

MODEL PIPE THREADS

For many years we have made our model pipe fittings with straight threads in 3/16-40 UNS (Unified Special) with a basic pitch diameter of .171 and 1/4-40 UNS with a basic pitch diameter of .234. Taps and dies for UNS or ME straight threads are readily available and inexpensive. These fittings work well with the use of thread sealant such as Loctite PST565.

Over the years many customers have requested tapered threads because they screw up tighter, thereby reducing leakage and loosening during use. We have recently started making our 3/16-40 and 1/4-40 thread sizes with tapered threads. We have designed the tapered thread to be interchangeable with our earlier manufactured straight threads, and interchangeable with UNS or ME straight threads. We have designated our pipe thread as UST (Universal Straight and Taper). Our 5/16-27 pipe fittings have the same thread as 1/16 NPT (National Pipe Thread) and are also the same as 5/16- 27 MTP (Model Taper Pipe).

Most British Model Pipe threads use 3/16-40, 1/4-40, and 1/4-32 ME (Model Engineering) straight threads. Our UST pipe threads will work with the 3/16-40 and 1/4-40 ME thread. Other manufacturers in the U.S. also sell model taper pipe threads designated MTP. These threads are derived from the National Pipe Thread Formulas. MTP have the same pitch and taper as our UST thread, but are approximately .005" smaller in pitch diameter and are not interchangeable with our UST or with the UNS and ME straight threads.

For those wishing to use MTP threads, we have also started to produce them in our same fine line of fittings. We will continue to carry straight thread taps and dies in the 3/16-40 and 1/4-40 sizes for threading pipe and fittings. These may be used with our UST pipe Fittings. We have 3/16-40 MTP and 1/4-40 MTP taps available. These are taper thread taps and can be used to cut threads for both the MTP and the UST pipe fittings. UST thread simply requires running the tap about 3 turns deeper than the MTP. We also have available taper thread dies for both the UST and the MTP in 3/16-40 and 1/4-40 sizes.

***NOTE:** Any of our pipe fittings with UST male threads, (Such as Lubricators, Nipples, Tube Unions, Etc.) can easily be converted to MTP thread by running a MTP Die over the existing thread.

Some thread designations are as follows:

- **MTP Model Taper Pipe**
- **ME Model Engineering (British Straight Thread)**
- **UNS American National Standard Unified Special (Straight Thread)**
- **UST Universal Straight and Taper (P.M. Research Inc. Tapered Thread)**
- **NPT American National Standard Tapered Pipe Thread**
- **METP Model Engineer Taper Pipe (British Equivalent of MTP)**