CURTISS-WRIGHT

EST Group

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GripTight® Test Plug

Pressure Test Open-end Pipe & Tubing

GripTight Test Plugs provide a fast, safe and reliable solution for testing open ended pipe. Capable of achieving test pressures up to 14000 PsiG (960 BarG), GripTight Test Plugs eliminate the need for welding on and cutting off end caps, saving time and money on every test. The self-gripping design uses test pressure to supplement the plug's pressure holding capability - the greater the test pressure, the greater the grip. GripTight Test Plugs incorporate a ported shaft for easy filling, venting and draining of the test system. GripTight Test Plugs are reusable, further reducing the cost per test. Wear components (seals and gripper assemblies) are field replaceable.

Basic Operations

- Verify pipe size (Outer Diameter, Wall Thickness, and Inner Diameter), schedule, and material
- Place plug into the inner diameter of the pipe
- Tighten the Compression Nut to the required installation torque
- Fill the pipe with the test medium
- Pressurize the pipe, hold for required time limit
- Depressurize and drain test medium
- Loosen Compression Nut and remove the GripTight Test Plug

Features and Benefits

- The GripTight Test Plug allows for quick, safe and reliable pressure tests on open ended metal pipe and tubing
- The Self-Gripping design provides unparalleled safety - the greater the test pressure, the greater the grip
- Provides the means for the constructor / fabricator to perform pressure testing without a subcontractor - putting them more in control of their production schedule
- The ported shaft allows the test medium to be filled or vented through the GripTight Test Plug
- The GripTight Test Plugs are reusable. Drastically reducing the cost per test by up to 80% compared to welded-on end caps
- Eliminates the need for post weld stress relief

Specs / Materials

GripTight Test Plugs are readily available in pipe sizes from ½" through 24" (DN15 - DN600). The plugs are constructed of zinc plated carbon steel with a Urethane Seal. GripTight Test plugs can be supplied in sizes up to 42" (DN1000). GripTight Test Plugs are available with stainless steel construction, and equipped with alternative seal materials. OD Gripping and Sealing models are also available – greatly reducing the number of plug sizes that may be required for a given pipe size.

Competitive Advantage

- Fast, safe and easy installation
- Limited installation equipment required
- Reliable performance
- No welding or extensive pipe preparation required
- Quick completion of pressure tests compared to alternative methods
- Reusability option drastically reduces material waste and cost
- Pressure testing capabilities up to 14,000 PsiG (960 BarG)

Frequently Asked Questions

- **What installation equipment is required for a GripTight Test Plug?**
  A standard torque wrench & appropriate size crows foot or extra-deep socket.

- **What is the lead time for a standard GripTight Test Plug?**
  A majority of sizes are available from stock and are eligible for same day shipping. If items are not in stock, every effort will be made to meet your scheduling needs.

- **Does the pipe need to be in a specific condition before the GripTight Test Plug can be installed?**
  Yes. The GripTight Test Plug is designed for use in smooth bore pipe to achieve the desired functionality. If corrosion, pitting, scale, or a seam weld is present, then some preparation is required prior to testing.

- **What is the average amount of time required to install and perform a pressure test with the GripTight Test Plug?**
  Depending on the volume of the application, the pressure tests can be completed in as little as 10 minutes from insertion to removal.

- **Can one GripTight Test Plug be used to test multiple pipe sizes?**
  No. They are size specific to the schedule of the pipe.

- **What is the standard seal material for the GripTight Test Plug and are alternate seal materials available?**
  Urethane is the standard seal material for a GripTight Test Plug. Alternate seal materials are available; the most common replacement seal material options consist of Fluoroelastomer, Neoprene, Silicone, EPDM, Natural Rubber, Nitrile/Buna-N, and SBR/ Buna-S

- **What is the desired test medium?**
  While hydrostatic testing is the safest means for accomplishing a pressure test since water is a non-compressible medium, the self-gripping feature of the GripTight Test Plug does not recognize a difference in the test medium.

- **Is there visible scarring from the grippers after the test has been completed?**
  At high pressure, minimal marring of the pipe can occur due to the gripper engagement. Customers have reported that gripper indentations may range in depth from 0.005” to 0.015” (0.13 - 0.38 mm), significantly less than the depth of a pipe imperfection that would require a weld repair.