

THREADING TOOLS

HIGH SPEED STEEL FOR QUALITY AND SERVICE



SPIRAL POINT:

For machine use only. Manufactured with a tough design for tapping through holes. These taps have a blue steam temper finish.

STRAIGHT FLUTE:

This general purpose tap is suitable for machine or hand use, and available with either taper, second or plug lead.

SPIRAL FLUTE:

For machine use only. Designed primarily for tapping blind holes. The right-hand spiral assists swarf removal.

LONG SHANK:

Straight flute taps with longer shanks. Suitable for deep-hole or other long-reach tapping applications.

GROUND THREAD TAPS

HIGH SPEED STEEL

ISO METRIC | COARSE

NOM. DIA. AND PITCH MM	STRAIGHT FLUTE	SHORT MACHINE TAPS			LEFT HAND	ISO LONG SHANK MACHINE TAPS
		SPIRAL POINT	SPIRAL FLUTE	AVAILABILITY		
M1.6 x 0.35	•	•				
M1.8 x 0.35	•	•				
M2 x 0.4	•	•	•	•		
M2.2 x 0.45	•	•				
M2.5 x 0.45	•	•	•			
M3 x 0.5	•	•	•	•		•
M3.5 x 0.6	•	•	•			
M4 x 0.7	•	•	•	•		•
M4.5 x 0.75	•	•	•			
M5 x 0.8	•	•	•	•		•
M6 x 1	•	•	•	•		•
M7 x 1	•	•	•			
M8 x 1.25	•	•	•	•		•
M9 x 1.25	•	•				
M10 x 1.5	•	•	•	•		•
M11 x 1.5	•	•				
M12 x 1.75	•	•	•	•		•
M14 x 2	•	•	•			
M16 x 2	•	•	•	•		•
M18 x 2.5	•	•	•	•		•
M20 x 2.5	•	•	•	•		•
M22 x 2.5	•	•	•	•		•
M24 x 3	•	•	•	•		•
M27 x 3	•					
M30 x 3.5	•					
M33 x 3.5	•					
M36 x 4	•					
M39 x 4	•					
M42 x 4.5	•					
M45 x 4.5	•					
M48 x 5	•					
M52 x 5	•					
M56 x 5.5	•					
M60 x 5.5	•					
M64 x 6	•					
M68 x 6	•					
M72 x 6	•					

ISO METRIC | FINE

NOM. DIA. AND PITCH MM	STRAIGHT FLUTE	SPIRAL POINT	SPIRAL FLUTE	AVAILABILITY	
M3 x 0.35	•				
M3 x 0.6	•				
M3.5 x 0.35	•				
M4 x 0.5	•	•	•		
M4.5 x 0.5	•				
M5 x 0.5	•	•	•		
M5.5 x 0.9	•				
M6 x 0.75	•	•	•		
M7 x 0.75	•				
M8 x 0.75	•				
M8 x 1	•	•	•		
M9 x 1	•				
M10 x 0.75	•				
M10 x 1 ⁺⁺	•	•	•		
M10 x 1.25	•	•	•		
M12 x 1	•				
M12 x 1.25 ⁺⁺	•	•	•		
M12 x 1.5	•	•	•		
M14 x 1	•				
M14 x 1.25 ⁺⁺	•	•	•		
M14 x 1.5	•	•	•		
M16 x 1	•				
M16 x 1.5 ⁺	•	•	•		
M18 x 1	•				
M18 x 1.5 ⁺⁺	•	•	•		
M18 x 2	•				
M20 x 1	•				
M20 x 1.5 ⁺	•	•	•		
M20 x 2	•				
M22 x 1.5	•	•	•		
M24 x 1.5	•	•	•		
M24 x 2	•				
M25 x 1.5 ⁺	•				
M27 x 1.5	•				
M27 x 2	•				
M30 x 1.5	•				
M30 x 2	•				
M32 x 1.5 ⁺	•				
M33 x 2	•				
M40 x 1.5 ⁺⁺	•				

Metric Fine Left Hand and Long Shank available on request.
 + Metric Conduit.
 ++ Spark Plug.

The extensive range of ground thread taps is manufactured from quality high speed steel to internationally recognised ISO standards, ensuring both high performance and long tool life.



UNC/NC

NOM. DIA. AND TPI	STRAIGHT FLUTE	SHORT MACHINE TAPS			LEFT HAND	ISO LONG SHANK MACHINE TAPS
		SPIRAL POINT	SPIRAL FLUTE	AVAILABILITY		
No. 1 x 64	•	•				
No. 2 x 56	•	•				
No. 3 x 48	•	•				
No. 4 x 40	•	•	•			
No. 5 x 40	•	•				
No. 6 x 32	•	•	•			
No. 8 x 32	•	•	•			
No. 10 x 24	•	•	•			
No. 12 x 24	•	•	•			
1/4 x 20	•	•	•	•		•
5/16 x 18	•	•	•	•		•
3/8 x 16	•	•	•	•		•
7/16 x 14	•	•	•	•		•
1/2 x 13	•	•	•	•		•
9/16 x 12	•	•	•	•		•
5/8 x 11	•	•	•	•		•
3/4 x 10	•	•	•	•		•
7/8 x 9	•	•	•	•		•
1 x 8	•	•	•	•		•
1.1/8 x 7	•					
1.1/4 x 7	•					
1.3/8 x 6	•					
1.1/2 x 6	•					
1.3/4 x 5	•					
2 x 4.1/2	•					

Larger sizes on application.

UNF/NF

NOM. DIA. AND TPI	STRAIGHT FLUTE	SHORT MACHINE TAPS			LEFT HAND	ISO LONG SHANK MACHINE TAPS
		SPIRAL POINT	SPIRAL FLUTE	AVAILABILITY		
No. 0 x 80	•	•				
No. 1 x 72	•	•				
No. 2 x 64	•	•				
No. 3 x 56	•	•				
No. 4 x 48	•	•	•			
No. 5 x 44	•	•	•			
No. 6 x 40	•	•	•			
No. 8 x 36	•	•	•			
No. 10 x 32	•	•	•			
No. 12 x 28	•	•	•			
1/4 x 28	•	•	•	•		•
5/16 x 24	•	•	•	•		•
3/8 x 24	•	•	•	•		•
7/16 x 20	•	•	•	•		•
1/2 x 20	•	•	•	•		•
9/16 x 18	•	•	•	•		•
5/8 x 18	•	•	•	•		•
3/4 x 16	•	•	•	•		•
7/8 x 14	•	•	•	•		•
1 x 12	•	•	•	•		•
1.1/8 x 12	•					
1.1/4 x 12	•					
1.3/8 x 12	•					
1.1/2 x 12	•					

Larger sizes on application.

AMERICAN UNIFIED 8 THREAD SERIES (8 UN)

NOM. DIA. AND TPI	STRAIGHT FLUTE	AVAILABILITY
1.1/8 x 8	•	
1.1/4 x 8	•	
1.3/8 x 8	•	
1.1/2 x 8	•	
1.5/8 x 8	•	
1.3/4 x 8	•	
1.7/8 x 8	•	
2 x 8	•	



GROUND THREAD TAPS

HIGH SPEED STEEL

The extensive range of ground thread taps is manufactured from quality high speed steel, ensuring both high performance and long tool life.



BSP | BRITISH STANDARD PIPE | ISO 'G' SERIES

NOM. DIA. AND TPI	SHORT MACHINE TAPS				LONG SHANK MACHINE TAPS
	STRAIGHT FLUTE	SPIRAL POINT	SPIRAL FLUTE	LEFT HAND	
AVAILABILITY					
1/8 x 28	•	•	•	•	•
1/4 x 19	•	•	•	•	•
3/8 x 19	•	•	•	•	•
1/2 x 14	•	•	•	•	•
5/8 x 14	•	•	•	•	•
3/4 x 14	•	•	•	•	•
7/8 x 14	•	•	•	•	•
1 x 11	•	•	•	•	•
1.1/8 x 11	•	•	•	•	•
1.1/4 x 11	•	•	•	•	•
1.1/2 x 11	•	•	•	•	•
1.3/4 x 11	•	•	•	•	•
2 x 11	•	•	•	•	•
2.1/4 x 11	•	•	•	•	•
2.1/2 x 11	•	•	•	•	•
2.3/4 x 11	•	•	•	•	•
3 x 11	•	•	•	•	•
3.1/2 x 11	•	•	•	•	•
4 x 11	•	•	•	•	•

NPT/API

AMERICAN NATIONAL PIPE TAPER

NOMINAL DIAMETER & TPI	STRAIGHT FLUTE
	AVAILABILITY
1/16 x 27	•
1/8 x 27	•
1/4 x 18	•
3/8 x 18	•
1/2 x 14	•
3/4 x 14	•
1 x 11.1/2	•
1.1/4 x 11.1/2	•
1.1/2 x 11.1/2	•
2 x 11.1/2	•

NPTF

AMERICAN NATIONAL PIPE TAPER - DRYSEAL

NOMINAL DIAMETER & TPI	STRAIGHT FLUTE
	AVAILABILITY
1/16 x 27	•
1/8 x 27	•
1/4 x 18	•
3/8 x 18	•
1/2 x 14	•
3/4 x 14	•
1 x 11.1/2	•
1.1/4 x 11.1/2	•

NPS

AMERICAN NATIONAL PIPE STRAIGHT

NOMINAL DIAMETER & TPI	STRAIGHT FLUTE
	AVAILABILITY
1/8 x 27	•
1/4 x 18	•
3/8 x 18	•
1/2 x 14	•
3/4 x 14	•
1 x 11.1/2	•

BSPT

BRITISH STANDARD PIPE TAPER ISO 'RC' SERIES

NOMINAL DIAMETER & TPI	STRAIGHT FLUTE
	AVAILABILITY
1/8 x 28	•
1/4 x 19	•
3/8 x 19	•
1/2 x 14	•
3/4 x 14	•
1 x 11	•
1.1/4 x 11	•
1.1/2 x 11	•
2 x 11	•

METRIC CONDUIT

NOMINAL DIAMETER & TPI	STRAIGHT FLUTE
	AVAILABILITY
M16 x 1.5	•
M20 x 1.5	•
M25 x 1.5	•
M32 x 1.5	•
M40 x 1.5	•

BS CONDUIT

NOMINAL DIAMETER & TPI	STRAIGHT FLUTE
	AVAILABILITY
1/2 x 18	•
5/8 x 18	•
3/4 x 16	•
1 x 16	•
1.1/4 x 16	•
1.1/2 x 14	•
2 x 14	•

PG

SIZE	STRAIGHT FLUTE
	AVAILABILITY
PG7	•
PG9	•
PG11	•
PG13.5	•
PG16	•

BSW | BRITISH STANDARD WHITWORTH

NOM. DIA. AND PITCH BSW	SHORT MACHINE TAPS				ISO LONG SHANK MACHINE TAPS
	STRAIGHT FLUTE	SPIRAL POINT	SPIRAL FLUTE	LEFT HAND	
AVAILABILITY					
1/16 x 60	•				
3/32 x 48	•				
1/8 x 40	•	•	•	•	
5/32 x 32	•	•	•	•	
3/16 x 24	•	•	•	•	
7/32 x 24	•	•	•	•	
1/4 x 20	•	•	•	•	•
9/32 x 20	•	•	•	•	
5/16 x 18	•	•	•	•	•
3/8 x 16	•	•	•	•	•
7/16 x 14	•	•	•	•	•
1/2 x 12	•	•	•	•	•
9/16 12	•	•	•	•	
5/8 x 11	•	•	•	•	
11/16 x 11	•	•	•	•	
3/4 x 10	•	•	•	•	
13/16 x 10	•	•	•	•	
7/8 x 9	•	•	•	•	
15/16 x 9	•	•	•	•	
1 x 8	•	•	•	•	
1.1/8 x 7	•	•	•	•	
1.1/4 x 7	•	•	•	•	
1.3/8 x 6	•	•	•	•	
1.1/2 x 6	•	•	•	•	
1.5/8 x 5	•	•	•	•	
1.3/4 x 5	•	•	•	•	
1.7/8 x 4.1/2	•	•	•	•	
2 x 4.1/2	•	•	•	•	
2.1/4 x 4	•	•	•	•	
2.1/2 x 4	•	•	•	•	
2.3/4 x 3.1/2	•	•	•	•	
3 x 3.1/2	•	•	•	•	

BSF | BRITISH STANDARD FINE

NOM. DIA. AND PITCH BSF	SHORT MACHINE TAPS				ISO LONG SHANK MACHINE TAPS
	STRAIGHT FLUTE	SPIRAL POINT	SPIRAL FLUTE	LEFT HAND	
AVAILABILITY					
3/16 x 32	•	•	•	•	
7/32 x 28	•	•	•	•	
1/4 x 26	•	•	•	•	•
9/32 x 26	•	•	•	•	
5/16 x 22	•	•	•	•	•
3/8 x 20	•	•	•	•	•
7/16 x 18	•	•	•	•	•
1/2 x 16	•	•	•	•	•
9/16 x 16	•	•	•	•	
5/8 x 14	•	•	•	•	
11/16 x 14	•	•	•	•	
3/4 x 12	•	•	•	•	
13/16 x 12	•	•	•	•	
7/8 x 11	•	•	•	•	
15/16 x 11	•	•	•	•	
1 x 10	•	•	•	•	
1.1/8 x 9	•	•	•	•	
1.1/4 x 9	•	•	•	•	
1.3/8 x 8	•	•	•	•	
1.1/2 x 8	•	•	•	•	
1.5/8 x 8	•	•	•	•	
1.3/4 x 7	•	•	•	•	
2 x 7	•	•	•	•	
2.1/4 x 6	•	•	•	•	
2.1/2 x 6	•	•	•	•	

BA | BRITISH ASSOCIATION

BA SIZE NO.	SHORT MACHINE TAPS			
	STRAIGHT FLUTE	SPIRAL POINT	SPIRAL FLUTE	LEFT HAND
AVAILABILITY				
0	•	•	•	•
1	•	•	•	•
2	•	•	•	•
3	•	•	•	•
4	•	•	•	•
5	•	•	•	•
6	•	•	•	•
7	•	•	•	•
8	•	•	•	•
9	•	•	•	•
10	•	•	•	•

BS | BRASS

NOM. DIA. & TPI	STRAIGHT FLUTE
	AVAILABILITY
1/4 x 26	•
5/16 x 26	•
3/8 x 26	•
7/16 x 26	•
1/2 x 26	•
9/16 x 26	•
5/8 x 26	•
3/4 x 26	•
7/8 x 26	•
1 x 26	•

GROUND THREAD TAPS

KITS | SETS

MINI TAP KITS



PAIRS

Each kit contains: one HSSGT Straight Flute, Taper and Plug Lead Tap of each size.

KIT REF	THREAD RANGE
TK 1 PR	3, 4, 5, 6, 8, 10mm Metric Coarse
TK 2 PR	3, 4, 5, 6, 8, 10mm Metric Fine (10 x 1.25)
TK 3 PR	1/8, 3/16, 1/4, 5/16, 3/8, BSW
TK 4 PR	No.8, No.10, 1/4, 5/16, 3/8 UNC
TK 5 PR	No.8, No.10, 1/4, 5/16, 3/8 UNF

TAPER LEAD

Each kit contains: one HSSGT Straight Flute Tap and Taper Lead of each size.

KIT REF	THREAD RANGE
TK 10T	3, 4, 5, 6, 8, 10, 12mm Metric Coarse
TK 11T	3, 4, 5, 6, 8, 10, 12mm Metric Fine
TK 12T	1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2 BSW
TK 13T	3/16, 1/4, 5/16, 3/8, 7/16, 1/2 BSF
TK 14T	No.8, No.10, 1/4, 5/16, 3/8, 7/16, 1/2 UNC
TK 15T	No.8, No.10, 1/4, 5/16, 3/8, 7/16, 1/2 UNF

SECOND LEAD

Each kit contains: one HSSGT Straight Flute Tap and Second Lead of each size.

KIT REF	THREAD RANGE
TK 20S	3, 4, 5, 6, 8, 10, 12mm Metric Coarse
TK 21S	3, 4, 5, 6, 8, 10, 12mm Metric Fine
TK 22S	1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2 BSW
TK 23S	3/16, 1/4, 5/16, 3/8, 7/16, 1/2 BSF
TK 24S	No.8, No.10, 1/4, 5/16, 3/8, 7/16, 1/2 UNC
TK 25S	No.8, No.10, 1/4, 5/16, 3/8, 7/16, 1/2 UNF

PLUG LEAD

Each kit contains: one HSSGT Straight Flute Tap and Plug Lead of each size.

KIT REF	THREAD RANGE
TK 30P	3, 4, 5, 6, 8, 10, 12mm Metric Coarse
TK 31P	3, 4, 5, 6, 8, 10, 12mm Metric Fine
TK 32P	1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2 BSW
TK 33P	3/16, 1/4, 5/16, 3/8, 7/16, 1/2 BSF
TK 34P	No.8, No.10, 1/4, 5/16, 3/8, 7/16, 1/2 UNC
TK 35P	No.8, No.10, 1/4, 5/16, 3/8, 7/16, 1/2 UNF

SPIRAL POINT

Each kit contains: one HSSGT Spiral Point Tap of each size.

KIT REF	THREAD RANGE
TK 40SP	3, 4, 5, 6, 8, 10, 12mm Metric Coarse
TK 41SP	1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2 BSW
TK 42SP	3/16, 1/4, 5/16, 3/8, 7/16, 1/2 BSF
TK 43SP	No.8, No.10, 1/4, 5/16, 3/8, 7/16, 1/2 UNC
TK 44SP	No.8, No.10, 1/4, 5/16, 3/8, 7/16, 1/2 UNF

SPIRAL FLUTE

Each kit contains: one HSSGT Spiral Flute Tap of each size.

KIT REF	THREAD RANGE
TK 50SF	3, 4, 5, 6, 8, 10, 12mm Metric Coarse
TK 51SF	1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2 BSW
TK 52SF	3/16, 1/4, 5/16, 3/8, 7/16, 1/2 BSF
TK 53SF	No.8, No.10, 1/4, 5/16, 3/8, 7/16, 1/2 UNC
TK 54SF	No.8, No.10, 1/4, 5/16, 3/8, 7/16, 1/2 UNF

TAP INDEX SETS



HSSGT TAPS IN METAL CASSETTE INDEX

Contains: Taper, Second and Bottoming HSSGT Taps in quality metal cassette index.

SET REF	THREAD RANGE
TI 1	3, 4, 5, 6, 8, 10, 12mm (Coarse)
TI 2	10, 1/4, 5/16, 3/8, 7/16, 1/2 UNF
TI 3	10, 1/4, 5/16, 3/8, 7/16, 1/2 UNC
TI 4	3/16, 1/4, 5/16, 3/8, 7/16, 1/2 BSF
TI 5	1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2 BSW

GROUND THREAD TAPS

SETS | WRENCHES

CASED SETS OF HSSGT TAPS WITH HSS SPLIT CIRCULAR DIES, INCLUDING WRENCHES AND STOCKS

Each set in polished wood case contains: HSS Die, HSSGT Taper and Bottoming Tap per size. Tap Wrench and Diestock to suit. Screwdriver for Diestock adjustment.



THREAD: METRIC ISO COARSE

SET REF	THREADING SIZE IN MILLIMETRES	DIAMETER OF DIES IN INCHES	TAPWRENCH NO.
SC/1	2, 2.5, 3, 3.5, 4, 5, 6	13/16	(ATW0)
SC/2	3, 4, 5, 6, 8, 10, 12	13/16 - 1.5/16	(ATW1)
SC/3	6, 7, 8, 9, 10, 11, 12	13/16 - 1.5/16	(ATW1)
SC/4	6, 7, 8, 9, 10, 12, 14, 16, 18, 20	1 - 1.5/16 - 1.1/2	(ATW3)
SC/5	14, 16, 18, 20	1.1/2 - 2	(ATW4)

THREAD: METRIC ISO FINE

SET REF	THREADING SIZE IN MILLIMETRES	DIAMETER OF DIES IN INCHES	TAPWRENCH NO.
SC/6	3, 4, 5, 6, 8, 10, 12	13/16 - 1.5/16	(ATW1)
SC/7	6, 7, 8, 9, 10, 12, 14, 16, 18	13/16 - 1.5/16 - 1.1/2	(ATW3)

THREAD: UNC/NC

SET REF	THREADING SIZE IN INCHES	DIAMETER OF DIES IN INCHES	TAPWRENCH NO.
SC/11	5, 10, 1/4, 5/16, 3/8, 7/16, 1/2	13/16 - 1.5/16	(ATW1)
SC/12	1/4, 5/16, 3/8, 7/16, 1/2	1 - 1.5/16	(ATW1)
SC/13	1/4, 5/16, 3/8, 7/16, 1/2, 5/8, 3/4	1 - 1.1/2	(ATW3)
SC/14	1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4	1 - 1.1/2	(ATW3)
SC/17	1/4, 5/16, 3/8, 7/16, 1/2, 5/8, 3/4, 7/8, 1	1 - 1.5/16 - 2	(ATW1&4)

THREAD: UNF/NF

SET REF	THREADING SIZE IN INCHES	DIAMETER OF DIES IN INCHES	TAPWRENCH NO.
SC/21	5, 10, 1/4, 5/16, 3/8, 7/16, 1/2	13/16 - 1.5/16	(ATW1)
SC/22	1/4, 5/16, 3/8, 7/16, 1/2	1 - 1.5/16	(ATW1)
SC/23	1/4, 5/16, 3/8, 7/16, 1/2, 5/8, 3/4	1 - 1.1/2	(ATW3)
SC/24	1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4	1 - 1.1/2	(ATW3)
SC/27	1/4, 5/16, 3/8, 7/16, 1/2, 5/8, 3/4, 7/8, 1	1 - 1.5/16 - 2	(ATW1&4)

THREAD: BSF

SET REF	THREADING SIZE IN INCHES	DIAMETER OF DIES IN INCHES	TAPWRENCH NO.
SC/30	3/16, 1/4, 5/16, 3/8, 7/16, 1/2	13/16 - 1.5/16	(ATW1)
SC/31	1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2	13/16 - 1.5/16	(ATW1)
SC/32	1/4, 5/16, 3/8, 7/16, 1/2	1 - 1.5/16	(ATW1)
SC/33	1/4, 5/16, 3/8, 7/16, 1/2, 5/8, 3/4	1 - 1.1/2	(ATW3)
SC/34	1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4	1 - 1.1/2	(ATW3)
SC/37	1/4, 5/16, 3/8, 7/16, 1/2, 5/8, 3/4, 7/8, 1	1 - 1.5/16 - 2	(ATW1&4)

THREAD: BSF

SET REF	THREADING SIZE IN INCHES	DIAMETER OF DIES IN INCHES	TAPWRENCH NO.
SC/40	3/16, 1/4, 5/16, 3/8, 7/16, 1/2	3/16 - 1.5/16	(ATW1)
SC/42	1/4, 5/16, 3/8, 7/16, 1/2	1 - 1.5/16	(ATW1)
SC/43	1/4, 5/16, 3/8, 7/16, 1/2, 5/8, 3/4	1 - 1.1/2	(ATW3)
SC/44	1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4	1 - 1.1/2	(ATW3)
SC/47	1/4, 5/16, 3/8, 7/16, 1/2, 5/8, 3/4, 7/8, 1	1 - 1.5/16 - 2	(ATW1&4)

THREAD: BA

SET REF	RANGE	DIAMETER OF DIES IN INCHES	TAPWRENCH NO.
SC/51	0, 1, 2, 3, 4, 5, 6	13/16	(ATW0)
SC/52	0, 1, 2, 3, 4, 5, 6, 7, 8	13/16	(ATW0)
SC/53	0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10	13/16	(ATW0)

THREAD: BSP

SET REF	RANGE	DIAMETER OF DIES IN INCHES	TAPWRENCH NO.
SC/61	1/8, 1/4, 3/8, 1/2, 3/4, 1	1 - 1.1/2 - 2 - 2.1/4	(ATW 3&4)
SC/62	1.1/4, 1.1/2, 2	4	(ATW 5)

THREAD: BSPT

SET REF	RANGE	DIAMETER OF DIES IN INCHES	TAPWRENCH NO.
SC/71	1/8, 1/4, 3/8, 1/2, 3/4, 1	1 - 1.1/2 - 2 - 2.1/4	(ATW 3&4)
SC/72	1.1/4, 1.1/2, 2	4	(ATW5)

THREAD: NPT

SET REF	RANGE	DIAMETER OF DIES IN INCHES	TAPWRENCH NO.
SC/81	1/8, 1/4, 3/8, 1/2, 3/4, 1	1 - 1.1/2 - 2 - 2.1/4	(ATW 3&4)
SC/82	1.1/4, 1.1/2, 2	4	(ATW5)

TAP WRENCHES

Available in sizes to cover the whole range of Taps and Dies.

Types: ATW0, ATW1



Types: ATW2 - ATW5



ALL STEEL ADJUSTABLE TAPWRENCHES

TAP WRENCH NO.	CAPACITY						HAND REAMERS MM.	AVAILABILITY
	OVERALL LENGTH	SQUARE RANGE MM.	METRIC TAPS MM.	BOLT THREAD TAPS INCHES	BSP & BSPT INCHES	NPT & NPS INCHES		
ATW0	4.1/4"	2-5	1.4-6	1/16-1/4	-	-	2.5-6	•
ATW1	6.1/4"	2-8	1.4-12	1/16-1/2	-	-	2.5-10	•
ATW2	9.3/4"	3.55-9.5	4.5-14	3/16-9/16	1/16-1/4	1/16-1/8	4.5-11	•
ATW3	14"	4.8-11.4	6-20	1/4-3/4	1/8-3/8	1/16-1/4	7-15	•
ATW4	29.1/2"	8.6-24.1	14-42	9/16-1.5/8	3/8-1.1/8	1/4-1	11-30	•
ATW5	41"	19.1-40.1	36-90	1.3/8-3.1/2	1-3	1-2	24-52	•



SINGLE ENDED WRENCHES

TAP WRENCH NO.	NOMINAL SQUARE SIZE A/F	L1 HANDLE LENGTH MM.	AVAILABILITY
SETW 1	.197"	98.5	•
*SETW 2	.242"	98.6	•
SETW 3	.294"	138	•
*SETW 4	.242"	138	•
SETW 5	.275"	138	•
SETW 6	.322"	168.5	•
SETW 7	.360"	168.5	•
SETW 8	.442"	168.5	•

* These two wrenches have identical A/F sizes, but different overall dimensions.

GROUND THREAD TAPS

TAP SPECIFICATIONS - CHOICE OF TAP

Many factors have to be considered when choosing a tap for a particular application. The method of tapping, type of material, condition and type of equipment and batch quality are the main criteria which affect the choice of tap style.

STRAIGHT FLUTE TAPS

FOR MACHINE OR HAND USE

This type is the basic tap designed as a general purpose tool for hand and machine operation.

As this basic tap will give acceptable performance in most materials and for medium sized production runs, it is usually the most economical tap to use. However, it performs best in materials where the cutting action results in chips which break up readily and do not present problems of chip disposal.

The regular hand tap has four flutes in sizes larger than 9/32" - 7mm diameter. These taps may not be suitable because of inadequate chip space when deep or blind holes have to be tapped in soft stringy materials. This applies particularly to the coarse pitch threads such as BSW and UNC.

SPIRAL POINT

FOR MACHINE USE ONLY

Spiral point taps have straight flutes supplemented by angular cutting faces at the point. The angular cutting faces cut with a shearing action which propels the chips ahead of the tap leaving the flutes clear for the free flow of coolant to the point.

Spiral point taps are designed for use in through holes, but can be used in blind holes providing there is ample clearance beyond the threaded section to accommodate the chips. The advantages of a

spiral point tap are: the shearing action of the angular cutting faces produce a fine finish on the threads, shallower flutes permit a stronger cross section throughout the tap and cutting torque is less than that of a hand tap. HALL Spiral Point Taps have a blue steam-tempered finish to reduce surface friction.

SPIRAL FLUTE TAPS

FOR MACHINE USE ONLY

These taps, designed primarily for machine tapping of blind holes, are used to the best advantage in materials which produce long stringy chips. The shearing action provided by the spiral flutes produces a better finish on difficult to machine metals and causes the chips to be drawn back, eliminating clogging at the cutting chamfer.

LONG SHANK

These taps are based on shanks 50% longer than the ISO Short Machine and Hand Taps and are for deep hole or other 'long reach' tapping applications. Available in Taper, Second and Bottoming Leads.

SERIAL TAPS

Serial taps comprise one or more undersized roughing taps which remove most of the material before final sizing with a finishing tap.

Some reasons for using serial taps are:

- The toughness of the material being tapped
- The amount of material to be removed could cause swarf choking with a single tap
- A very small tolerance on pitch diameter
- An extremely good finish required

The table below indicates taps which after considering the above factors may be suitable for use on a selection of common materials.

MATERIAL	CHOICE OF HALL TAP	
	THROUGH HOLES	BLIND HOLES
Low Carbon Steel	Straight Flute or Spiral Point	Straight Flute or Spiral Flute
High Carbon Steel	Straight Flute or Spiral Point	Straight Flute or Spiral Flute
Tool Steel	Straight Flute or Spiral Point	Straight Flute or Spiral Flute
Cast Steel	Straight Flute or Spiral Point	Straight Flute or Spiral Flute
Cast Iron	Straight Flute or Spiral Point	Straight Flute
Stainless Steel	Straight Flute or Spiral Point	Straight Flute or Spiral Flute
Die Cast Aluminium	Straight Flute or Spiral Point	Straight Flute or Spiral Flute
Silicon Aluminium	Straight Flute	Straight Flute
Die Cast Zinc	Straight Flute or Spiral Point	Straight Flute
Brass	Straight Flute	Straight Flute
Thermo-Setting Plastic (eg: Bakelite)	Straight Flute	Straight Flute
Thermo-Plastics (eg: Nylon)	Straight Flute or Spiral Point	Straight Flute or Spiral Flute

GROUND THREAD TAPS

TAP SPECIFICATIONS - DIMENSIONS



ISO (SHORT) DIMENSIONS

THREAD SIZES							DIMENSIONS			
METRIC COARSE	METRIC FINE	UNC	UNF	BSW	BSF	BA	OVERALL LENGTH	THREAD LENGTH	SHANK Ø	SQUARE A/F
1.6			No 0	1/16			41	8	2.5	2.0
1.7/1.8						No 10	41	8	2.5	2.0
2.0		No 1	No 1			No 9	41	8	2.5	2.0
2.2		No 2	No 2			No 8	44.5	9.5	2.8	2.24
2.5		No 3	No 3	3/32		No 7/6	44.5	9.5	2.8	2.24
3	3	No 4/5	No 4/5	1/8		No 5	48	11	3.15	2.5
3.5	3.5	No 6	No 6			No 4	50	13	3.55	2.8
4	4			5/32			53	13	4.0	3.15
4.5	4.5	No 8	No 8			No 3	53	13	4.5	3.55
5	5	No 10	No 10	3/16	3/16	No 2	58	16	5.0	4.0
		No 12	No 12	7/32	7/32	No 1	62	17	5.6	4.5
6	6	1/4	1/4	1/4	1/4	No 0	66	19	6.3	5.0
7	7			9/32	9/32		66	19	7.1	5.6
8	8	5/16	5/16	5/16	5/16		72	22	8.0	6.3
9	9						72	22	9.0	7.1
10	10	3/8	3/8	3/8	3/8		80	24	10.0	8.0
11	11	7/16	7/16	7/16	7/16		85	25	8.0	6.3
12	12	1/2	1/2	1/2	1/2		89	29	9.0	7.1
14	14	9/16	9/16	9/16	9/16		95	30	11.2	9.0
16	16	5/8	5/8	5/8	5/8		102	32	12.5	10.0
18	18	11/16	11/16	11/16	11/16		112	37	14.0	11.2
20	20	3/4	3/4	3/4	3/4		112	37	14.0	11.2
22	22	7/8	7/8	7/8	7/8		118	38	16.0	12.5
24	24/25	1	1	1	1		130	45	18.0	14.0
	27/30		1.1/8				127	37	20.0	16.0
27							135	45	20.0	16.0
30		1.1/8		1.1/8	1.1/8		138	48	20.0	16.0
	32/33		1.1/4				137	37	22.4	18.0
33		1.1/4		1.1/4	1.1/4		151	51	22.4	18.0
	36		1.3/8				144	39	25.0	20.0
36		1.3/8		1.3/8			162	57	25.0	20.0
	39/40		1.1/2				149	39	28.0	22.4
39		1.1/2		1.1/2	1.1/2		170	60	28.0	22.4
42				1.5/8	1.5/8		170	60	28.0	22.4
45		1.3/4		1.3/4	1.3/4		187	67	31.5	25.0
48				1.7/8			187	67	31.5	25.0
52/56		2		2	2		200	70	35.5	28.0
60		2.1/4		2.1/4	2.1/4		221	76	40.0	31.5
64		2.1/2		2.1/2	2.1/2		224	79	40.0	31.5
68/72		2.3/4		2.3/4	2.3/4		234	79	45.0	35.5
		3		3	3		258	83	50.0	40.0



ISO (LONG SHANK) DIMENSIONS

METRIC	UNC	UNF	No OF FLUTES	OVERALL LENGTH MM	THREAD LENGTH MM	SHANK Ø MM	SQUARE A/F MM
M3 x 0.50			3	66	11	2.24	1.80
M3.5 x 0.60			3	68	13	2.50	2.00
M4 x 0.70			3	73	13	3.15	2.50
M4.5 x 0.75			3	73	13	3.55	2.80
M5 x 0.80			3	79	16	4.0	3.15
M6 x 1.00	1/4	1/4	3	89	19	4.5	3.55
M7 x 1.00			3	89	19	5.6	4.5
M8 x 1.25	5/16	5/16	4	97	22	6.3	5.0
M9 x 1.25			4	97	22	7.1	5.6
M10 x 1.50			4	108	24	8.0	6.3
	3/8	3/8	4	108	24	7.1	5.6
M11 x 1.50	7/16	7/16	4	115	25	8.0	6.3
M12 x 1.75	1/2	1/2	4	119	29	9.0	7.1
M14 x 2.0	9/16	9/16	4	127	30	11.2	9.0
M16 x 2.0	5/8	5/8	4	137	32	12.5	10.0
M18 x 2.5	3/4	3/4	4	149	37	14.0	11.2
M20 x 2.5			4	149	37	14.0	11.2
M22 x 2.5	7/8	7/8	4	158	38	16.0	12.5
M24 x 3.0	1	1	4	172	45	18.0	14.0

PIPE THREAD DIMENSIONS

THREAD SIZES		DIMENSIONS IN MM			
BSP (ISO 'G')	BSPT (ISO 'R')	OVERALL LENGTH	THREAD LENGTH	SHANK Ø	SQUARE A/F
1/8	1/8	59	15	8.0	6.3
1/4	1/4	67	19	10.0	8.0
3/8	3/8	75	21	12.5	10.0
1/2	1/2	87	26	16.0	12.5
5/8		91	26	18.0	14.0
3/4	3/4	96	28	20.0	16.0
7/8		102	29	22.4	18.0
1	1	109	33	25.0	20.0
1.1/8		115	34	28.0	22.4
1.1/4	1.1/4	119	36	31.5	25.0
1.1/2	1.1/2	125	37	35.5	28.0
1.3/4		132	39	35.5	28.0
2	2	140	41	40.0	31.5
2.1/4		142	42	40.0	31.5
2.1/2	2.1/2	153	45	45.0	35.5
2.3/4		160	46	50.0	40.0
3	3	164	48	50.0	40.0

THREAD SIZES			DIMENSIONS IN MM			
NPS	NPT (API)	NPTF DRYSEAL	OVERALL LENGTH	THREAD LENGTH	SHANK Ø	SQUARE A/F
	1/16		2.1/8	11/16	0.312	0.234
1/8	1/8	1/8	2.1/8	3/4	0.437	0.328
1/4	1/4	1/4	2.7/16	1.1/16	0.562	0.421
3/8	3/8	3/8	2.9/16	1.1/16	0.700	0.531
1/2	1/2	1/2	3.1/8	1.3/8	0.687	0.515
3/4	3/4	3/4	3.1/4	1.3/8	0.906	0.679
1	1	1	3.3/4	1.3/4	1.125	0.843
	1.1/4	1.1/4	4	1.3/4	1.312	0.984
	1.1/2		4.1/4	1.3/4	1.500	1.125
	2		4.1/2	1.3/4	1.875	1.406
	2.1/2		5.1/2	2.9/16	2.250	1.687
	3		6	2.5/8	2.625	1.968

SPLIT CIRCULAR DIES & HEXAGON DIENUTS

HIGH SPEED STEEL



Manufactured from quality High Speed Steel to BS 1127:1950. Used for cutting external threads - either by machine, or by hand when used in a die stock.



Manufactured from quality High Speed Steel to BS 1127:1950. Used for correcting bruised and damaged external threads by hand.

STANDARD METRIC COARSE ISO

NOM. DIA. AND PITCH	DIES - OUTSIDE DIAMETER						HEX DIENUT
	13/16"	1"	1.5/16"	1.1/2"	2"	3"	
AVAILABILITY							
M2 x 0.4	•*						
M2.2 x 0.45	•						
M2.5 x 0.45	•*						
M3 x 0.5	•*						•
M3.5 x 0.6	•						•
M4 x 0.7	•*						•
M4.5 x 0.75	•						•
M5 x 0.8	•*						•
M6 x 1	•*	•	•				•
M7 x 1	•*	•	•				•
M8 x 1.25		•*	•				•
M9 x 1.25		•*	•				•
M10 x 1.5		•*	•	•			•
M11 x 1.5			•	•			•
M12 x 1.75			•*	•			•
M14 x 2			•	•	•		•
M16 x 2				•	•		•
M18 x 2.5				•	•		•
M20 x 2.5				•	•		•
M22 x 2.5					•		•
M24 x 3					•		•
M27 x 3						•	•
M30 x 3.5						•	•
M33 x 3.5						•	•
M36 x 4						•	•
M39 x 4						•	•
M42 x 4.5							•

* Left Hand available.

METRIC FINE AND OTHER THREADS

NOM. DIA. AND PITCH	DIES - OUTSIDE DIAMETER						HEX DIENUT
	13/16"	1"	1.5/16"	1.1/2"	2"	3"	
AVAILABILITY							
M3 x 0.35	•						•
M3 x 0.6	•						•
M3.5 x 0.35	•						•
M4 x 0.5	•						•
M4.5 x 0.5	•						•
M5 x 0.5	•						•
M5.5 x 0.9	•						•
M6 x 0.75	•						•
M7 x 0.75	•						•
M8 x 1		•					•
M10 x 0.75		•					•
*M10 x 1		•					•
M10 x 1.25		•					•
M12 x 1			•				•
*M12 x 1.25			•				•
M12 x 1.5			•				•
*M14 x 1.25			•				•
M14 x 1.5			•	•			•
M16 x 1				•			•
**M16 x 1.5				•			•
*M18 x 1.5				•			•
M20 x 1					•		•
**M20 x 1.5					•		•
M20 x 2					•		•
M22 x 1.5					•		•
M24 x 1.5					•		•
M24 x 2					•		•
**M25 x 1.5					•		•
M27 x 2						•	•
M30 x 2						•	•
**M32 x 1.5						•	•

* Spark Plug.
** Metric Conduit.

BSW

NOM. DIA. AND PITCH	DIES - OUTSIDE DIAMETER						HEX DIENUT
	13/16"	1"	1.5/16"	1.1/2"	2"	3"	
AVAILABILITY							
1/8	•						•
5/32	•						•
3/16	•						•
7/32	•						•
1/4	•	•	•				•
5/16		•	•				•
3/8		•	•	•			•
7/16			•	•	•		•
1/2			•	•	•	•	•
9/16			•	•	•		•
5/8				•	•		•
11/16					•		•
3/4					•		•
7/8						•	•
1						•	•
1.1/8							•
1.1/4							•
1.3/8							•
1.1/2							•
1.3/4							•
2							•

BSF

NOM. DIA. AND PITCH	DIES - OUTSIDE DIAMETER						HEX DIENUT
	13/16"	1"	1.5/16"	1.1/2"	2"	3"	
AVAILABILITY							
3/16	•						•
7/32	•						•
1/4	•	•	•				•
5/16		•	•				•
3/8		•	•	•			•
7/16			•	•	•		•
1/2			•	•	•	•	•
9/16			•	•	•		•
5/8				•	•		•
11/16					•		•
3/4					•		•
7/8						•	•
1						•	•
1.1/8							•
1.1/4							•
1.3/8							•
1.1/2							•
1.3/4							•
2							•

BSP

NOM. DIA. AND PITCH	DIES - OUTSIDE DIAMETER						HEX DIENUT
	1"	1.5/16"	1.1/2"	2"	2.1/4"	3"	
AVAILABILITY							
1/8	•	•	•				•
1/4		•	•	•			•
3/8			•	•	•		•
1/2				•	•	•	•
5/8				•	•		•
3/4					•	•	•
7/8					•	•	•
1						•	•
1.1/4							•
1.1/2							•
1.3/4							•
2							•

BSPT AND NPT (Dies supplied as solid non-adjustable)

NOM. DIA. AND PITCH	DIES - OUTSIDE DIAMETER				HEX DIENUT
	1"	1.1/2"	2"	2.1/4"	
AVAILABILITY					
1/8	•				•
1/4		•			•
3/8		•			•
1/2			•		•
3/4			•		•
1				•	•

Sizes: 1.1/4 - 1.1/2 - 2 available. Please inquire.

SPLIT CIRCULAR DIES & HEXAGON DIENUTS

HIGH SPEED STEEL



Manufactured from quality High Speed Steel to BS 1127:1950. Used for cutting external threads - either by machine, or by hand when used in a die stock.



Manufactured from quality High Speed Steel to BS 1127:1950. Used for correcting bruised and damaged external threads by hand.

UNC / NC

NOM. DIA. AND PITCH	DIES - OUTSIDE DIAMETER						HEX DIENUT
	13/16"	1"	1.5/16"	1.1/2"	2"	3"	
AVAILABILITY							
No.2
No.3
No.4
No.5
No.6
No.8
No.10
No.12
1/4
5/16
3/8
7/16
1/2
9/16
5/8
3/4
7/8
1
1.1/8
1.1/4
1.3/8
1.1/2
1.3/4
2

UNF / NF

NOM. DIA. AND PITCH	DIES - OUTSIDE DIAMETER						HEX DIENUT
	13/16"	1"	1.5/16"	1.1/2"	2"	3"	
AVAILABILITY							
No.2
No.3
No.4
No.5
No.6
No.8
No.10
No.12
1/4
5/16
3/8
7/16
1/2
9/16
5/8
3/4
7/8
1
1.1/8
1.1/4
1.3/8
1.1/2

BS | BRASS

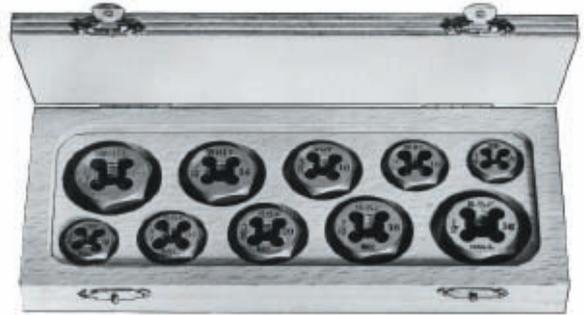
NOM. DIA. AND PITCH	DIES - OUTSIDE DIAMETER			
	1"	1.5/16"	1.1/2"	2"
AVAILABILITY				
*1/4
5/16
3/8
7/16
1/2
5/8
3/4
7/8
1

* BSF also.

BA | BRITISH ASSOCIATION

NOM. DIA. AND PITCH	DIES - OUTSIDE DIAMETER		HEX DIENUT
	13/16"	1"	
AVAILABILITY			
0	.	.	.
1	.	.	.
2	.	.	.
3	.	.	.
4	.	.	.
5	.	.	.
6	.	.	.
7	.	.	.
8	.	.	.
9	.	.	.
10	.	.	.

SETS OF HSS HEXAGON DIENUTS IN POLISHED WOOD CASES



THREAD: METRIC ISO COARSE

SET REF	THREADING SIZES IN MILLIMETRES
DN/1	6, 8, 10, 12
DN/2	6, 8, 10, 12, 14, 16, 18, 20, 22, 24

THREAD: METRIC ISO COARSE, FINE, COMBINATION

SET REF	THREADING SIZES IN MILLIMETRES
DN/1C	6x1, 7x1, 8x1.25, 10x1.5, 12x1.75 coarse combination 6x0.75, 7x0.75, 8x1, 10x1, 12x1.25 fine

THREAD: UNC / NC, UNF / NF

SET REF	THREADING SIZES IN INCHES	
UNC/NC	UNF/NF	
DN/11	DN/21	1/4, 5/16, 3/8, 7/16, 1/2
DN/12	DN/22	1/4, 5/16, 3/8, 7/16, 1/2*, 5/8, 3/4, 7/8, 1
DN/13	DN/23	10, 1/4, 5/16, 3/8, 7/16, 1/2*, 5/8, 3/4, 7/8, 1
DN/2C		1/4, 5/16, 3/8, 7/16, 1/2 Combination

* 9/16 size can be included if required.

THREAD: BSW, BSF

SET REF	THREADING SIZES IN INCHES	
UNC/NC	UNF/NF	
DN/31	DN/41	1/4, 5/16, 3/8, 7/16, 1/2
DN/32	DN/42	1/4, 5/16, 3/8, 7/16, 1/2*, 5/8, 3/4, 7/8, 1
DN/33	DN/43	3/16, 1/4, 5/16, 3/8, 7/16, 1/2*, 5/8, 3/4, 7/8, 1
DN/34	-	1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2*, 5/8, 3/4, 7/8, 1
DN/3C		1/4, 5/16, 3/8, 7/16, 1/2 Combination

* 9/16 size can be included if required.



DIESTOCKS FOR SPLIT CIRCULAR DIES

O/D INCHES	AVAILABILITY
13/16	.
1	.
1.5/16	.
1.1/2	.
2	.
2.1/4	.
3	.
4	.