PERMALOK®
A Northwest Pipe Company

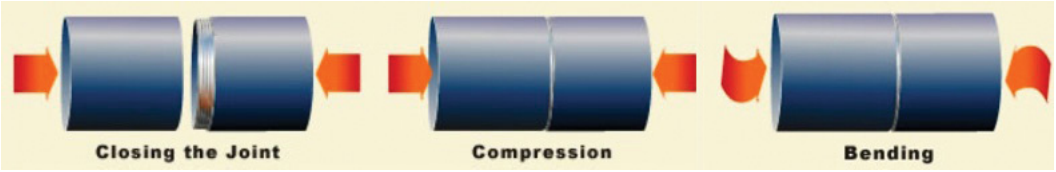
The T-5 Permalok® Joint

The Permalok® joint utilizes a precision machined interference fit that eliminates the need for time-intensive field-applied butt welds on trenchless installations of casing pipes. The pre-installed precision joint connection, which is flush with the interior and exterior surfaces of the pipe, quickly, easily, and permanently joins each piece of steel casing pipe on a project. Its unique stepped profile makes stabbing and aligning simple and expeditious. Combined with the use of a sealant such as RTV Silicone, the Permalok joint design will not leak under challenging installation conditions. The RTV sealant lubricates the grooved profile of the connection during assembly and installation, which then performs as a gasket creating a water-tight connection. The T-5 Joint's unique profile is machined to tolerances of less than +/- 0.005 of an inch, which creates a joint of consistent quality and integrity that is leak resistant even under considerable pressure.

Loading

The T-5 Permalok Joint is designed to handle various types of loading conditions that a casing pipe is likely to undergo in the field. Through many miles of proven installations, the joint has been proven to be suited in both compression and bending in applications involving:

- Microtunneling
- Pipe jacking
- Pipe ramming
- Auger boring



A 60-inch outside diameter Permalok Casing Pipe, with a wall thickness of 0.625-inch, will require approximately 40 to 60 tons of compressive force to complete the connection.

End Preparation, Mating Procedures, and Installation

• Both ends (male and female) are coated at the factory with a wax-like rust inhibitor. This must be removed before attempting to make up the joints. Use of any type of petroleum based solvent and a stiff brush will dissolve the film, 13joint is completely engaged in the female end. As steel pipe is never perfectly round, it is good practice to measure across the face of each male and female end to determine the maximum and minimum deviations from round, prior to placing the pipe for joint make-up. Match marking the pieces in this manner will aid and speed up the mating process in the work pit. A 24-inch Class .3 Permalok will require approximately 10 to 20 tons (20,000 – 40,000 lbs.) of compressive force to complete the connection.