



## NU-BOLT™ ASSEMBLY I-ROD® PIPE SUPPORTS

**Nu-Bolt assemblies have been in service for over twenty-five years with no reported pipe failures where they're installed.**

Designed by corrosion engineers, the Nu-Bolt assembly combines the half-round I-Rod support with a modified pipe U-Bolt. A variety of corrosion-resistant treatments provide reliable, long-term service in the severe operating environments associated with offshore oil and gas production and coastal process facilities.

### Corrosion at pipe supports

Corrosion at pipe supports is one of the leading causes of process piping failures, which can have potentially catastrophic results. All styles of pipe supports, including beam supports and pipe saddles, create crevices where water is trapped and held in constant contact with the pipe surface. Once corrosion is initiated in these pockets, it can quickly undercut the paint film, and cause rapid wall loss as it expands from the crevice. When these conditions are not addressed, entire sections of pipe can fail and require replacement.

Deepwater developed the I-Rod pipe-support system specifically to combat crevice corrosion and ensure longer, safer lives for pipelines by eliminating crevices between pipes and supports.

### Polyshrink

Polyshrink is applied over the shank of the U-Bolt to protect the pipe's paint system during installation; it is not designed to protect the U-Bolt. The material is a cross-linked, high-compressive-strength, UV-stable polyolefin that remains in service in temperatures up to 230 °F (110 °C).

### Bolt finishes

The bolt is available in carbon steel with one of two coatings: Hot-dip galvanized or SermaGard®, which is a corrosion-resistant coating reliable in even the harshest offshore conditions. Bolts are also available in 316 stainless steel.

### Half-round I-Rod support

The standard white I-Rod material works exceptionally well for most process piping conditions. In situations with extreme operating temperatures, Deepwater can substitute the more resistant I-Rod HT material. Deepwater has also begun to offer PEEK material for environments that prove too severe for either (though these instances are rather rare). For details about all three materials, visit [stoprust.com](http://stoprust.com).

### Maintenance and durability

The Nu-bolt assembly provides an electrically isolated stand-off between the pipe and the supporting beam or saddle clamp, which allows for easy maintenance and inspection. I-Rod also has excellent compressive strength and a very low friction coefficient. Some Nu-bolts have been in continuous use with no reported failures since 1989, when the first all-new structure that specified I-Rod and Nu-Bolt began operations.

**More info at [www.i-rod.com](http://www.i-rod.com)**



A STANDARD NU-BOLT ASSEMBLY

This is the most popular means of installing I-Rod on pipe supports.



OFFSHORE

Nu-Bolts on pipe run at (+) 100' elevation on an offshore platform.



GRIPPING AND NON-GRIPPING OPTIONS

Non-gripping Nu-Bolts are also available that allow for thermal expansion of pipes.