

GRIP TIGHT[®] ISOLATION PLUG

Quickly and Safely Isolate and Pressure Test Pipe

Technical Brief - EST Group

DESCRIPTION

EST Group's GripTight Isolation Plug allows you to positively isolate and monitor potentially explosive vapors during "hot work", then effectively hydrotest the new weld connection with one easy to use tool.

The GripTight Isolation Plug integrates all the features of EST's Double Block and Bleed Test Plug with GripTight gripping technology. The GripTight Grippers enhance operational safety, by reducing the risks associated with unexpected upstream pressure in the line. The GripTight Isolation Plug is capable of withstanding upstream pressures up to 1500 PsiG (103 BarG). If the upstream pressure increases, then the GripTight Grippers actually use the pressure to increase their grip on the pipe. The greater the pressure, the greater the grip!

BASIC OPERATIONS

- After determining pipe and schedule size, install the GripTight Isolation Plug upstream of "hot work" area
- Expand seals and grippers by tightening compression nuts
- Inject inert gas or water between seals (isolation zone) and pressurize
- Monitor isolation zone pressure during "hot work"
- After weld cools, release pressure and seal, reposition isolation zone over weld area
- Pressurize isolation zone to test weld area

FEATURES AND BENEFITS

- Lightweight, aluminum and steel construction makes it easy to use.
- Test pressures to 2250 PsiG (155 BarG) between the seals .
- Upstream pressure up to 1500 PsiG (103 BarG).
- Available for NPS ranging from 3/4" to 24" (DN20 - DN600).
- Pressure tests performed with less than a gallon of water. Reduced fill time. Reduced waste disposal.

SPECS/MATERIALS

Standard materials include aluminum body with steel hardware and urethane seals.



FAQ

Q What installation equipment is required for a GripTight Isolation Plug?

A A standard torque wrench, the appropriate size crow foot or deep socket, and an extension.

Q Does the pipe need to be in a specific condition before the GripTight Isolation Plug can be installed?

A Yes. The GripTight Isolation Plug is designed for use in seamless and welded pipe. In seam welded pipe or where corrosion, pitting, or scale is present, the pipe ID may require some preparation prior to plug installation and use.

Q What is the temperature rating of the Urethane Seals and will the close proximity to heat transfer area compromise the seals during the welding process?

A The temperature rating for the Urethane seals is 180°F (82°C). When the plug is installed 12" (305 mm) from the weld, the distance between the weld and the GripTight Isolation plug usually allows the heat to dissipate and decrease to a temperature that is within the rating of the seals.

Q Will the GripTight Isolation Plug accommodate slight weld intrusion?

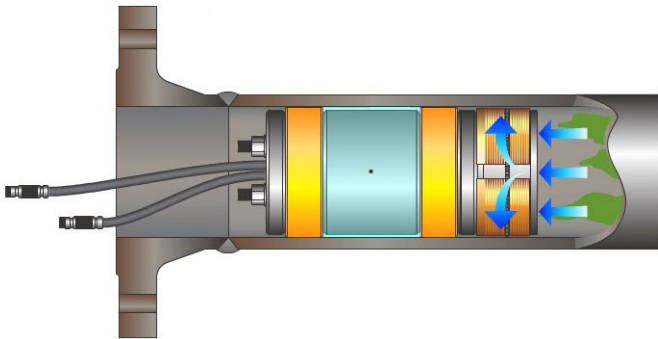
A Yes. The plug is designed with increased clearance (up to 3/8" on larger size plugs) to allow the plug to be positioned over the weld for testing even when slight weld intrusion is present on the Inner Diameter of the pipe.

Q What is the average time required to install a GripTight Isolation Plug and achieve a pressure test?

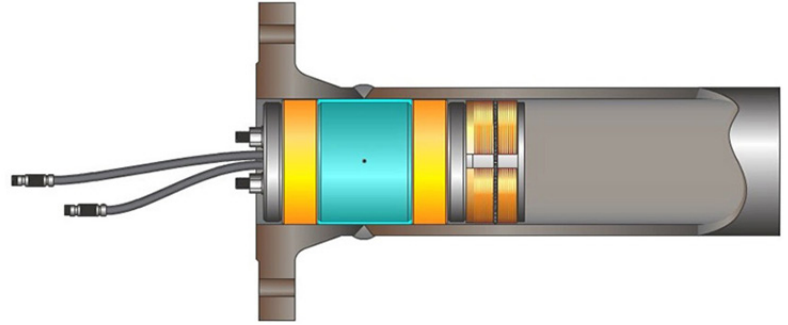
A After the temperature of the weld area has decreased below 180°F (82°C), the GRIPTIGHT Isolation Plug can be used to complete pressure tests in as little as 10 minutes from insertion to removal.

Q What upkeep and storage conditions are required to preserve the quality and performance of the GripTight Isolation Plug?

A The GripTight Isolation Plug requires periodic inspection of the O-Rings and Seals prior to testing. The compression shafts should be inspected and anti-seize should be applied as needed. After a test has been completed, the compression nuts should be retracted so the seals can fully relax; allowing the Urethane Seals to return to their original size, preventing any permanent swelling and/or deformation.



GripTight Isolation Plug used as an Isolation Plug



GripTight Isolation Plug used as a Test Plug

North America / Central & South America
Corporate Office
2701 Township Line Rd
Hatfield, PA 19440-1770 USA
(P) +1 215.721.1100
+1 800.355.7044
(F) +1 215.721.1101
est-info@curtisswright.com
<http://estgroup.cwfc.com>

Europe / Middle East / Africa
EST Group B.V.
Hoorn 312a
2404 HL, Alphen aan den Rijn
The Netherlands
(P) +31.172.418841
(F) +31.172.418849
est-emea@curtisswright.com

Asia Pacific
EST Group Asia
35 Tannery Rd, #11-10 Tannery Block
Ruby Industrial Complex
Singapore 347740
(P) +65.6745.8560
(F) +65.6742.8700
est-asia@curtisswright.com

**CURTISS
WRIGHT**
Flow Control Company
EST Group

© EST Group DC8076 Rev1 | 10/13