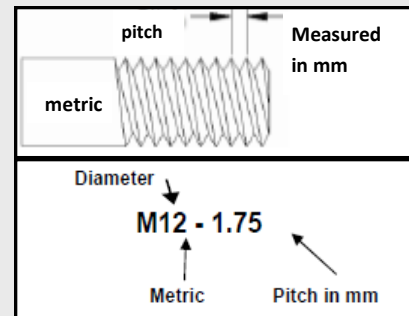
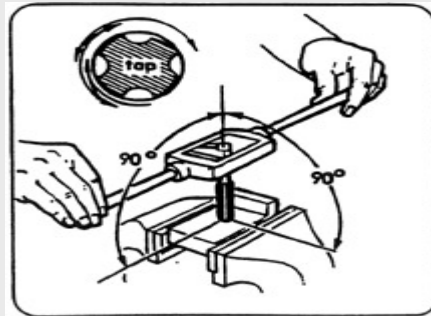
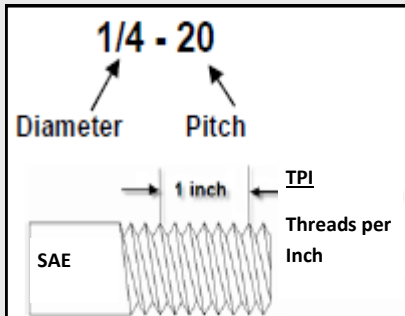

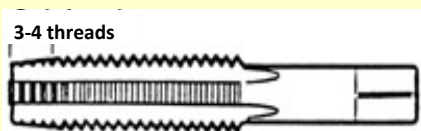
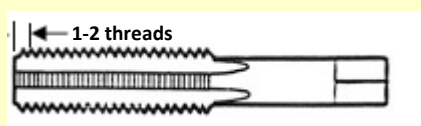


Hand Taps

This guide is intended to assist individuals in the selection of hand taps. Whether cutting new threads or repairing damaged ones, the right tap is essential to getting the job done. But how do you select one? What do all the numbers mean, like 5/8-11 or M6x 1.00? What do terms like taper, plug, or bottoming mean to me? At the most basic level, thread designations consist of two main specifications: diameter and pitch. Diameter is the distance across the face of a fastener or tap, while pitch is a measurement of the actual threads. In the case of SAE threads, pitch is a measurement of the number of threads per inch of length, or TPI, while metric thread pitch is measured by the distance from the peak of one thread, to the peak of the next thread in millimeters.



The following table will describe the three main types of taps and their applications.

Type	Application	Image
Taper Tap - Taper taps, also called starting taps, have chamfered (tapered) ends for the first 8-10 threads, which distributes the cutting force over a larger area, and also seats the tap into the hole more easily.	Used when starting threads in a new hole. Also good for tapping thin material.	
Plug Tap - Plug taps, or second taps as they are also known, have 3-4 chamfered threads at the lead end.	Most popular tap, as they can be used as both a second tap, or a starting tap. Used on through holes and blind holes where threads are not required close to the bottom.	
Bottoming Tap - Bottoming taps have 1-2 chamfered threads at the lead end.	As the name implies, they are used to produce threads as close as possible to the bottom of a hole. Must be preceded by a plug tap to work properly.	

A tap wrench of the proper size for your application and a lubricant or cutting fluid should always be used when tapping. The use of lubricant will prolong the life of the tap and make for an easier tapping operation. Patience is a must when hand tapping, as it can be time consuming, particularly with larger thread sizes. Generally the best practice is to advance the tap about a quarter turn then turn back to break the chips. Continue this practice until your threads are complete.



Information sources include W.W. Grainger

If you still experience difficulties choosing a Hand Tap,
please contact us at askzoro@zoro.com or 855-289-9676

Product Compliance and Suitability.

THE PRODUCT STATEMENTS CONTAINED IN THIS EZTIP ARE INTENDED FOR GENERAL INFORMATIONAL PURPOSES ONLY. SUCH PRODUCT STATEMENTS DO NOT CONSTITUTE A PRODUCT RECOMMENDATION OR REPRESENTATION AS TO THE APPROPRIATENESS, ACCURACY, COMPLETENESS, CORRECTNESS OR CURRENTNESS OF THE INFORMATION PROVIDED. INFORMATION PROVIDED IN THIS EZ TIP DOES NOT REPLACE THE USE BY YOU OF ANY MANUFACTURER INSTRUCTIONS, TECHNICAL PRODUCT MANUAL OR OTHER PROFESSIONAL RESOURCE OR ADVISER AVAILABLE TO YOU. ALWAYS READ, UNDERSTAND, AND FOLLOW ALL MANUFACTURER INSTRUCTIONS.

Document Create Date: 1 October 2014

Last Review: 5 March 2015

Zoro Hand Taps eZtip

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