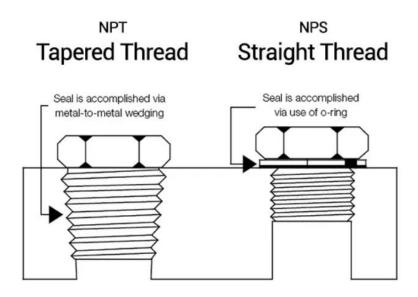
NPS vs NPT pipe threads

NPT (National Pipe Thread) and NPS (National Pipe Straight) are standards used to describe pipe threads. However, they differ in their application and design.

NPS: NPS stands for "National Pipe Straight". It refers to a standard straight thread used for pipes with a nominal size of 1/8 inch to 12 inch. The threads on NPS pipes are designed to create a tight seal when the pipes are joined together, but they are not intended for use in high pressure applications.

NPT: NPT stands for "National Pipe Taper." It refers to a taper thread used for pipes with a nominal size of 1/16 inch to 24 inch. The threads on NPT pipes are designed to create a tight seal when the pipes are joined together, and they are commonly used in plumbing and hydraulic systems. NPT threads are also used in low pressure applications such as air compressors and pneumatic tools.



NPT and NPS have the same thread angle, shape, and pitch (threads per inch). However, NPT threads are tapered, and NPS threads are straight (parallel). Both threads have a 60° included angle and have flat peaks and valleys.

While NPT and NPS threads will engage, they do not seal properly with each other.