7	4x0.7 4x0.75
8NC32 1/4NF28	3/16W24 3/16NF32	5M0.9 5M0.8	3/16W18 5M0.8	5x0.8 5x0.9
10NC24 3/16NF24	1/4W20 1/4NF28	6M1.0 6M0.75	3/8W16 6M1.0	6x1.0 8x1.0
12NC24 3/8NF24	3/16W18 3/16NF24	7M1.0 7M0.75	7/16W14 7M1.0	7x1.0 10x1.25
1/4NC20 7/16NF20	3/8W16 3/8NF24	8M1.25 8M1.0	1/2W12 8M1.25	8x1.25 11x1.50
5/16NC18 1/2NF20	7/16W14 7/16NF20	10M1.5 10M1.25	1/8BSP 9M1.25	9x1.25 12x1.5
3/8NC16 1/8NPT	1/2W12 1/2NF20	12M1.75 12M1.5	10M1.5	10x1.50 12x1.25
7/16NC14	1/8BSP	1/8BSP	11M1.5	12x1.75
			12M1.75	

PLASTIC COLOUR GREEN RED ORANGE

HIGH QUALITY TUNGSTEN STEEL PROFESSIONAL QUALITY

# 40 PC. TAP and HEX DIE SET

ART NO.850H

ALL POLISH



## HOW TAP SIZES ARE DESIGNATED

The first number, or fraction, represents the diameter of the screw or bolt. The second, the number of threads per inch (this is the number of revolutions the screw travels in one inch.) The letters indicate the thread series in one of these five types:  
 NC(USS)—National Coarse  
 NF(SAE)—National Fine  
 NS—National Special  
 NPT—National Pipe Taper  
 NPS—National Pipe Straight  
 ISO—International Metric  
 SI—International Metric  
 SF—French Metric  
 DIN—German Metric

## PLASTIC HANDY STORAGE BOX

- 17Hex Dies
- 17Plug Taps
- 1 "T" Type Tap Wrench 1/8-1/4 (3M/M-6M/M)
- 1 "T" Type Tap Wrench 1/4-1/2 (3M/M-6M/M)
- 1 Screw Pitch Gauge
- 1 Screw Driver

Contents Per Carton	G.W.	CFT
10SETS	25kg.	0.8

HD-CF	HD-WF	HD-DIN	HD-WM	HD-MM
NC&NF	BSW&SAE	METRIC&BSP	BSW&METRIC	METRIC
4NC40 1/2NC13	1/2W40 1/8NF44	3M0.6 3M0.5	1/2W40 M3M0.5	M3x0.6
6NC32 10NF32	3/32W32 3/32NF36	4M0.75 4M0.7	1/4W20 4M0.7	4x0.7 4x0.75
8NC32 1/4NF28	3/16W24 3/16NF32	5M0.9 5M0.8	3/16W18 5M0.8	5x0.8 5x0.9
10NC24 3/16NF24	1/4W20 1/4NF28	6M1.0 6M0.75	3/8W16 6M1.0	6x1.0 8x1.0
12NC24 3/8NF24	3/16W18 3/16NF24	7M1.0 7M0.75	7/16W14 7M1.0	7x1.0 10x1.25
1/4NC20 7/16NF20	3/8W16 3/8NF24	8M1.25 8M1.0	1/2W12 8M1.25	8x1.25 11x1.50
5/16NC18 1/2NF20	7/16W14 7/16NF20	10M1.5 10M1.25	1/8BSP 9M1.25	9x1.25 12x1.25
3/8NC16 1/8NPT	1/2W12 1/2NF20	12M1.75 12M1.5	10M1.5	10x1.50 12x1.25
7/16NC14	1/8BSP	1/8BSP	11M1.5	12x1.75
			12M1.75	

PLASTIC COLOUR GREEN RED ORANGE

# EXCELLENT 60 PC. TAP and DIE SET

ART NO.860

JEU DE 60 FILIERES ET DE TARAUDS  
 60-TEILIG GEWINDESCHNEIDWERKZEUGSATZ

- SET NO.ET-60RD:SOLID ROUND DIES
- SET NO.ET-60ARD:ADJUSTABLE ROUND DIES
- SET NO.ET-60HEX:HEXAGON DIES

## HIGH SPEED STEEL ALLOY TOOL STEEL



## COMPLETE THREADING SET

CONTAINS ONE EACH PLUG TAP AND 1" O/D(A/F) DIE FOR THE FOLLOWING 27 THREAD SIZES AND RELATED ACCESSORIES INDICATED.

PACKED IN AN ATTRACTIVE METAL CASE.

# 4-40	#12-24	3/8-16	5/16-24	1/8NPT27	M5x0.8	M 9x1.25
# 6-32	#10-32	7/16-14	3/8-24	(PIPE)	M6x1.0	M10x1.5
# 8-32	1/4-20	1/2-13	7/16-20	M3x0.5	M7x1.0	M10x1.0
#10-24	5/16-18	1/4-28	1/2-20	M4x0.7	M8x1.25	M12x1.75

## RELATED ACCESSORIES:

- 1 DIE STOCK ADJUSTABLE GIDE(1" O/D OR 1" A/F)
- 1 ADJUSTABLE TAP WRENCH 1/8-1/2(M3-M12)
- 1 "T" TYPE TAP WRENCH 1/8-1/4(M3-M6)
- 1 SCREW DRIVER
- 2 SCREW PITCH GAUGES (METRIC & SAE)

CONTENTS PER CARTON	N.W.	G.W.	CFT
10 SETS	30kgs	31kgs	1.6

Contains the most popular sizes in:  
 SAE INCH ... NATIONAL COARSE and NATIONAL FINE THREAD and METRIC  
 USED FOR THE FOLLOWING CARS:  
 AMERICAN · JAPANESE · EUROPEAN CARS & MOTORCYCLES...  
 General Motors · Chrysler · Ford · American Motors · Datsun · Toyota · Volkswagen · Mercedes · Renault · Fiat.

HIGH QUALITY TUNGSTEN STEEL PROFESSIONAL QUALITY

# 16 PC. TAP and DIE SET

ART NO.716

## TRANSPARENT PLASTIC LID ON TOOLS

PLASTIC CASE  
 PLASTIC COLOUR  
 ORANGE BLUE



## METAL CASE "ABS" PLASTIC TRAY

METAL CASE  
 METAL CASE  
 COLOUR  
 BLUE RED



## FOR AUTO & REPAIR SHOPS FOR INDUSTRIAL USE

- ADJUSTABLE ROUND SPLIT DIE TYPE
- SOLID ROUND DIE TYPE

## ALLOY STEEL HIGH SPEED STEEL

SKC NO.	16W	16WW	16NC	16NF	16NF	16NF
THREAD	BSW	BSW	UNC	UNF(SAE)	UNF(SAE)	UNF(SAE)
CUTTING	1/16" x 60	1/8" x 40	6 x 32	1/8" x 44	M3 x 0.6	M3 x 0.5
SIZE	3/32 x 48	3/16 x 24	8 x 32	3/16 x 32	3.5 x 0.6	4 x 0.7
ONE PLUG	1/8 x 40	1/4 x 20	10 x 24	1/4 x 28	4 x 0.75	5 x 0.8
TAP & ROUND	5/32 x 32	5/16 x 18	1/4" x 20	5/16 x 24	4.5 x 0.75	6 x 1.0
DIE	3/16 x 24	3/8 x 16	5/16 x 18	3/8 x 24	5 x 0.9	8 x 1.25
	7/32 x 24	7/16 x 14	3/8 x 16	7/16 x 20	6 x 1.0	10 x 1.5
	1/4 x 20	1/2 x 12	1/2 x 13	1/2 x 20	8 x 1.25	12 x 1.75
DIE STOCK	1"	1"	1"	1"	1"	1"
TAP WRENCH	1/16-1/4	1/8-1/2	1/8-1/2	1/8-1/2	1/8-1/2	1/8-1/2
WEIGHT	800g	900g	900g	900g	900g	900g
CONTENTS PER CARTON			G.W.		CFT	
24 SETS			23kg		1.0	



# 110 PC. TAP and DIE SET

ART NO.110

**ATTACHE TYPE METAL CASE FOR AUTO & REPAIR SHOPS AND INDUSTRIAL USE. "T"TYPE TAP HOLDER**

**CONTENTS:**

DIE STOCK (25.4) 1" O/D  
(38.1) 1 1/2" O/D  
TAP WRENCH (No. 6) 3/16 - 3/4 (5m/m - 20m/m)  
(No. 4) 1/16 - 7/16 (1.6m/m - 6m/m)  
"T" TYPE TAP HOLDER No. 1 1/16 - 7/16 (1.6m/m - 6m/m)  
TAPS: TAPER & BOTTOMING,  
EACH PC. PER SIZE (70 PCS.)  
DIES: EACH PER SIZE (35 PCS.)

NET WEIGHT = 8 KGS.  
N.W. G.W. MEAS' T  
3SETS 24kg 25kg 1.4CFT  
CARTON CASE

**POPULAR SIZE COMBINATION SET**

SAE INCH... NATIONAL COARSE and NATIONAL FINE THREAD AND METRIC THREAD SET  
METRIC... METRIC COARSE and METRIC FINE THREAD SET  
WSF... BSW THREAD AND SAE(NF) THREAD AND BSF THREAD SET  
USED FOR THE FOLLOWING CARS:  
AMERICAN · JAPANESE · EUROPEAN CARS & MOTORCYCLES...  
General Motors · Chrysler · Ford · American Motors  
Datsun · Toyota · Volkswagen · Mercedes · Renault · Fiat.

**HIGH SPEED STEEL ALLOY STEEL**

**SKC NO.110M (METRIC SIZE)**

φ M2×0.4	M7×0.75	M9×1.0	M11×0.75	M12×1.25	M14×2.0
3×0.5	7×1.0	9×1.25	11×1.0	12×1.5	16×1.0
4×0.7	8×0.75	10×0.75	11×1.25	12×1.75	16×1.5
5×0.8	8×1.0	10×1.0	11×1.5	14×1.0	16×2.0
6×0.75	8×1.25	10×1.25	12×0.75	14×1.25	18×1.5
6×1.0	9×0.75	10×1.5	12×1.0	14×1.5	

**SKC NO.110 CFM (NC,NF PIPE,METRIC SIZE)**

NO. 4NC 40	1/4" NC 20	3/8" NC 16	3/16" NC 12	1/8" NPT 27	M11×1.5
NO. 6NC 32	1/4 NF 28	3/8 NF 24	3/16 NF 18	1/4 NPT 18	12×1.25
NO. 8NC 32	1/4 NS 24	7/16 NC 14	5/8 NC 11	M6×1.0	12×1.75
NO. 10NC 24	1/4 NS 32	7/16 NF 20	5/8 NF 18	8×1.25	14×1.25
NO. 12NC 24	5/16 NC 18	1/2 NC 13	3/4 NC 10	10×1.5	18×1.5
NO. 10NF 32	5/16 NF 24	1/2 NF 20	3/4 NF 16	10×1.0	

**SKC NO.110 WSF (BSW,SAE (NF) BSF NC PIPE SIZE)**

1/8" W 40	7/32" W 24	5/16" W 18	3/8" BSF 20	1/2" W 12	5/8" W 11
1/8 SAE 44	7/32 SAE 28	5/16 SAE 24	3/8 NC 16	1/2 SAE 20	5/8 SAE 18
5/32 W 32	1/4 W 20	5/16 BSF 22	7/16 W 14	1/2 BSF 16	3/4 W 10
5/32 SAE 36	1/4 SAE 28	5/16 NC 18	7/16 SAE 20	1/2 NC 13	3/4 SAE 16
3/16 W 24	1/4 BSF 26	3/8 W 16	7/16 BSF 18	3/16 W 12	1/8 BSP 28
3/16 SAE 32	1/4 NC 20	3/8 SAE 24	7/16 NC 14	3/16 SAE 18	



# 75 PC. TAP and DIE SET

ART NO.875

**TUNGSTEN—INDUSTRIAL \*NC,NF & METRIC COMBINATION THREAD \*METRIC & PIPE COMBINATION THREAD**



**ALL POLISH or METAL CASE BOX "ABS" PLASTIC TRAY**

**CONSISTING OF:**

- \*31 Taps (Plugs)
- \*31 Split Dies (Adjustable)
- \*2 Tap Wrenches  
Small (1/8" to 1/2") (3-12MM),  
Large (1/4" to 3/4") (6-18MM)
- \*2 Die Stocks—Small (1"), Large (1-1/2")
- \*1 Super Tap Holder (3-12mm) (1/8" to 1/2")
- \*1 Tap Holder (3-6mm) (1/8" to 1/4")
- \*5 Screw Extractors (#1-5)
- \*1 Screw Pitch Gauge
- \*1 Screw Driver

CONTENTS PER Carton	G.W.	CFT
3 SETS	22kg	1.6

**SKC NO.875 CFM**

SIZES OF COMBINATION SET—C/NF/M	
1" O/D (# 4 NS 36 4 NC 40 5 NC 40 6 NC 32 8 NC 32 10 NC 24 10 NS 32 12 NC 24 14 NS 20 3/16 NS 24 10×1.0mm 1/4 NC 20 1/4 NF 28 5/16 NC 18 5/16 NF 24 3/8 NC 16 3/8 NF 24 7/16 NC 14 7/16 NF 20 1/2 NC 13 1/2 NF 20 1/8 NPT)	
1 1/2" O/D (3/16 NC 12 3/16 NF 18 5/8 NC 11 5/8 NF 18 3/4 NC 10 3/4 NF 16 14×1.25mm 18×1.5mm 1/4 NPT)	

**SKC NO.875 METRIC**

SIZES OF COMBINATION SET—METRIC/PIPE	
1" O/D M2 ×0.4 M3.5×0.6 M5×0.8 M7×1.0 M10×1.0 M12×1.25 M2.6×0.45 M4 ×0.7 M5×0.9 M8×1.25 M10×1.25 M12×1.5 M3 ×0.5 M4 ×0.75 M6×1.0 M8×1.0 M10×1.5 M12×1.75 M3 ×0.6 M4.5×0.75 M6×0.75 M9×1.25	
1 1/2" O/D M14×2.0 M14×1.5 M14×1.25 M16×2.0 M16×1.5 M18×2.5 M18×1.5 M1/8 PIPE 1/4 PIPE	

# 20 PC. TAP and DIE SET

ART NO.720

**ALL POLISH or BLACK FINISH FOR AUTO & REPAIR SHOPS FOR INDUSTRIAL USE**

- \* ADJUSTABLE ROUND SPLIT DIE TYPE
- \* SOLID ROUND DIE TYPE.

**ALLOY STEEL HIGH SPEED STEEL SPECIAL**

SKC NO.	20W	20NF	20NC	20BSF	20M	20DIN
THREAD	BSW	SAE	UNC	BSF	METRIC	METRIC
CUTTING SIZE	1/8" × 40 5/32 × 32	1/8" × 44 5/32 × 36	6 × 32 8 × 32	1/8" × 44 5/32 × 36	M3×5.6 4×7.75	M3×0.5 3.5×0.6
ONE PLUG TAP & ONE ROUND DIE	3/16 × 24 7/32 × 24 1/4 × 20 5/16 × 18 3/8 × 16 7/16 × 14 1/2 × 12	3/16 × 32 7/32 × 28 1/4 × 28 5/16 × 24 3/8 × 24 7/16 × 20 1/2 × 20	10 × 24 12 × 24 1/4" × 20 5/16 × 18 3/8 × 16 7/16 × 14 1/2 × 13	3/16 × 32 7/32 × 28 1/4 × 26 5/16 × 22 3/8 × 20 7/16 × 18 1/2 × 16	5×8.9 6×1.0 7×1.0 8×1.25 9×1.25 10×1.5 12×1.75	4×0.7 5×0.8 6×1.0 8×1.25 10×1.50 10×1.00 12×1.75
DIE STOCK	1"	1"	1"	1"	1"	1"
TAP WRENCH	1/8-1/2	1/8-1/2	1/8-1/2	1/8-1/2	M3-M12	M3-M12
WEIGHT	1kg	1kg	1kg	1kg	1kg	1kg
CONTENTS PER CARTON	G.W.		CFT			
24 SETS	25kg		1.3			

TRANSPARENT PLASTIC LID ON TOOLS



PLASTIC CASE PLASTIC COLOUR ORANGE BLUE

METAL CASE "ABS" PLASTIC TRAY



METAL CASE COLOUR CASE OR RED



**EXCELLENT**

# 47 PC. TAP and DIE SET

JEU DE 47 FILIERES ET DE TARAUDS  
47-TEILIG GEWINDESCHNEIDWERKZEUGSATZ

SET NO. ET-47L

HIGH SPEED STEEL  
ALLOY TOOL STEEL



### COMBINATION SET

CONTAINS ONE EACH PLUG TAP AND DIE FOR THE FOLLOWING 21 THREAD SIZES AND RELATED ACCESSORIES INDICATED.

PACKED IN AN ATTRACTIVE METAL CASE.

TAPS:

UNC	UNF	METRIC
1/4" -20	1/4" -28	M 6 x 1.0
5/16 -18	5/16 -24	8 x 1.25
3/8 -16	3/8 -24	10 x 1.5
7/16 -14	7/16 -20	12 x 1.75
1/2 -13	1/2 -20	16 x 2.0
5/8 -11	5/8 -18	20 x 2.5
3/4 -10	3/4 -16	24 x 3.0

ADJ. ROUND DIES:

1 1/2" O/D	1/4" - 1/2"	M 6 - M16
2" O/D	5/8" - 3/4"	M20 - M24

### RELATED ACCESSORIES:

- 2 DIE STOCKS, 1 1/2" O/D AND 2" O/D
- 2 TAP WRENCHES No. 5 5/32" - 1/2" (M 3 - M12)  
No. 7 3/8" - 1" (M10 - M27)
- 1 SCREW DRIVER

CONTENTS PER CARTON	N. W.	G. W.	CFT
3 SETS	24kg	25kg	1.10

**EXCELLENT**

# 59 PC. TAP and DIE SET

JEU DE 59 FILIERES ET DE TARAUDS  
59-TEILIG GEWINDESCHNEIDWERKZEUGSATZ

ART NO. 899

SET NO. ET-59ARD: ADJUSTABLE ROUND DIES  
SET NO. ET-59HEX: HEXAGON DIES

HIGH SPEED STEEL  
ALLOY TOOL STEEL



ALL POLISH OR BLACK FINISH  
METAL CASE BOX "ABS" TRAY

### COMPLETE THREADING SET CONSISTING OF:

- 23 PLUG TAPS
- 23 DIES
- 2 ADJUSTABLE TAP WRENCHES 1/16" - 1/2", 5/32" - 3/4"
- 2 DIE STOCKS 1" O/F (A/F) 1 1/2" O/D (A/F)
- 1 'T' TYPE TAP WRENCH #0 - 1/4
- 1 SCREW PITCH GAUGE
- 1 SCREW DRIVER
- 5 SCREW EXTRACTORS 1-5

CFM

1" O/D (A/F) DIES	#6-32 #8-32 #10-24 #12-24 1/4-20 5/16-18 3/8-16 7/16-14 1/2-13 #10-32 1/4-28 5/16-24 3/8-24 7/16-20 1/2-20 1/8 NPT 27 1/4 NPT 18
1 1/2" O/D (A/F) DIES	3/16-12 3/16-18 5/8-11 5/8-18 3/4-16 3/4-10

METRIC

1" O/D (A/F) DIES (A/F)	M3 x 0.5 M3 x 0.6 M4 x 0.7 M4 x 0.75 M5 x 0.8 M5 x 0.9 M6 x 1.0 M8 x 1.25 M9 x 1.25 M12 x 1.5 M11 x 1.5, M7 x 1.0 M12 x 1.75 M10 x 1.25 M12 x 1.5 1/8 BSP 28 1/4 BSP 19
1 1/2" O/D (A/F) DIES	M14 x 2.0 M16 x 2.0 M20 x 2.5 M14 x 1.25 M16 x 1.5 M18 x 1.5

CONTENTS PER CARTON	N. W.	G. W.	CFT
5 SETS	25kg	26kg	1.5

# 45 PC. TAP and DIE SET

JEU DE 45 FILIERES ET DE TARAUDS

ART NO. 895

### POPULAR SIZE COMBINATION SET

SAE INCH... NATIONAL COARSE and NATIONAL FINE THREAD SET  
METRIC... METRIC COARSE and METRIC FINE THREAD SET

USED FOR THE FOLLOWING CARS:

AMERICAN · JAPANESE · EUROPEAN CARS & MOTORCYCLES...

General Motors · Chrysler · Ford · American Motors  
Datsun · Toyota · Volkswagen · Mercedes · Renault · Fiat.



### ALL POLISH OR BLACK FINISH METAL CASE BOX "ABS" PLASTIC TRAY ALLOY STEEL HIGH SPEED STEEL ADJUSTABLE ROUND SPIRIT DIE TYPE

THREAD	UNC & UNF	METRIC COARSE & FINE	
CUTTING SIZE	1/4" -20 1/4" -28	M 6 x 1.0 M 6 x 0.75	
ONE PLUG TAP & ONE ROUND DIE 1/4" TO 1/2"	5/16 -18 5/16 -24 3/8 -16 3/8 -24 7/16 -14 7/16 -20	8 x 1.25 8 x 1.0 10 x 1.50 10 x 1.25 12 x 1.75 12 x 1.5	
1 1/2" O/D	1/2 -13 1/2 -20	14 x 2.0 14 x 1.5	
3/16" TO 1"	9/16 -12 9/16 -18	16 x 2.0 16 x 1.5	
1 1/2" O/D	5/8 -11 5/8 -18	18 x 2.5 18 x 1.5	
3/16" TO 1"	3/4 -10 3/4 -16	20 x 2.5 20 x 1.5	
2" O/D	7/8 -9 7/8 -14	22 x 2.5 22 x 1.5	
	1-8 1-14	24 x 3.0 24 x 1.5	
DIE STOCK	1 1/2" O/D & 2" O/D	1 1/2" O/D & 2" O/D	
TAP WRENCH	No. 5 & No. 7	No. 5 & No. 7	
WEIGHT	9kg	9kg	
CONTENTS PER CARTON	N. W.	G. W.	CFT
3 SETS	27kg	28kg	0.75

BSW AND UNF THREAD. BSF AND UNF THREAD COMB. AVAILABLE

# 64 PC. TAP and DIE SET

ART NO. 900

HIGH SPEED STEEL  
ALLOY STEEL

ALL POLISH OR BLACK FINISH  
METAL CASE BOX "ABS" PLASTIC TRAY  
COMPLETE THREADING SET  
CONSISTING OF:

- 28 PLUG TAPS
- 28 ROUND DIES
- 2 ADJUSTABLE TAP WRENCHES 1/16" - 1/2" 1/4" - 1 1/8"
- 3 DIE STOCKS 1" O/D 1 1/2" O/D 2" O/D
- 2 'T' TYPE TAP WRENCHES #0 - 1/4 5/16 - 1/2
- 1 SCREW PITCH GAUGE
- 1 SCREW DRIVER

CONTENTS PER CARTON	N. W.	G. W.	CFT.
3 SETS	33kg	34kg	1.8

### SKC NO 900 METRIC

1" O/D	M3 x 0.5 M3 x 0.6 M4 x 0.7 M4 x 0.75 M5 x 0.8 M5 x 0.9 M6 x 1.0 M6 x 0.75 M7 x 1.0 M7 x 0.75 M8 x 1.25 M8 x 1.0 M10 x 1.5 M10 x 1.25 M12 x 1.75 M12 x 1.5 1/8 BSP 28
1 1/2" O/D	M14 x 2.0 M16 x 2.0 M20 x 2.5 M14 x 1.25 M16 x 1.5 M18 x 1.5 M10 x 1.0
2" O/D	M22 x 2.5 M24 x 3.0 M22 x 1.5 M24 x 1.5

### SKC NO 900 CFM

1" O/D	#4-40 #6-32 #8-32 #10-24 #12-24 #10-32 1/4-20 1/4-28 5/16-18 5/16-24 3/8-16 3/8-24 7/16-14 7/16-20 1/2-20 1/8-27 NPT 1/2-13
1 1/2" O/D	3/16-12 3/16-18 5/8-18 3/4-10 3/4-16 1/4-18 NPT 5/8-11
2" O/D	7/8-9 7/8-14 1-8 1-14

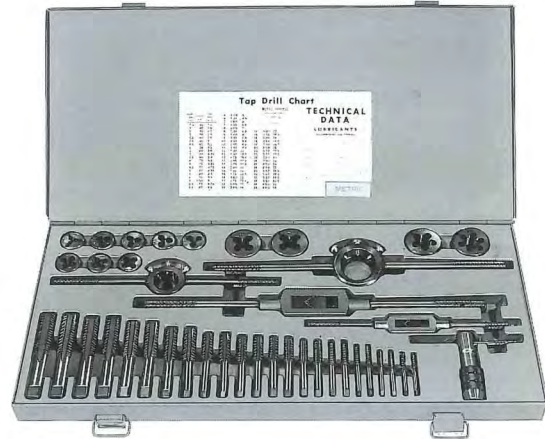


# 41 PC. TAP and DIE SET

ART NO.881

## HIGH SPEED STEEL ALLOY STEEL

ALL POLISH  
METAL CASE BOX "ABS" PLASTIC TRAY



### POPULAR SIZE COMBINATION SET

SAE INCH...NATIONAL COARSE and NATIONAL FINE THREAD SET  
METRIC...METRIC COARSE and METRIC FINE THREAD SET  
USED FOR THE FOLLOWING CARS:  
AMERICAN·JAPANESE·EUROPEAN CARS & MOTORCYCLES...  
General Motors·Chrysler·Ford·American Motors  
Datsun·Toyota·Volkswagen·Mercedes·Renault·Fiat.

### COMPLETE THREADING SET CONSISTING OF:

- 12 TAPER TAPS
- 12 BOTTOMING TAPS
- 8 1" O/D ROUND DIES
- 1 1/2" O/D ROUND DIES
- 1 ADJUSTABLE TAP WRENCH M3—M12
- 1 ADJUSTABLE TAP WRENCH M5—M20
- 1 'T' TYPE TAP HOLDER M3—M12
- 1 1" O/D DIE STOCK
- 1 1/2" O/D DIE STOCK

### SKC NO881 METRIC

1" O/D DIES	M3×0.5 M4×0.7 M5×0.8 M6×1.0 M7×1.0
1 1/2" O/D DIES	M8×1.25 M9×1.25 M10×1.5
1 1/2" O/D DIES	M12×1.75 M14×2.0 M16×2.0 M18×2.5

### SKC NO 881 CUF

1" O/D DIES	#6—32 #8—32 #10—24 #10—32 #12—24
1 1/2" O/D DIES	1/4—28 5/16—24 3/8—24
1 1/2" O/D DIES	7/16—20 1/2—20 3/4—18 5/8—18

CONTENTS PER CARTON	N. W.	G. W.	CFT
5 SET	25kg	26kg	1.2

# 24 PC. TAP and DIE SET

JEU DE 24 FILIERES ET DE TARAUDS

ART NO.724

## ALLOY STEEL HIGH SPEED STEEL SPECIAL

- ADJUSTABLE ROUND SPLIT DIE TYPE
- SOLID ROUND DIE TYPE



### ● METAL CASE "ABS" PLASTIC TRAY

THREAD	BSW & SAE	UNC & UNF	METRIC	BSF & UNF
CUTTING	1/4" × 20 1/4" × 28	1/4" × 20 1/4" × 28	M5×0.8 M5×0.9	1/4" × 26 1/4" × 28
SIZE	5/16 × 18 5/16 × 24	5/16 × 18 5/16 × 24	6×1.0 6×0.75	5/16 × 22 5/16 × 24
ONE PLUG	3/8 × 16 3/8 × 24	3/8 × 16 3/8 × 24	8×1.25 8×1.0	3/8 × 20 3/8 × 24
TAP & ONE ROUND DIE	7/16 × 14 7/16 × 20	7/16 × 14 7/16 × 20	10×1.5 10×1.25	7/16 × 18 7/16 × 20
DIE STOCK	1/2 × 12 1/2 × 20	1/2 × 13 1/2 × 20	12×1.75 12×1.5	1/2 × 16 1/2 × 20
DIE	1/8 BSP	1/8 NPT	1/8 BSP	1/8 BSP
DIE STOCK	1"	1"	1"	1"
TAP WRENCH	1/8—1/2	1/8—1/2	M3—M12	1/8—1/2
WEIGHT	1.6kg	1.0kg	1.0kg	1.0kg
PER CASE	G.W.	MEAS' T		
24 SETS	24kg	1.3CFT		CARTON

# 8 PC. TAP and DIE SET

ART NO.707

JEU DE 8 FILIERES ET DE TARAUDS

## ALLOY STEEL HIGH SPEED STEEL SPECIAL

- ADJUSTABLE ROUND SPLIT DIE TYPE
- SOLID ROUND DIE TYPE



### PLASTIC CASE

SKC No.	707W	707C	707F	707M
THREAD	BSW	UNC	UNF(SAE)	METRIC
CUTTING	1/4" × 20	1/4" × 20	1/4" × 28	M6 × 1.0
SIZE	5/16 × 18	5/16 × 18	5/16 × 24	8 × 1.25
ONE PLUG	3/8 × 16	3/8 × 16	3/8 × 24	10 × 1.5
TAP & DIE				
DIE STOCK	1"	1"	1"	1"
TAP WRENCH	Square	Square	Square	Square
WEIGHT	500g	500g	500g	500g
PER CASE		G. W.	MEAS' T	
5 DOZ.		31kg.	1.1CFT	CARTON
6 SETS CARTON BOX 60 SETS ONE CAS				

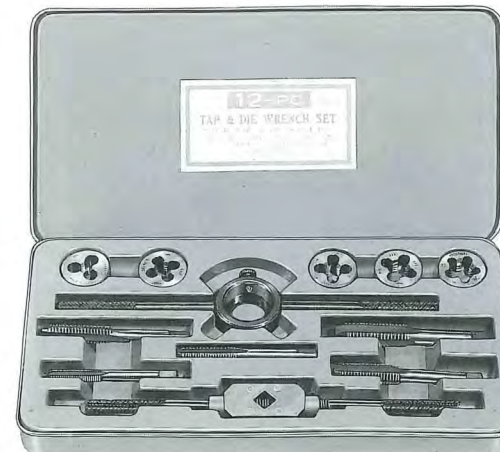
# 12 PC. TAP and DIE SET

ART NO.712

JEU DE 12 FILIERES ET DE TARAUDS

## ALLOY STEEL HIGH SPEED STEEL SPECIAL

- ADJUSTABLE ROUND SPLIT DIE TYPE
- SOLID ROUND DIE TYPE



- METAL CASE "ABS" PLASTIC TRAY
- PLASTIC CASE

SKC No.	712E	712NC	712NF	712BSF	712SM	712S	712M	712S.W
THREAD	BSW	UNC	UNF	BSF	MACHINE	SCREW	METRIC	BSW
CUTTING	1/4" × 20	1/4" × 20	1/4" × 28	1/4" × 26	4 × 36	6 × 32	M5 × 0.8	1/8" × 40
SIZE	5/16 × 18	5/16 × 18	5/16 × 24	5/16 × 22	6 × 32	8 × 32	6 × 1.0	5/32 × 32
ONE PLUG	3/8 × 16	3/8 × 16	3/8 × 24	3/8 × 20	8 × 32	10 × 24	8 × 1.25	3/16 × 24
TAP & DIE	7/16 × 14	7/16 × 14	7/16 × 20	7/16 × 18	10 × 24	12 × 24	10 × 1.5	1/4 × 20
DIE STOCK	1/2 × 12	1/2 × 13	1/2 × 20	1/2 × 16	12 × 24	1/4 × 20	12 × 1.75	5/16 × 18
DIE STOCK	1"	1"	1"	1"	1"	1"	1"	1"
TAP WRENCH	1/8—1/2	1/8—1/2	1/8—1/2	1/8—1/2	1/16—1/4	1/16—1/4	M3—M12	1/16—3/8
WEIGHT	800g	800g	800g	800g	690g	690g	800g	720g
PER CASE		G. W.	MAS' T					
24 SETS		20kg.	1.1CFT				CARTON	



# 26 PC. TAP and DIE SET

JEU DE 26 FILIERES ET DE TARAUDS

ART NO. 726

**TUNGSTEN STEEL**  
**CABON STEEL**  
**HIGH SPEED STEEL SPECIAL**

- ADJUSTABLE ROUND SPLIT DIE TYPE
- SOLID ROUND DIE TYPE



●METAL CASE "ABS" PLASTIC TRAY

THREAD	DIN	METRIC	BSW	UNF	UNC
CUTTING SIZE	M3×0.5	M4×0.7	1/8"×40	1/8"×44	6×32
ONE TAPER & PLUG & BOTTMING	4×0.7	5×0.8	3/16×24	3/16×32	8×32
TAP ONE	5×0.8	6×1.0	1/4×20	1/4×28	10×24
ROUND DIE	6×1.0	8×1.25	5/16×18	5/16×24	1/4×20
DIE STOCK	8×1.25	10×1.5	3/8×16	3/8×24	5/16×18
TAP WRENCH	10×1.5	12×1.75	1/2×12	1/2×20	3/8×16
PER CASE	G. W.		MEAS' T		
24 SETS	28K 800g		1.3CFT		CARTON

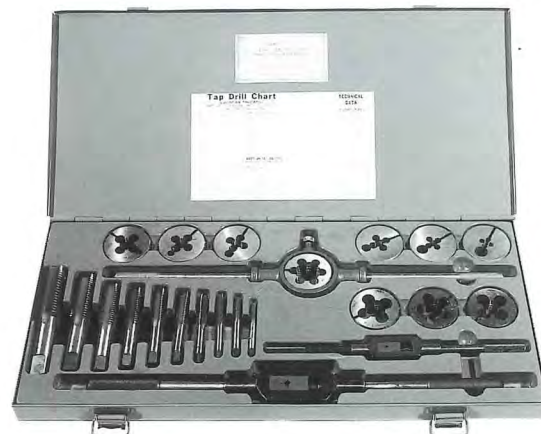
# "OK" type TAP and DIE SET

ART NO. 825

ART NO. 828

**HIGH SPEED STEEL**  
**TUNGSTEN STEEL**

●METAL CASE "ABS" PLASTIC TRAY



SKC/NO	825INCH	12PCS.	16PCS.	21PCS.	12PCS.	16PCS.	21PCS.
SET NO.	OK 1	OK 5	OK 7	OK 31	OK 35	OK 37	
CUTTING SIZE	1/4"-20	1/4"-20	1/4"-20	1/4"-28	1/4"-28	1/4"-28	
ONE PLUG	5/16-18	5/16-18	5/16-18	5/16-24	5/16-24	5/16-24	
TAP & ONE ROUND DIE	3/8-16	3/8-16	3/8-16	3/8-24	3/8-24	3/8-24	
	7/16-14	7/16-14	7/16-14	7/16-20	7/16-20	7/16-20	
	1/2-12	1/2-12	1/2-12	1/2-20	1/2-20	1/2-20	
		5/8-11	5/8-11		5/8-18	5/8-18	
		3/4-10	3/4-10		3/4-16	3/4-16	
			7/8-9			7/8-14	
			1-8			1-14	
DIE DIA	1 1/2"	2"	2"	1 1/2"	2"	2"	
TAP WRENCH	NO. 5	NO. 6	NO. 5, 7	NO. 5	NO. 6	NO. 5, 7	
WEIGHT	2.3kg	4.5kg	6.5kg	2.3kg	4.5kg	6.5kg	

SKC/NO 828 METRIC

SET NO.	OK 41	OK 45	OK 47	OK 100	M 12	M 13	M14
CUTTING SIZE	M 6×1.0	M 6×1.0	M 6×1.0	M 6×1.0	M 6×1.0	M 6×1.0	M10×1.50
AND THEREAD	7×1.0	8×1.25	8×1.25	8×1.25	7×1.0	7×1.0	11×1.50
PER INCH	8×1.25	10×1.50	10×1.50	10×1.5	8×1.25	8×1.25	12×1.75
ONE PLUG	10×1.50	12×1.75	12×1.75	12×1.75	9×1.25	9×1.25	13×1.75
TAP & ONE ROUND DIE EACHPC.	12×1.75	14×2.0	14×2.0	14×2.0	10×1.50	10×1.50	14×2.0
		16×2.0	16×2.0	16×2.0	11×1.50	11×1.50	16×2.0
		18×2.5	18×2.5	18×2.5	12×1.75	12×1.75	18×2.5
			20×2.5	20×2.5	14×2.0	14×2.0	20×2.5
			22×2.5	22×2.5	16×2.0	16×2.0	22×2.5
			24×3.0	24×3.0	18×2.5	18×2.5	24×3.0
			26×3.0	26×3.0	20×2.5	20×2.5	26×3.0
			28×3.0	28×3.0			
			30×3.5	30×3.5			
DIES DIAMETER IN	1 1/2"	2"	2"	2" 1/2 1/4"	1 1/2"	2"	2"
TAP WRENCH NO.	5	6	5&7	6&7 1/2	6#	6#	5#, 7#
WEIGH	2.5kg	4.5kg	6.4kg	15.7kg	4.0kg	6.5kg	13kg

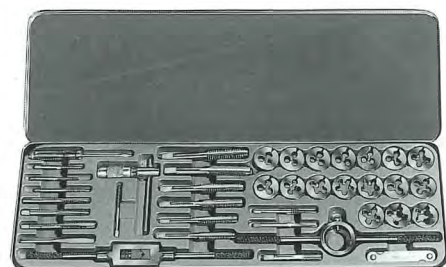
# 40 PC. TAP and DIE SET

JEU DE 40 FILIERES ET DE TARAUDS

ART NO. 740

**TUNGSTEN STEEL**  
**CABON STEEL**  
**HIGH SPEED STEEL SPECIAL**

- ADJUSTABLE ROUND SPLIT DIE TYPE
- SOLID ROUND DIE TYPE



- PLASTIC TRAY
- METAL CASE "ABS" PLASTIC TRAY

THREAD	NC & NF & NPT	BSW & AE & BSP	METRIC & BSP	BSW & METRIC & BSP
CUTTING SIZE	4×40 1/2"×13	1/8"×40 1/8"×44	M3×0.6 M3×0.5	1/8"-40 M3-0.5
ONE PLUG	6×32 10×32	5/32×32 5/32×36	4×0.75 4×0.7	1/4-20 4-0.7
TAP & ONE ROUND DIE	8×32 1/4×28	3/16×32 3/16×32	5×0.9 5×0.8	5/16-18 5-0.8
	10×24 5/16×24	1/4×20 1/4×28	6×1.0 6×0.75	3/8-16 6-1.0
	12×24 3/8×24	5/16×18 5/16×24	7×1.0 7×0.75	7/16-14 7-1.0
	1/4×20 7/16×20	3/8×16 3/8×24	8×1.25 8×1.0	1/2-12 8-1.25
	5/16×18 1/2×20	7/16×14 7/16×20	10×1.5 10×1.25	1/8 BSP 9-1.25
	3/8×16 1/8×27	1/2×12 1/2×20	12×1.75 12×1.5	10-1.5
	7/16×14	1/8 BSP	1/8 BSP	11-1.5
				12-1.75
DIE STOCK	1"	1"	1"	1"
TAP WRENCH	#4-1/2	1/8-1/2	M3-M12	M3-M12
PITCH GAUGES	NC & NF	BSW & SAE	METRIC	METRIC
SCREW DRIVER	4"	4"	4"	4"
TAP HOLDER	T-10	T-10	T-10	T-10
WEIGHT	1.5kg	1.5kg	1.5kg	1.5kg
PER CASE	G. W.	MEAS' T		
10 SETS	16kg	0.7CFT		CARTON

# "OK" type TAP and DIE SET

COMBINATION THREAD

ART NO. 827

**HIGH SPEED STEEL**  
**TUNGSTEN STEEL**

●METAL CASE "ABS" PLASTIC TRAY



SKC/NO 827 "INCH" COMBINATION

SET NO.	OK 310	OK 311	OK 312
CUTTING SIZE	1/4"-20 1/4"-28	1/4"-20 1/4"-28	1/4"-20 1/4"-28
BSW & SAE	5/16-18 5/16-24	5/16-18 5/16-24	5/16-18 5/16-24
ONE PLUG	3/8-16 3/8-24	3/8-16 3/8-24	3/8-16 3/8-24
TAP & ONE ROUND DIE	7/16-14 7/16-20	7/16-14 7/16-20	7/16-14 7/16-20
	1/2-12 1/2-20	1/2-12 1/2-20	1/2-12 1/2-20
		9/16-12 9/16-18	9/16-12 9/16-18
		5/8-11 5/8-18	5/8-11 5/8-18
		3/4-10 3/4-16	3/4-10 3/4-16
			7/8-9 7/8-14
			1-8 1-14
WRENCH & STOCK	No. 5 1/2" O/D	No. 6 1/2" O/D	No. 5, 7 2" O/D
WEIGHT	5.4kg	10kg	15.4kg

SKC/NO 827 "METRIC" COMBINATION

SET NO.	OK 410	OK 411	OK 412
CUTTING SIZE	M 6×1.0 M 6×0.75	M 5×0.8 M 5×0.9	M 6×1.0 M 6×0.75
METRIC COARSE	7×1.0 7×0.75	6×1.0 6×0.75	8×1.25 8×1.0
METRIC FINE	8×1.25 8×1.0	8×1.25 8×1.0	10×1.5 10×1.25
ONE PLUG	10×1.5 10×1.25	10×1.5 10×1.25	12×1.75 12×1.5
TAP & ONE ROUND DIE	12×1.75 12×1.5	12×1.75 12×1.5	14×2.0 14×1.5
		14×2.0 14×1.5	16×2.0 16×1.5
		16×2.0 16×1.5	18×2.5 18×1.5
		18×2.5 18×1.5	20×2.5 20×1.5
			22×2.5 22×1.5
			24×3.0 24×1.5
WRENCH & STOCK	No. 5 1/2" O/D	No. 6 1/2" O/D	No. 5, 7 2" O/D
WEIGHT	5.4kg	10kg	15.4kg



# "OK" type TAP & DIE SET

ALL STRONG METAL CASE BOX.  
ABS PLASTIC TRAY

ART NO.825

**ALLOY STEEL**      **BSW THREAD**  
**TUNGSTEN STEEL**      **UNC THREAD**  
**HIGH SPEED STEEL**



SET NO.	OK" 1	OK" 2	OK" 5	OK" 5 1/2	OK" 7	OK" 7 1/2	OK" 40	OK" 50	
CUTTING SIZE AND THREAD PER INCH	1/4-20 5/16-18 3/8-16 7/16-14 1/2-12	1/4-20 3/8-16 1/2-12 5/8-11 3/4-10	1/4-20 3/8-16 7/16-14 1/2-12 5/8-11 3/4-10	1/4-20 5/16-18 3/8-16 7/16-14 1/2-12 5/8-11 3/4-10	1/4-20 5/16-18 3/8-16 7/16-14 1/2-12 5/8-11 3/4-10	1/4-20 5/16-18 3/8-16 7/16-14 1/2-12 5/8-11 3/4-10	1/4-20 5/16-18 3/8-16 7/16-14 1/2-12 5/8-11 3/4-10	1/4-20 5/16-18 3/8-16 7/16-14 1/2-12 5/8-11 3/4-10	1/4-20 5/16-18 3/8-16 7/16-14 1/2-12 5/8-11 3/4-10
ONE PLUG TAP & ONE ROUND DIE									
DIES DIAMETER INCHES	1 1/2	2"	2"	2"	2"	2"	2" 2 1/2	2" 3	
STOCK LENGTH	12"	20"	20"	20"	20"	20"	20" 24"	20" 26"	
TAP WRENCH NO.	5	6	6	6	5 & 7	5 & 7	7 & 7 1/2	6 & 8	
WEIGHT PER SET	2.0kg	3.6kg	4.0kg	4.5kg	5.5kg	6.0kg	14.8kg	20kg	
PER CASE	10 SET	5 SET	5 SET	5 SET	5 SET	5 SET	2 SET	2 SET	

SET NO.	OK" 101	OK" 102	OK" 105	OK" 105 1/2	OK" 107	OK" 107 1/2	OK" 104	OK" 150	
CUTTING SIZE AND THREAD PER INCHES	1/4-20 5/16-18 3/8-16 7/16-14 1/2-12	1/4-20 3/8-16 1/2-12 5/8-11 3/4-10	1/4-20 3/8-16 7/16-14 1/2-12 5/8-11 3/4-10	1/4-20 5/16-18 3/8-16 7/16-14 1/2-12 5/8-11 3/4-10	1/4-20 5/16-18 3/8-16 7/16-14 1/2-12 5/8-11 3/4-10	1/4-20 5/16-18 3/8-16 7/16-14 1/2-12 5/8-11 3/4-10	1/4-20 5/16-18 3/8-16 7/16-14 1/2-12 5/8-11 3/4-10	1/4-20 5/16-18 3/8-16 7/16-14 1/2-12 5/8-11 3/4-10	1/4-20 5/16-18 3/8-16 7/16-14 1/2-12 5/8-11 3/4-10
TAPER & BOTTOMING PLUG & TAP & ONE ROUND DIE									
DIES DIAMETER INCH	1 1/2	2	2	2	2	2	2" 2 1/2"	2" 3"	
STOCK LENGTH	12"	20"	20"	20"	20"	20"	20" 24"	20" 26"	
TAP WRENCH NO.	5	6	6	6	5 & 7	5 & 7	6 & 7 1/2	6 & 8	
WEIGHT PER SET	2.7kg	5.8kg	7.0kg	8.0kg	9.0kg	11.7kg	20.8kg	31.5kg	
PER CASE	10 SET	5 SET	5 SET	5 SET	3 SET	3 SET	2 SET	1 SET	

# "OK" type TAP & DIE SET

ART NO.828

**ALL STRONG METAL CASE**  
**INTERNATIONAL STANDARD**  
**BUTTON DIE TYPE & OK TYPE**  
**(ABS PLASTIC TRAY)**



SET NO.	D 413	D 47	D 47 1/2	D 48	F 46	F 48	M 10	M 11	M 12	M 13	M 14	
CUTTING SIZE AND THREAD PER INCH	M1 x0.25 M1.2x0.25 M1.4x0.3 M1.7x0.35 M2 x0.4 M2.3x0.4 M2.6x0.45 M3 x0.5 M3.5x0.6 M4 x0.7 M4.5x0.75 M5 x0.8 M5.5x0.9	M2 x0.4 M2.5x0.45 M3 x0.5 M3.5x0.6 M4 x0.7 M5 x0.8 M6 x1.0	M3 x0.5 M3.6x0.6 M4 x0.7 M4.5x0.75 M5 x0.8 M5.5x0.9 M6 x1.0	M2 x0.4 M2.5x0.45 M3 x0.5 M3.5x0.6 M4 x0.7 M4.5x0.75 M5 x0.8 M6 x1.0 M7 x1.0	M4 x0.75 M5 x0.9 M6 x1.0 M8 x1.25 M10 x1.50 M12 x1.75	M3 x0.6 M4 x0.75 M5 x0.9 M6 x1.0 M7 x1.0 M8 x1.25 M9 x1.25 M10 x1.50 M11 x1.50 M12 x1.75 M13 x1.75 M14 x2.0	M2 x0.4 M2.5x0.45 M3 x0.5 M3.5x0.6 M4 x0.7 M4.5x0.75 M5 x0.8 M5.5x0.9 M6 x1.0	M5 x0.8 M5.5x0.9 M6 x1.0 M7 x1.0 M8 x1.25 M9 x1.25 M10 x1.50 M11 x1.50 M12 x1.75 M13 x1.75 M14 x2.0 M16 x2.0 M18 x2.5 M20 x2.5	M6 x1.0 M7 x1.0 M8 x1.25 M9 x1.25 M10 x1.50 M11 x1.50 M12 x1.75 M13 x1.75 M14 x2.0 M16 x2.0 M18 x2.5 M20 x2.5	M6 x1.0 M7 x1.0 M8 x1.25 M9 x1.25 M10 x1.50 M11 x1.50 M12 x1.75 M13 x1.75 M14 x2.0 M16 x2.0 M18 x2.5 M20 x2.5	M6 x1.0 M7 x1.0 M8 x1.25 M9 x1.25 M10 x1.50 M11 x1.50 M12 x1.75 M13 x1.75 M14 x2.0 M16 x2.0 M18 x2.5 M20 x2.5	M10 x1.50 M11 x1.50 M12 x1.75 M13 x1.75 M14 x2.0 M16 x2.0 M18 x2.5 M20 x2.5 M22 x2.5 M24 x3.0 M26 x3.0
DIES DIAMETER IN	1 3/16"	1 3/16"	1 3/16"	1 3/16"	1"	1"	1"	1"	1 1/2	2"	2"	
STOCK LENGTH	6 1/2	6 1/2	6 1/2	6 1/2	7 1/2	7 1/2	7 1/2	7 1/2	12	20	20	
TAP WRENCH NO.	0#	0#	0#	0#	4#	4#	0#	4#	6#	6#	5# 7#	
NET WEIGHT	2.3kg	1.5kg	1.5kg	1.6kg	1.8kg	1.9kg	1.6kg	1.9kg	4.0kg	6.5kg	13kg	
PER CASE	20	20	20	20	20	20	20	20	10	5	3	

SET NO.	OK 41	OK 45	OK 47	OK 100	OK 41 1/2	OK 45 1/2	OK 47 1/2	OK 100 1/2
CUTTING SIZE AND THREAD PER INCH	M6 x1.0 M7 x1.0 M8 x1.25 M10 x1.50 M12 x1.75	M6 x1.0 M8 x1.25 M10 x1.50 M12 x1.75 M14 x2.0 M16 x2.0 M18 x2.5	M6 x1.0 M8 x1.25 M10 x1.50 M12 x1.75 M14 x2.0 M16 x2.0 M18 x2.5 M20 x2.5 M22 x2.5 M24 x3.0	M6 x1.0 M8 x1.25 M10 x1.5 M12 x1.75 M14 x2.0 M16 x2.0 M18 x2.5 M20 x2.5 M22 x2.5 M24 x3.0 M26 x3.0 M28 x3.0 M30 x3.5	M6 x0.75 M7 x0.75 M8 x1.0 M10 x1.25 M12 x1.5 M14 x1.50 M16 x1.50 M18 x1.50	M6 x0.75 M8 x1.0 M10 x1.25 M12 x1.50 M14 x1.50 M16 x1.50 M18 x1.50	M6 x0.75 M8 x1.0 M10 x1.25 M12 x1.50 M14 x1.50 M16 x1.50 M18 x1.50	M6 x0.75 M8 x1.0 M10 x1.25 M12 x1.50 M14 x1.50 M16 x1.50 M18 x1.50
DIES DIAMETER IN	1 1/2	2"	2"	2"	1 1/2	2"	2"	2"
STOCK LENGTH	12"	20"	20"	24"	12"	20"	20"	24"
TAP WRENCH NO.	5	6	5 & 7	6 & 7 1/2	5	6	5 & 7	6 & 7 1/2
NET WEIGHT	2.5kg	4.5kg	6.5kg	15.7kg	2.5kg	5.5kg	8.0kg	19.8kg
PER CASE	10	5	5	3	10	5	5	3



# "BUTTON" DIE type TAP & DIE SET

ART NO.829

**ALL STRONG METAL CASE**  
**ABS PLASTIC TRAY**  
**UNC or BSW & BRITISH ASSOCIATION THREAD**



SET NO.	DD 5	DD 7	DD 8	DD 9	F 5	F 6	F 7	F 8	BA 10
CUTTING SIZE	1/8-40	1/16-60	1/16-60	1/16-60	1/8-40	1/8-40	1/8-40	1/16-60	NO.0BA
THREAD PER INCH	5/32-32	3/32-48	3/32-48	3/32-48	3/16-24	3/16-24	5/32-32	3/32-48	NO.1BA
ONE PLUG TAP AND ONE ROUND DIE EACH	3/16-24	1/8-40	1/8-40	1/8-40	1/4-20	1/4-20	3/16-24	1/8-40	NO.2BA
	7/32-24	5/32-32	5/32-32	5/32-32	5/16-18	5/16-18	7/32-24	5/32-32	NO.3BA
	1/4-20	3/16-24	3/16-24	3/16-24	3/8-16	3/8-16	1/4-20	3/16-24	NO.4BA
		7/32-24	7/32-24	7/32-24		7/16-14	5/16-18	7/32-24	NO.5BA
		1/4-20	1/4-20	1/4-20			3/8-16	1/4-20	NO.6BA
			5/16-18	5/16-18				5/16-18	NO.7BA
				3/8-16				3/8-16	NO.8BA
									NO.9BA
									NO.10BA
DIES DIAM INCHES	13/16"	13/16	13/16	13/16	1	1	1	1	13/16
STOCK NO. LENGTH	6 1/2	6 1/2	6 1/2	6 1/2	7 1/2	7 1/2	7 1/2	7 1/2	6 1/2
TAP NO. WRENCH	0	0	0	0	4	4	4	4	0
NET WEIGHT	950g	980g	1000g	1280g	1200g	1300g	1350g	1440g	1340g
PER CASE	20SET	20SET	20SET	20SET	20SET	20SET	20SET	20SET	20SET

## UNC or BSW "BRITISH ASSOCIATION" THREAD

SET NO.	DD 105	DD 107	DD 108	DD 109	F 105	F 106	F 107	F 108	BA 100
CUTTING SIZE	1/8-40	1/16-60	1/16-60	1/16-60	1/8-40	1/4-40	1/8-40	1/16-60	NO.0BA
THREAD PER INCH	5/32-32	3/32-48	3/32-48	3/32-48	3/16-24	3/16-24	5/32-32	3/32-48	1BA
ONE TAPER & PLUG & BOTTOMING TAP & ONE ROUND DIE EACH	3/16-24	1/8-40	1/8-40	1/8-40	1/4-20	1/4-20	3/16-24	1/8-40	2BA
	7/32-24	5/32-32	5/32-32	5/32-32	5/16-18	5/16-18	7/32-24	5/32-32	3BA
	1/4-20	3/16-24	3/16-24	3/16-24	3/8-16	3/8-16	1/4-20	3/16-24	4BA
		7/32-24	7/32-24	7/32-24		7/16-14	5/16-18	7/32-24	5BA
		1/4-20	1/4-20	1/4-20			3/8-16	1/4-20	6BA
			5/16-18	5/16-18				5/16-18	7BA
				3/8-16				3/8-16	8BA
									9BA
									10BA
DIES DIAM INCHES	13/16	13/16	13/16	13/16	1	1	1	1	13/16
STOCK NO. LENGTH	6 1/2	6 1/2	6 1/2	6 1/2	7 1/2	7 1/2	7 1/2	7 1/2	6 1/2
TAP NO. WRENCH	0	0	0	0	4	4	4	4	0
NET WEIGHT	1500g	1800g	1900g	2100g	1900g	2000g	2200g	2250g	2000g
PER CASE	20SET	20SET	20SET	20SET	20SET	20SET	20SET	20SET	20SET

# EXCELLENT 33 PC. TAP and DIE SET

JEU DE 33 FILIERES ET DE TARAUDS  
 33-TEILIG GEWINDESCHNEIDWERKZEUGSATZ

ART NO.933

**SET NO.ET-33RD: SOLID ROUND DIES**  
**SET NO.ET-33ADR:ADJUSTABLE ROUND DIES**  
**SET NO.ET-33HEX:HEXAGON DIES**

**HIGH SPEED STEEL**  
**ALLOY TOOL STEEL**  
**CARBON STEEL**



**COMBINATION SET**  
 CONTAINS ONE EACH PLUG TAP AND 1" O/D(A/F) DIE FOR THE FOLLOWING THREAD SIZES AND RELATED ACCESSORIES INDICATED.

PACKED IN AN ATTRACTIVE METAL CASE.

UNC & UNF		METRIC	
No. 8NC32	1/4" NF28	M3 x 0.5	M10 x 1.5
No. 10NC24	5/16 NF24	4 x 0.7	11 x 1.5
1/4" NC20	5/16 NF24	5 x 0.8	12 x 1.75
5/16 NC18	7/16 NF20	6 x 1.0	10 x 1.0
3/8 NC16	1/2 NF20	7 x 1.0	12 x 1.25
7/16 NC14	1/8 NPT27	8 x 1.25	1/8 BSP028
1/2 NC13	1/4 NPT18	9 x 1.25	1/4 BSP019

RELATED ACCESSORIES:

- 1 DIE STOCK ADJUSTABLE GUIDE(1" O/D OR 1" A/F)
- 1 ADJUSTABLE TAP WRENCH
- 1 T-HANDLE TAP WRENCH
- 1 SCREW PITCH GAUGE
- 1 SCREW DRIVER

CONTENTS PER CARTON	N.W.	G.W.	CFT
10 SETS	20kg	21kg	0.9

# EXCELLENT 47PC. TAP and DIE SET

JEU DE 47 FILIERES ET DE TARAUDS  
 47-TEILIG GEWINDESCHNEIDWERKZEUGSATZ

ART NO.947

**SET NO.ET-47SRD:SOLID ROUND DIES**  
**SET NO.ET-47ARD:ADJUSTABLE ROUND DIES**  
**SET NO.ET-47HEX:HEXAGON DIES**

**HIGH SPEED STEEL**  
**ALLOY TOOL STEEL**  
**CARBON STEEL**



**COMPLETE SET**  
 CONTAINS ONE EACH PLUG TAP AND 1" O/D(A/F) DIE FOR THE FOLLOWING THREAD SIZES PLUS ONE EACH TAPER AND BOTTOM TAPS FOR SIZE, 1/4" NC, 5/16" NC AND 3/8" NC OR M6 x 1.0, M8 x 1.25 AND M10 x 1.5 PLUS RELATED ACCESSORIES INDICATED.

PACKED IN AN ATTRACTIVE METAL CASE.

UNC & UNF		METRIC	
No. 4-40	7/16"-14	M3 x 0.5	M9 x 1.25
No. 6-32	1/2"-13	3 x 0.6	10 x 1.50
No. 8-40	1/4"-28	4 x 0.7	12 x 1.75
No. 10-24	5/16"-24	4 x 0.75	8 x 1.0
No. 10-32	3/8"-24	5 x 0.8	10 x 1.25
No. 12-24	7/16"-20	5 x 0.9	10 x 1.0
1/4"-20	1/2"-20	6 x 1.0	12 x 1.25
5/16"-18	1/8 NPT27	7 x 1.0	1/8 BSP28
3/8"-16	1/4 NPT18	8 x 1.25	1/4 BSP19

RELATED ACCESSORIES:

- 1 DIE STOCK ADJUSTABLE GUIDE(1" O/D OR 1" A/F)
- 1 ADJUSTABLE TAP WRENCH
- 1 T-HANDLE TAP WRENCH
- 1 SCREW PITCH GAUGE
- 1 SCREW DRIVER

CONTENTS PER CARTON	N.W.	G.W.	CFT
10 SETS	27kg	28kg	1.20



# EXCELLENT

## 30 PC. TAP and DIE SET

JEU DE 30 FILIERES ET DE TARAUDS  
31-TEILIG GEWINDESCHNEIDWERKZEUGSATZ

### SET NO. ET-30DIN

in stabilem Blechkasten mit Tragegriff.  
Jedes Werkzeug ist in einer eigenen Halterung untergebracht.  
Die Gewindebohrer stellen sich beim Öffnen des Deckels automatisch auf.  
Gewindebohrer und Schneideisen HSS und Tungsten.



ALL POLISH OR BLACK FINISH  
METAL CASE BOX "ABS" TRAY

### COMPLETE THREADING SET CONSISTING OF:

- 7 TAPER TAPS
- 7 PLUG TAPS
- 7 BOTTOMING TAPS
- 7 ROUND DIES
- 1 25 φ O/D DIE STOCK
- 1 ADJUSTABLE TAP WRENCH M3-M12

### HIGH SPEED STEEL ALLOY TOOL STEEL

Metallkassetten mit Gewindebohrern DIN 352/ISO, und  
Schneideisen DIN 223 metrisch nach DIN 13, HSS

	fur Gewinde for threads	Schneideisen- halter die stocks	verstellbare Windeisen Gr. tap wrenches
METRIC	M 3 4 5 6 M 8 10 M 12	25×9	2(NO.5)
UNC	#6/32 #8/32 #10/24 1/4-20NC 5/16-18NC 3/8-16NC 1/2-13NC	25×9	2(NO.5)

CONTENTS PER CARTON	N.W.	G.W.	CFT
10 SETS	15kg	16kg	1.00

# EXCELLENT

## 51 PC. TAP and DIE SET

JEU DE 51 FILIERES ET DE TARAUDS  
51-TEILIG GEWINDESCHNEIDWERKZEUGSATZ

### SET NO. ET-51RD: SOKID ROUND DIES

### SET NO. ET-51ARD: ADJUSTABLE ROUND DIES

### SET NO. ET-51HEX: HEXAGON DIES

**HIGH SPEED STEEL**  
**ALLOY TOOL STEEL**  
**CARBON STEEL**



### COMPLETE THREADING SET

CONTAINS ONE EACH PLUG TAP AND DIE FOR THE  
FOLLOWING 20 THREAD SIZES AND RELATED  
ACCESSORIES INDICATED.

PACKED IN AN ATTRACTIVE METAL CASE WITH AN  
ABS PLASTIC TRAY.

6-32, 8-32, 10-24, 12-24, 10-32, 1/4-20, 5/16-18, 3/8-16, 7/16-14,  
1/2-13, 1/4-28, 5/16-24, 3/8-24, 7/16-20, 1/2-20  
M3×0.5, M4×0.7, M5×0.8, M6×1.0, M8×1.25

### RELATED ACCESSORIES:

- 5 EXTRACTORS #1 #2 #3 #4 #5
- 2 PITCH GAUGES INCH & METRIC
- 1 SCREW DRIVER
- 1 TAP WRENCH 1/16-1/2
- 1 DIE STOCK 1" O/D (A/F)
- 1 "T" TYPE HOLDER 0-1/4

CONTENTS PER CARTON	N.W.	G.W.	CFT
3 SETS	22kg	23kg	0.97

## 35-TEILIG GEWINDESCHNEIDWERKZEUGSATZ DIN-AUSFUHRUNG.

## 35 PIECES TAP & DIE SET DIN STANDARD.

## 35 PIECES JEUX D'OUTILS DE TARAUDAGE ET FILETAGE DIMENSIONS SELON DIN.

### SET NO. TD-35DIN



Handgewindebohrer  
DIN 352  
Satz a 3 Stuck  
Schneideisen DIN 223

Hand Taps DIN 352  
In set of 3 pieces  
Round Dies DIN 233

Tarauds a main DIN 352  
en jeux de 3 pieces  
Filières rondes DIN 223

365×285×40mm 2.6kg

fur Metrisches ISO-Gewinde nach DIN 13

M3×0.5 M4×0.7 M5×0.8 M6×1.0

M8×1.25 M10×1.5 M12×1.75

bestuckt mit:

Je 1 Satz Gewindebohrer DIN 352

M3, 4, 5, 6, 8, 10, 12

Je 1 Stk. Schneideisen DIN 223

M3, 4, 5, 6, 8, 10, 12

Je 1 Stk. Verstellbare Windeisen M1-8, M4-12

Je 1 Stk. Schneideisenhalter Gr. 25, 38

Je 1 Stk. Schneideisenkapsel Gr. 25×20, 38×30

Je 1 Stk. Schraube

CONTENTS PER CARTON	N.W.	G.W.
5 SETS	13kg	14kg

**Alloy Steel**  
**High Speed STEEL**





# 60 PIECES TAP & DIE SET

**NEW**

High-carbon steel, precision-machined,  
Properly heat-treated, highly polished.



Set No. TD-60R with round dies.

Set No. TD-60H with hexagonal dies.

CONTENTS PER CARTON	N. W.	G. W.
5 SETS	12.5kg	13.5kg

Case size: 365 × 285 × 40mm  
Weight: 2.5kgs.

**Set consists of:**

- 1.....Die-stock with adjustable guide.
  - 1.....Adjustable tap wrench.
  - 1.....T-handle Tap wrench.
  - 2.....Screw pitch gauges, inch & metric
  - 1.....Screwdriver
  - 27.....dies.
  - 27.....taps.
- |       |          |          |          |         |          |
|-------|----------|----------|----------|---------|----------|
| Size: | 4NC/40   | 6NC 32   | 8NC32    | 10NC24  | 12NC24   |
|       | 10NF32   | 1/4NC 20 | 5/16NC18 | 3/8NC16 | 7/16NC14 |
|       | 1/2NC13  | 1/4NF 28 | 5/16NF24 | 3/8NF24 | 7/16NF20 |
|       | 1/2NF20  | 1/8NPT27 |          |         |          |
|       | M 3×0.5  | M 4×0.7  | M 5×0.8  | M 6×1.0 | M 7×1.0  |
|       | M 8×1.25 | M 9×1.25 | M10×1.5  | M10×1.0 | M12×1.75 |

Each set comes in custom made blow plastic case, with attractive printed box.  
A complete instruction and drill chart are included.

# CONCRETE-STONE DRILLS

## STRAIGHT TYPE

### STRAIGHT SHANK DRILLS



### STRAIGHT SHANK LONG DRILLS



### Straight Shank Drills

### Straight Shank Long Drills

Size		Straight Shank, Standard			Straight Shank Long		
m.m	inch	Size O. A.	Blade length	Shank length	O. A.	Blade length	Shank length
3.0		70 <sup>m/m</sup>	40 <sup>m/m</sup>	2.5 <sup>m/m</sup>	— <sup>m/m</sup>	— <sup>m/m</sup>	— <sup>m/m</sup>
3.2	(1/8)	70	40	3.0	—	—	—
3.5		70	40	3.0	—	—	—
4.0	(5/32)	70	40	3.5	—	—	—
4.5		80	45	4.0	—	—	—
4.8	(3/16)	80	45	4.5	—	—	—
5.0		80	45	4.5	—	—	—
5.5		80	45	5.0	—	—	—
6.0		100	60	5.5	300	240	5.5
6.4	(1/4)	100	60	5.5	300	240	6.0
6.5		100	60	6.0	300	240	6.0
7.0		100	60	6.5	300	240	6.5
7.5		110	65	7.0	300	240	7.0
8.0	(5/16)	110	65	7.5	300	240	7.5
8.5		110	65	8.0	300	240	8.0
9.0		120	120	7.5	300	240	8.5
9.5	(3/8)	120	75	8.5	300	240	8.5
10.0		120	75	9.0	300	240	9.0
10.5		120	75	10.0	300	240	10.0
11.0	(7/16)	120	75	10.0	300	240	10.0
11.5		140	95	11-10	300	240	11-10
12.0		140	95	12-10	300	240	12-10
12.5		140	95	12-10	300	240	12-10
12.7	(1/2)	140	95	12-10	300	240	12-10
13.0		140	95	12-10	300	240	12-10
13.5		140	95	12-10	300	240	12-10
14.0		150	105	13-10	300	240	13-10
14.5	(9/16)	150	105	13-10	300	240	13-10
15.0		150	105	14-10	300	240	14-10
16.0	(5/8)	180	110	15-13-10	300	240	15-13-10
16.5		180	110	15-13-10	300	240	15-13-10
17.0		180	110	16-13-10	300	230	16-13-10
17.5	(11/16)	180	110	16-13-10	300	230	16-13-10
18.0		180	110	17-13-10	300	230	17-13-10
19.0	(3/4)	180	110	18-13-10	300	230	18-13-10
20.0		180	110	19-15-10	300	230	19-15-10
22.0	(7/8)	200	120	21-15-10	300	230	21-15-10
25.0	(1)	200	120	24-15-10	300	230	24-15-10
26.0		200	120	24-15-10	300	230	24-15-10
28.0	(1 1/8)	200	120	26-15-10	300	230	26-15-10
30.0		200	120	28-15-10	300	230	28-15-10
32.0	(1 1/4)	200	120	30-15-10	300	230	30-15-10



# CALBIDE TIPPED TAPER SHANK DRILL BIT

ART NO.956

\* Excellent quality of carbide tip material is used. That endures strong strikes and maintains cutting ability for a long time.

\* Gives hammering power and revolution to the tip of drills efficiently, and can make hole in high speed.

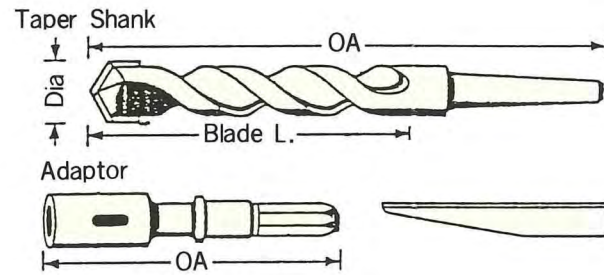
\* Drill bits are easily interchangeable to adaptor.

Specification:  
Tip dia: 4.8mm to 22.5mm

Material suitable for hole making:  
Concrete Block, Brick, Stone, Reaming in Anchor Engineering, etc.

Drift: Used when removing taper shank drill out of adaptor

Taper Shank



Dia.	O. A.			
	S	SM	M	L
4.8	120	180	200	280
5.0	120	180	200	280
5.5	120	180	200	280
6.0	120	180	200	280
6.4	120	180	200	280
6.5	120	180	200	280
6.6	120	180	200	280
7.0	120	180	200	280
7.5	120	180	200	280
8.0	120	180	200	280
8.5	120	180	200	280
9.0	120	180	200	280
9.5	120	180	200	280
10.0	120	180	200	280
10.5	120	180	200	280
10.7	120	180	200	280
11.0	120	180	200	280
11.5	120	180	200	280
12.0	120	180	200	280
12.3	120	180	200	280
12.5	120	180	200	280
12.7	120	180	200	280
13.0	120	180	200	280
13.5	120	180	200	280

Dia.	O. A.			
	S	SM	M	L
14.0	120	180	200	280
14.3	120	180	200	280
14.5	120	180	200	280
14.7	120	180	200	280
15.0	130	180	200	280
15.5	130	180	200	280
16.0	130	180	200	280
16.5	130	180	200	280
16.7	130	180	200	280
17.0	130	180	200	280
17.5	130	180	200	280
18.0	130	180	200	280
18.5	130	180	200	280
19.0	160	180	200	280
19.5	160	180	200	280
20.0	160	180	200	280
20.5	160	180	200	280
21.0	160	180	200	280
21.5	160	180	200	280
22.0	160	180	200	280
22.5	160	180	200	280

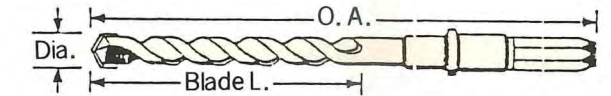
# HAMMER DRILL BIT WITH HEXAGONAL SHANK

ART NO.957

\*Excellent quality of carbide tip material is used. That endures strong strikes and maintains cutting ability for a long time.

\*Gives hammering power and revolution to the tip of drills, efficiently, and can make hole at high speed. Most suitable for deep hole making, perforation of tunnel, reaming in anchor engineering, making hole in rocks, etc.

Dimensions:



Dia.	O. A.		
	S	L	M
10.0	280	505	420
10.5	280	505	420
10.7	280	505	420
11.0	280	505	420
11.5	280	505	420
12.0	280	505	420
12.3	280	505	420
12.5	280	505	420
12.7	280	505	420
13.0	280	505	420
13.5	280	505	420
14.0	280	505	420
14.3	280	505	420
14.5	280	505	420
14.7	280	505	420
15.0	280	505	420
15.5	280	505	420
16.0	280	505	420
16.5	280	505	420
16.7	280	505	420
17.0	280	505	420
17.5	280	505	420
18.0	280	505	420
18.5	280	505	420
19.0	280	505	420
19.5	280	505	420
19.7	280	505	420
20.0	280	505	420
20.5	280	505	420
21.0	280	505	420
21.5	280	505	420

Dia.	O. A.		
	S	L	M
22.0	280	505	420
22.5	280	505	420
23.0	280	505	420
23.5	280	505	420
24.0	280	505	420
24.5	280	505	420
25.0	280	505	420
25.5	280	505	420
26.0	280	505	420
26.5	280	505	420
27.0	280	505	420
27.5	280	505	420
28.0	280	505	420
28.5	280	505	420
29.0	280	505	420
29.5	280	505	420
30.0	280	505	420
31.0	280	505	420
32.0	280	505	420
33.0	280	505	420
34.0	280	505	420
35.0	280	505	420
36.0	280	505	420
37.0	280	505	420
38.0	280	505	420
39.0	280	505	420
40.0	280	505	420
41.0	280	505	420
42.0	280	505	420



# GARBIDE TIPPED MULTI DRILL BIT

ART NO.958

\*A new type of carbide tip is used. That is most suitable for portable hammer drilling machine.

\*Designed to match portable hammer drilling machines, with a flute on the shank of the bit. Suitable for work at a high place, due to light weight of the drilling machine.

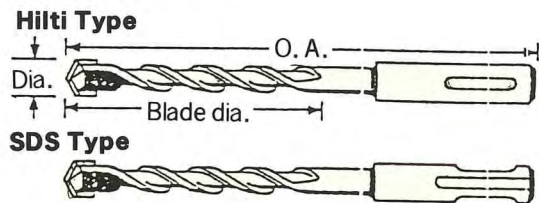
Soecification:

Tip dia. : 3.5m. m. to 32m. m

Material suitable for hole making :

Concrete Block, Stone, etc.

Dimensions:



Dia.	O. A.				
	S	SM	M	LM	L
3.5	116	166			
4.0	116	166			
4.3	116	166			
4.5	116	166			
4.8	116	166			
5.0	116	166			
5.5	116	166			
6.0	116	166			
6.4	116	166			
6.5	116	166			
7.0		166	216		
7.5		166	216		
8.0		166	216	300	
8.5		166	216	300	
9.0		166	216	300	
9.5		166	216	300	
10.0		166	216	300	400
10.5		166	216	300	400
11.0		166	216	300	400
11.5		166	216	300	400
12.0		166	216	300	400
12.5		166	216	300	400
12.7		166	216	300	400
13.0		166	216	300	400
13.5		166	216	300	400
14.0		166	216	300	400
14.3		166	216	300	400
14.5		166	216	300	400
15.0		166	216	300	400
15.5		166	216	300	400
16.0		166	216	300	400
16.5		166	216	300	400
16.7		166	216	300	400

Dia.	O. A.				
	S	SM	M	LM	L
17.0		166	216	300	400
17.5		166	216	300	400
18.0		166	216	300	400
18.5		166	216	300	400
19.0		166	216	300	400
19.5		166	216	300	400
20.0		166	216	300	400
20.5		166	216	300	400
21.0		166	216	300	400
21.5		166	216	300	400
22.0		166	216	300	400
22.5		166	216	300	400
23.0		166	216	300	400
23.5		166	216	300	400
24.0		166	216	300	400
24.5		166	216	300	400
25.0		166	216	300	400
25.5		166	216	300	400
26.0			216	300	400
26.5			216	300	400
27.0			216	300	400
27.5			216	300	400
28.0			216	300	400
28.5			216	300	400
29.0			216	300	400
29.5			216	300	400
30.0			216	300	400
31.0			216	300	400
32.0			216	300	400

# TAP DRILL CHART

## AMERICAN THREADS NATIONAL COARSE-NC NATIONAL FINE-NF NATIONAL SPECIAL-NS

NOMI- NAL SIZE	TAP DRILL		NOMI- NAL SIZE	TAP DRILL	
	Inches	mm		Inches	mm
1/16-64	3/64	1.2	9/16-12	31/64	12.
3/32-48	# 49	1.85	-18	33/64	13.
1/8-40	# 38	2.6	5/8-11	17/32	13.5
5/32-32	7/8	3.2	-18	37/64	14.5
-36	# 30	3.25	1 1/16-11	19/32	15.
3/16-24	# 26	3.75	-16	5/8	16.
-32	5/32	4.	3/4-10	21/32	16.5
7/32-24	# 16	4.5	-16	11/16	17.5
-32	3/16	4.8	7/8-9	49/64	19.5
1/4-20	13/64	5.1	-14	13/16	20.5
-24	# 4	5.3	1-8	7/8	22.5
-28	7/32	5.5	-12	59/64	23.5
-32	7/32	5.6	-14	15/16	23.5
5/16-18	F	6.5	1 1/8-7	63/64	25.
-24	I	6.9	-12	1 3/64	26.5
-32	9/32	7.2	1 1/4-7	1 7/64	28.
3/8-16	5/16	8.	-12	1 11/64	29.5
-24	Q	8.5	1 3/8-6	1 7/32	31.
7/16-14	3/8	9.3	-12	1 19/64	33.
-20	25/64	9.9	1 1/2-6	1 11/32	34.
1/2-12	27/64	10.75	-12	1 27/64	36.
-13	27/64	10.75	1 5/8-5 1/2	1 29/64	37.
-20	29/64	11.5	1 3/4-5	1 1/16	39.5
			1 7/8-5	1 11/16	43.
			2-4 1/2	1 25/32	45.

## AMERICAN NATIONAL PIPE TAPER-NPT-STRAIGHT-NPS

NOMINAL SIZE	TAP DRILL			
	NPT		NPS	
	Inches	m/m	Inches	m/m
1/8-27	Q	8.5	1 1/32	8.75
1/4-18	7/16	11.	7/16	11.5
3/8-18	9/16	14.5	37/64	15.
1/2-14	45/64	18.	23/32	18.5
3/4-14	29/32	23.	59/64	23.5
1-11 1/2	1 9/64	29.	1 5/32	29.5
1 1/4-11 1/2	1 31/64	38.	1 1/2	38.5
1 1/2-11 1/2	1 47/64	44.	1 3/4	44.5
2-11 1/2	2 37/64	56.	2 7/32	57.

## METRIC THREADS INTER- NATIONAL & SPECIAL SIZES

NOMI- NAL SIZE	PITCH m/m	TAP DRILL m/m
1.5	.35	1.1
2.	.40	1.6
2.	.45	1.5
2.	.50	1.5
2.3	.40	1.9
2.5	.45	2.
2.6	.45	2.1
3.	.50	2.5
3.	.60	2.4
3.	.75	2.25
3.5	.60	2.9
4.	.70	3.3
4.	.75	3.25
4.5	.75	3.75
5.	.75	4.25
5.	.80	4.2
5.	.90	4.1
5.	1.00	4.
5.5	.75	4.75
5.5	.90	4.6
6.	1.00	5.
6.	1.25	4.8
7.	1.00	6.
7.	1.25	5.8
8.	1.00	7.
8.	1.25	6.8
9.	1.00	8.
9.	1.25	7.8
10.	1.25	8.8
10.	1.50	8.6
11.	1.50	9.6
12.	1.25	11.
12.	1.50	10.5
12.	1.75	10.5
13.	1.50	11.5
13.	1.75	11.5
13.	2.00	11.
14.	1.25	13.
14.	1.75	12.5
14.	2.00	12.
15.	1.75	13.5
15.	2.00	13.
16.	2.00	14.
17.	2.00	15.
18.	1.50	16.5
18.	2.00	16.
18.	2.50	15.5
19.	2.50	16.5
20.	2.00	18.
20.	2.50	17.5
22.	2.50	19.5
24.	3.00	21.
26.	3.00	23.
27.	3.00	24.
28.	3.00	25.
30.	3.50	26.5
32.	3.50	28.5
33.	3.50	29.5
34.	3.50	30.5
36.	4.00	32.
38.	4.00	34.

## BSW THREADS BA THREADS

NOMINAL SIZE	TAP DRILL mm
BA 0	5.10
BA 1	4.50
BA 2	4.00
BA 3	3.40
BA 4	3.00
BA 5	2.65
BA 6	2.30
BA 7	2.05
BA 8	1.80
BA 9	1.55
BA10	1.40
BA11	1.20
BA12	1.05
3/32 BSW48	1.95
1/8 BSW40	2.55
5/32 BSW32	3.20
3/16 BSW24	3.70
7/32 BSW24	4.40
1/4 BSW20	5.10
5/16 BSW18	6.50
3/8 BSW16	7.90
7/16 BSW14	9.30
1/2 BSW12	10.50
5/8 BSW11	12.10
11/16 BSW11	13.50
3/4 BSW10	15.00
7/8 BSW 9	16.50
1" BSW 8	19.00
1" BSW 8	22.00
1 1/8 BSW 7	25.00
1 1/4 BSW 7	28.00
1 3/8 BSW 6	30.00
1 1/2 BSW 6	33.50
1 3/4 BSW 5	39.00
2" BSW4.5	44.50

## LUBRICANTS RECOMMENDED FOR TAPPING

Steel:	} Sulphur Base Oil
Cast	
Stainless	
Machinery	
Tool	
Chromium	
Moly.	
Nickel	
Vanad.	
Mang.*	
Malleable Iron*	
Hard Rubber	
Fiber	
Cast Iron	
Synth. Resins	
Brass*	} Light Oil
Bronze*	
Copper	
Mang. Bronze	
Aluminum	} Kerosine and lard Oil
Duralumin	
Die Castings	
Aluminum*	

\* May also be tapped with water soluble oil.

## MACHINE SCREW SIZES

0-80	3/64	1.2	6-32	#36	2.7
1-56	#54	1.4	-36	#34	2.8
-64	#53	1.5	-40	#33	2.9
-72	#53	1.5	8-32	#29	3.4
2-56	#50	1.75	-36	#29	3.5
-64	#50	1.8	-40	#28	3.6
3-48	#47	2.	10-24	#25	3.8
-56	#45	2.1	-30	#22	4.
4-32	#45	2.1	-32	#21	4.
-36	#44	2.15	12-24	#16	4.5
-40	#43	2.25	-28	#14	4.6
-48	#42	2.35	-32	#13	4.7
5-40	#38	2.6	14-20	#10	4.9
-44	#37	2.6	-24	# 7	5.1