

【Consultation】



We have a contract to produce a 3/8 NPT internal thread for exporting to the USA. I have a PT 3/8 tap that I always use for tapping pipe threads. Can I use the PT 3/8 tap to make the 3/8 NPT internal threads?

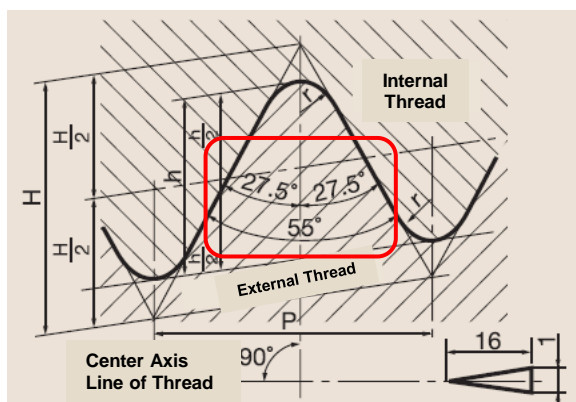
【Answer】

The 3/8 NPT is an American taper pipe thread. It is different from a taper pipe thread PT 3/8 which is normal in Japan. You cannot use the PT 3/8 for making the 3/8 NPT thread. The thread angle and the number of threads per inch are different between them. Please see the explanation below for more

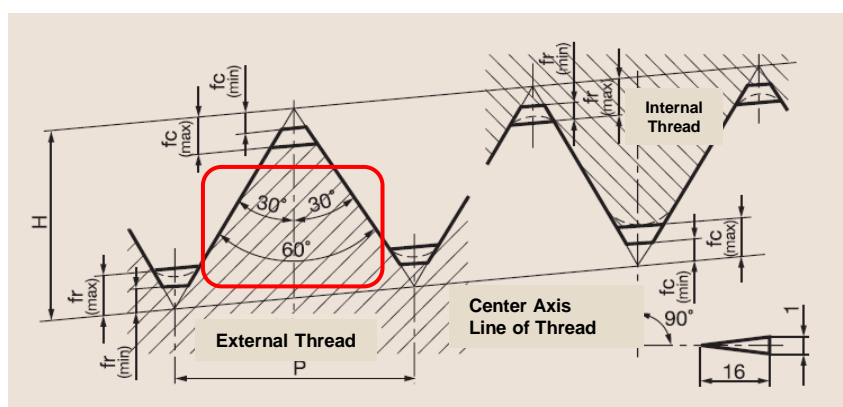


【Description】

■ Taper pipe thread (PT)



■ American taper pipe thread (NPT)



As you can see, the thread angle is different, PT: 55° , NPT: 60° ,



【Advice】

Let's compare a taper pipe thread hand tap PT 3/8 with a American taper pipe thread hand tap 3/8 NPT.



Unit : mm

Nominal size	No. of threads	Class	Basic major dia.	OAL (L)	Thread length (L)	Position on basic dia. (L _g)	Shank dia. (Ds)
PT 3/8	19	II	16.662	65	28	21	14
3/8	18 NPT	ANSI G	16.866	65	28	17.65	14

Overall length, screw length, shank diameter, etc. are the same, but the follows are different;

- ★ The number of threads.
- ★ The class.
- ★ The reference size for the major diameter.
- ★ The position on basic diameter.

With this information you can see why you can't use the PT tap for the NPT thread!