

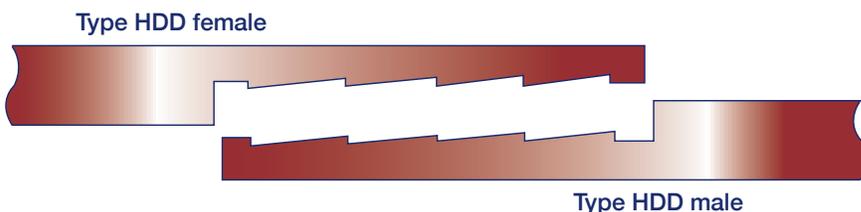


The Type HDD Joint

The Type HDD connection allows the Horizontal Directional Drilling industry freedom from field welding, making connections faster and easier. The HDD connection is available as both casing pipe and carrier pipe.

The Problem – Time, Cost, and Lack of Space

Prior to the Permalok® Type HDD connection, HDD contractors installing steel pipe needed to weld together long strings of material before installation; they also needed a long laydown area near the drilling site to stage the material. Unless they could make up the entire run in one string, the contractor had to stop installation to weld the sections of the run. Welding was costly, time consuming and often not enough room was available to stage significantly long sections to cut down on work stoppages while joining sections together. And in the case of ocean outfalls or fresh water intakes, expensive marine equipment had to be available, to assist the pull back stage of the operation in the water-side of the drill path. A 60-inch outside diameter Permalok Casing Pipe, with a wall thickness of 0.625-inch, will require approximately 40-60 tons of compressive force to complete the connection.



The Solution – Join the Sections of the Pipe Quickly, using Your Drill Rig

Permalok solved the problem by applying its field-proven, welding-free technology to horizontal directional drilling. The new Type HDD profile incorporates an additional locking key on the male portion of the joint to greatly increase pull-apart resistance. The new profile is considerably longer for more flexibility in bending. Also, by increasing the joint length, the spacing between interlocking ribs is greater, making the connection easier and faster with less force required to complete the joint makeup. With the new Type HDD profile, contractors can install steel pipe from the rig side of the bore path, using the drill rig to make up the sections and advance them, similar to installing drill stem. There is no need for expensive marine equipment because the pipe is installed from the landside of the operations on ocean outfall and fresh water intakes.