

HOW TO USE THE THREAD IDENTIFICATION CHART - Part 2

(Chart is on pages 1012 and 1013)

The following are step by step instructions on using the T.I.C.:

1. Use a micrometer or caliper to measure Major Diameter (actual outside diameter) of the screw thread. It can be measured in decimal inches or millimeters. Note that the thread major diameter is often undersized for clearance.

Example in measurement: Approx. .230 inches or 5.9 mm

2. Use a ruler, caliper or micrometer to count the number of threads per inch. Example in counting: Approx. 25 Threads per inch.

Since the Metric System does not use Threads per inch for identification, use the pitch conversion Table to convert the counted 25 Threads per inch to the exact number of 25 1/2 Threads per inch as equal to Pitch 1 (Pitch Conversion Table is located on the T.I.C.). Locate the decimal inch diameter. Once established, move horizontally to find a match in Thread per inch or Pitch.

Example: Major Diameter measured .230 is actually .2362 Inches or 6 mm in Basic Major Diameter column. Moving Horizontally, to the right, are listed two threads: Metric M 6 and British 0 BA (In Nominal Diameter column)

Should there be only one thread in this line, the task would be accomplished. Since there is more than one possibility, we have to go back to the example and check its thread angle for final breakdown. Using metric Screw Pitch Gage, we can safely distinguish 60° of metric thread against 47 1/2° of British BA thread angle. Example in measurement: Metric 60° thread angle.

Example in origin and size: Metric Screw M 6

PITCH CONVERSION TABLE

APPROX. THREADS PER INCH	PITCH mm	APPROX. THREADS PER INCH	PITCH mm	APPROX. THREADS PER INCH	PITCH mm
338 3/4	0.075	63 1/2	0.4	14 1/2	1.75
317 1/2	0.08	56 1/2	0.45	12 3/4	2
282 1/4	0.09	50 3/4	0.5	10 1/4	2.5
254	0.1	42 1/4	0.6	8 1/2	3
203 1/4	0.125	36 1/4	0.7	7 1/4	3.5
169 1/4	0.15	33 3/4	0.75	6 1/4	4
145 1/4	0.175	31 3/4	0.8	5 3/4	4.5
127	0.2	28 1/4	0.9	5	5
101 1/2	0.25	25 1/2	1	4 1/2	5.5
84 3/4	0.3	20 1/4	1.25	4 1/4	6
72 1/2	0.35	17	1.5		