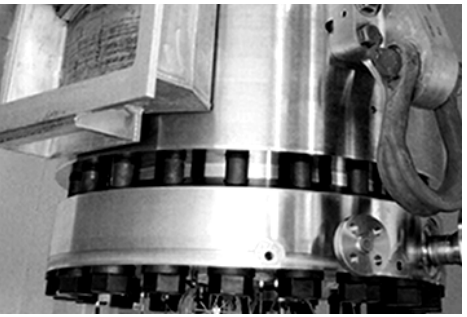
Product Information Cards

GripTight Test & Isolation Plug Product Line



GripTight® MAX Test Plug

Solution Overview

GripTight MAX High Pressure Test Plugs cut down time and man-hours needed to perform pressure testing by eliminating the need to weld on/cut off end caps.

Features

- Laser-marked top washer identifies part number, size range, pressure rating
- Reuseable up to 50-100 times, further extending return on investment
- Hydraulically-actuated units available upon request
- Manufactured in ISO 9001:2015 registered facility

Advantages

- Safe – No hot work permitting required
- Save on significant man-hours on expensive welders
- Complete tests in 85-95% less time than welding caps
- Patented dual-serrated self-gripping design
- Tests in accordance with ASME Boiler and Pressure Vessel codes
- Positioning top washer prevents plug loss in pipe end
- Self-centering design simplifies installation
- Safety gags available for increased safety during test

Size/Pressure Range Capabilities

- **Pressures:** up to 15,000 PSIG (1034 Bar)
- **Sizes:** 3/8” to 48” NPS standard (additional upon request)

Common Questions

Q: Will the test plug grippers damage the pipe?

A: The grippers leave minute contact spots well within the allowance, as outlined in ASTM A333/A333M Section 10.

Q: Will there be cross contamination with my stainless steel or Invar pipe?

A: There are various non-standard gripper material options available, EST Group application engineering is happy to assist!

Q: How can I easily lift large size plugs?

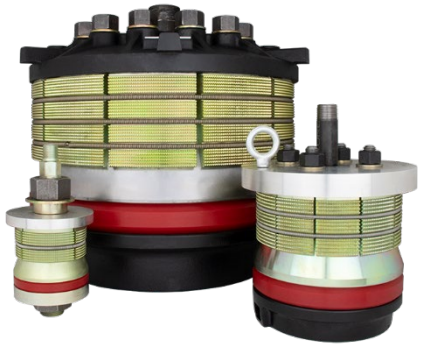
A: For sizes 10” and up, lifting arms are available for easy installation.

Q: Can I use the test plug for both hydrostatic and pneumatic testing?

A: Yes! Be cautioned that pneumatic testing is inherently more dangerous due to the stored energy in a compressed gas versus a non-compressible liquid. Always observe the current version of ASME PCC-2 for safety measures.

Cross-sell / Up-sell Opportunity

- Other Test Plugs
- Safety Gags
- Replacement Grippers & Seals
- Lifting Arms
- Vent Assemblies



GripTight® Elbow Test Plug

Solution Overview

GripTight Elbow Test Plug reduce testing time by up to 95% over conventional methods by eliminating the need to weld on pressure testing pipe spools and piping systems terminating in long radius elbows.

Features

- Fits most long radius elbows
- Orientation free installation - no need to align with elbow
- Saves significant time vs. welded-on end cap/pup procedures
- Patented dual-serrated GripTight MAX® grippers
- Patented self-aligning grippers / and seal design
- Reusable for multiple tests

Advantages

- Safe – No hot work permitting required
- Save on significant man-hours on expensive welders
- Complete tests in 85-95% less time than welding caps
- Self-centering design simplifies installation
- Safety gags available for increased safety during test
- Designed to accommodate a large range of pipe materials including: Carbon Steel, Stainless Steel, Duplex, Inconel, Incoloy, Hastelloy, Chromoly, Clad Elbows, Hardened Materials

Size/Pressure Range Capabilities

Test Pressures: 3,350 PsiG (231 BarG) – higher pressures available upon request

Size Range: 2” to 48” (DN50 to DN1200)

Common Questions

Q: Can the Elbow Test Plug be used on a straight pipe?

A: Yes! The GTLBO can be used in both long-radius elbow pipes, or straight pipes. However, the GTMAX is better suited for higher pressure straight-pipe applications.

Q: Will the Elbow Test Plug grippers damage the elbow?

A: The grippers leave minute contact spots well within the allowance.

Q: Can I use the test plug for both hydrostatic and pneumatic testing?

A: Yes! Be cautioned that pneumatic testing is inherently more dangerous due to the stored energy in a compressed gas versus a non-compressible liquid. Always observe the current version of ASME PCC-2 for safety measures.

Cross-sell / Up-sell Opportunity

- Other test plugs
- Safety gags
- Replacement Grippers & Seals
- Lifting Arms
- Vent Assemblies

GripTight® Reverse Pressure Test Plug

Solution Overview

GripTight Reverse Pressure (GTRP) test plugs eliminate concerns over inadequate joint strength when pressure testing welded flange connections.

Features

- Plug and test flange act independently of each other so that the weld joint is subjected to real world stresses during pressure testing
- Reuseable up to 50-100 times, further extending return on investment
- Modified Blind Flange and Lanyard Assembly safely monitors plug during testing
- Meets the requirements of ASME/ANSI B16.5

Advantages

- Flange-to-pipe weld is subjected to the full radial, hoop, and longitudinal stresses unlike all other Isolation tools on the market.
- Patented dual-serrated self-gripping design
- GTRP can accomplish Hydrostatic and Pneumatic Testing
- Testing performed with the GTRP Test Plug is quick, easy and safe.

Size/Pressure Range Capabilities

- **Pressures:** Up to 2,250 PsiG (155 BarG), which covers up to ANSI 600# class service.
- **Sizes:** 3/4” to 24” (DN20 - DN600). Custom size/higher pressures available upon request.

Common Questions

Q: Does a GTRP provide adequate testing to verify the longitudinal strength of the flange-to-pipe weld?

A: By isolating the test area between a test flange and our GTRP plug, the flange-to-pipe weld is subjected to the full radial, hoop, and longitudinal stresses, equivalent to the stresses that would be produced when using a test blind to pressurize the entire piping system.

Q: Can the GTRP handle upstream pressure?

A: Sizes 3/4”- 6” have upstream pressure rating up to 1500 PsiG (103 BarG), 8”- 24” safely vent upstream pressure.

Q: Can one GTRP Test Plug be used to test multiple pipe sizes?

A: No, GTRP Test Plugs are size specific to the schedule of the pipe.

Cross-sell / Up-sell Opportunity

- Other Curtiss Wright Isolation Plugs
- GTMAX/GTLBO Plugs
- Modified test flange equipped with a fill and vent port
- Replacement Grippers & Seals
- Hydrotesting pump and accessories.

GripTight® PE Test Plug

Solution Overview

Pressure Test Polythene Pipe in Minutes – Not Hours. Designed specifically for use in testing PE pipes in gas, water, wastewater and conduit service.

Features

- Conservatively rated to 150% of maximum operating pressure required under 49 CFR 192.513
- Available in 2”,3”,4”, 6” and 8” sizes (DN50-DN200)
- Ported shaft allows users to fill and vent through plug
- Patented dual seal design
- Adjustable configuration – additional fittings such as isolation valves, pipe caps, and pressure gauges can be easily attached

Advantages

- Safe, secure, fast, and easy
- Lightweight and rugged: Aluminum/steel construction
- Will perform in all grades of Polyethylene pipe
- Applicable on LDPE, MDPE & HDPE
- Durable sealing materials Urethane
- Reusable up to 50 to 100 times
- Hand tighten – easily installed, no special tools required
- Plugs cover SDRs from 9 to 17 medium or high density PE pipe

Size/Pressure Range Capabilities

- **Pressures:** Vary by plug size, SDR & material grade
- **Sizes:** 2”, 3”, 4”, 6” & 8” (Other sizes available upon request)

Common Questions

Q: What is the lead times of these products?

A: Standard 20 working days, ARO. Expedite service available upon request.

Q: Can the seals and grippers replaceable when damaged?

A: Yes, we sell the spare replacement seals and grippers separately.

Q: What is shelf life of the seal materials?

A: Typically 2 to 3 years when store in cool, dry, indoor & clean environment.

Q: Can one plug use on SDR from 9 to 17?

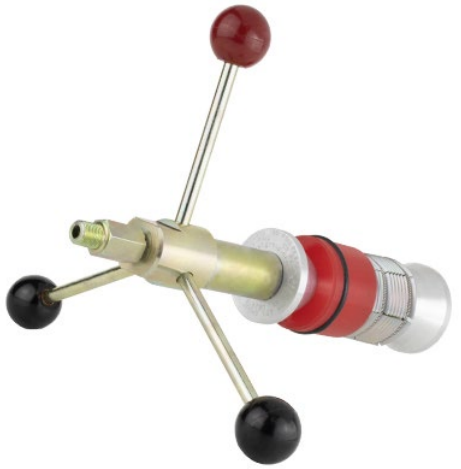
A: No, the test plugs selected based on pipe ID range reference DC2516.

Q: How do I install the test plugs?

A: Operating procedure instructions will be provided in every test plug sold.

Cross-sell / Up-sell Opportunity

- Other Test plugs for FRP, GRE, Steel pipes
- Safety gags
- Replacement Grippers/Seals
- Vent assemblies



OD GripTight® Test Plug

Solution Overview

OD GripTight High Pressure Test Plugs cut down time and man-hours needed to perform pressure testing by eliminating the need to weld on/cut off end caps.

Features

- Unique self-gripping and self-sealing feature to grip and seal along the outside of the pipe
- High strength aluminum body
- Hardened stainless steel grippers
- Patented Dual Seal element
- Manufactured in ISO 9001:2015 registered facility
- Urethane with Fluoroelastomer O-ring

Advantages

- Safe – No hot work permitting required
- Save on significant man-hours on expensive welders
- Fast and safe
- Lightweight aluminum construction
- Simple spanner wrench installation
- Can be used on different schedule for each pipe diameter
- Entire pipe is wetted for hydrotested, no unwetted “green” area
- No gripper marks or damage to the pipe I.D. whatsoever

Size/Pressure Range Capabilities

- **Pressures:** Up to 5000 PsiG (345 BarG)
- **Sizes:** ¼” to 4” (DN8 to DN100)

Common Questions

Q: Will the test plug grippers damage the pipe?

A: The grippers leave minute contact spots on the O.D. well within the allowance, but no contact spots on the pipe I.D. at all.

Q: Will there be cross contamination with my stainless steel or Invar pipe?

A: No, as standard grippers are in stainless steel material, and the ODGT grips the outside of the pipe.

Q: Is this type of plug available for any pipe size?

A: The ODGT can go up to 4” (DN100).

Q: Can I use the test plug for both hydrostatic and pneumatic testing?

A: Yes! Be cautioned that pneumatic testing is inherently more dangerous due to the stored energy in a compressed gas versus a non-compressible liquid. Always observe the current version of ASME PCC-2 for safety measures.

Cross-sell / Up-sell Opportunity

- Other Test Plugs
- Replacement Seals and Grippers
- High pressure caps

GripTight® Isolation Test Plug

Solution Overview

Integrating the functionality of a conventional Double Block and Bleed plug with our GripTight gripper technology, GripTight Isolation Plugs provide increased operational safety by minimizing risk of accidental blowouts/expulsions from unexpected upstream pressure.

Features

- Lightweight, aluminum and steel construction
- ASME PCC-2 Type IV testing device
- High quality best-in-class urethane seals
- Gripper technology minimizes risk of accidental blowout/expulsion

Advantages

- Monitor potential explosive vapors during work
- Perform flange weld testing with less than a gallon (3.8L) of water, reducing fill times, and waste/treatment expenses
- Dual porting allows water circulation during pre post weld procedure to aid in cooling
- Long history of use across many industries
- Dual-port design creates a positive pressure barrier between the seals – safely isolating hot work from any residual upstream gases
- Increased safety by minimizing risk from unexpected upstream pressure

Size/Pressure Range Capabilities

- **Pressures:** 2250 PsiG (155 BarG) between the seals
- **Pressures:** 1500 PsiG (103 BarG) upstream pressure
- **Sizes:** 3/4" to 48" NPS (DN20 to DN1200)

Common Questions

Q: How many tests can I do with this plug?

A: Plug is reusable with a long lifetime. Replace seals and grippers as needed to extend the plug life.

Q: Can we apply higher pressure than specified?

A: Yes, contact our engineering team for special requirements!

Q: How quickly can you deliver?

A: If not in stock, can be as quick as 15-20 workdays ARO depending on size.

Q: How do I store the plug when not in use?

A: Store in a cool, dry location away from sunlight. See operating procedures for additional information.

Cross-sell / Up-sell Opportunity

- Spare parts seals, studs and vent hoses
- Lifting arms
- Installation tools
- Service Team Work
- Test pumps / hand pumps
- Recommended lubricants

Double Block & Bleed Test Plug

Solution Overview

Positively isolate and monitor vapors during hot work, then effectively hydrotest the new weld connection. The dual-port design creates a positive pressure barrier between the seals - safely isolating hot work from any residual upstream gases.

Features

- Lightweight, aluminum and steel construction
- Monitor potentially explosive vapors during hot work
- The dual-port system allows water to be circulated between seals, providing improved cooling during pre/post-weld procedures
- ASME PCC-2 Type IV Testing Device
- Laser-marked top washer identifies part number, size range, and pressure rating

Advantages

- Light weight
- Uses less than a gallon (3.8L) of test media – cutting down on fill times and reducing waste/treatment expenses
- Dual porting allows water circulation during pre post weld procedure to aid in cooling
- Long history of use across many industries
- Dual-port design creates a positive pressure barrier between the seals – safely isolating hot work from any residual upstream gases

Size/Pressure Range Capabilities

- **Pressures:** 2250 PsiG (155 BarG) between seals
- **Sizes:** ¾" to 48" NPS (DN20 to DN1200) – larger sizes available upon request

Common Questions

Q: Are they able to be used on multiple schedules of pipe schedule?
A: No, each plug is schedule specific.

Q: What is temperature range of the test plugs?
A: The temp range is 180F (82C) when in stalled 12" (305 mm) from the weld.

Q: How long does it take to set up the test plug?
A: 10 minutes or less for installation to removal once welds are cooled.

Q: How does the root of the weld effect the test plug installation?
A: Test 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.

Cross-sell / Up-sell Opportunity

- Other Test Plug Types
- Test pumps / hand pumps
- Spare parts seals, studs and vent hoses
- Lifting Arms
- Recommended lubricants
- Service Team Work

High Lift Flange Weld Test Plug

Solution Overview

High Lift Flange Weld Test Plug is a safe, reliable, 4-in-1 tool that Facilitates field flange replacements and reduces the cost, downtime delays, and waste-water disposal associated with conventional flange testing.

Features

- Fast – one tool to isolate, weld & test
- Flange Classes 150# to 2500# Class
- Ported center shaft allows for upstream monitoring
- Flange to pipe welds are tested without needing to pressurize the entire system.

Advantages

- The plug isolates just the weld area so there is no need to fill the entire line or vessel.
- No blind flanging upstream, no vacuum truck for evacuating the line, and no X-raying.
- Each flange test requires a minimum amount of water, eliminating the need to fill the entire line. Use less water and minimize your environmental impact.

Size/Pressure Range Capabilities

- **Pressures:** up to 2250 PsiG (155 BarG)
- **Sizes:** 3/4” to 24” (DN20 – DN600), up to 36” as special

Common Questions

Q: Can the High Lift plug work on several schedules for the same pipe size ?

A: EST Group can supply additional Replacement Seal and Washer Set to change from one schedule to another for the same pipe size on sizes up to 6”.

Q: Can the installation depth of the seal be adjusted?

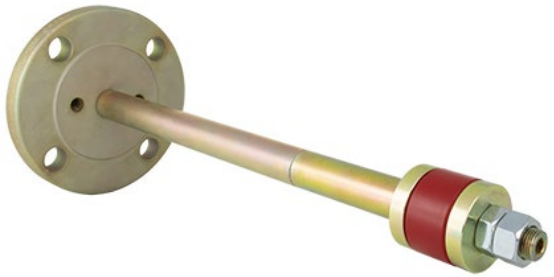
A: In sizes from 3/4” to 4” (DN20-DN100), the High Lift Flange Weld Test Plug’s segmented compression tube design allows you to adjust the distance between the flange and seal. In larger sizes (6” to 24” (DN150-DN600)), the installation depth of the seal is not adjustable.

Q: Can the High Lift plug work on same size but different ANSI flange classes?

A: No, the High Lift Flange Weld Test Plug is specific to the Flange Class. Classes 150, 300 and 600 are standard. Higher flange classes available upon request.

Cross-sell / Up-sell Opportunity

- DBB
- GTDBB
- Replacement Seals



D-Series Tapping Tool

Solution Overview

D-Series Tools help to safely and quickly test liquids in a pipe that may contain hazardous substances for humans and the environment.

Features

- Made of all Stainless Steel and PTFE material to withstand the harshest elements including plutonium and uranium.
- Meets requirements of ANSI N45.2, 10 CFR 50 Appx. B, and 10 CFR 21.
- Re-useable up to 5 times, but inexpensive enough to throw away after one use

Advantages

- Safe – no welding or pyrotechnics needed
- Installation takes minutes
- Test pipe safely and quickly
- All Stainless-Steel construction can withstand any and all elements
- Can position at any degree on pipe to make connections
- Drill bit does not create heat or sparks
- Can stay in place until pipe is removed
- Tap sand drains host pipes along the floor or other obstructions

Size/Pressure Range Capabilities

- **Pressures:** Up to 285 PsiG at 100ºF (38ºC)
- **Sizes:** ¼" to 3"

Common Questions

Q: What are the materials of construction?

A: 304SS and PTFE gasket material.

Q: What pressure will these hold?

A: 285 PsiG (19.6 BarG).

Q: What size is the drill?

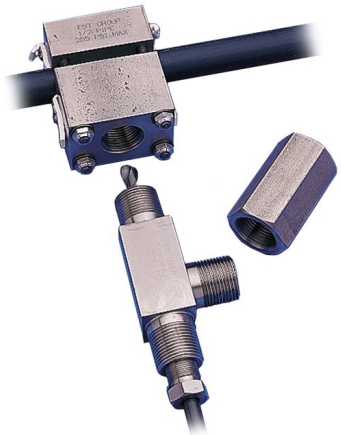
A: Nominal drill is 3/8", ¼" for smaller size tools.

Q: Can you drain from the top of the pipe?

A: Yes, the D2 model allows for tapping from the top of the pipe.

Selling Story

Originally slated for Rocky Flats Decommissioning and Demolition, the tool helped shave decades off the timeline for dismantling the plant. The D-Series Tapping Tools are used at a majority of DOE National Lab sites to test piping for contamination.



Thank You

Contact our sales team to request a sales quote, place your order, or get more information on EST Group's Products and Services

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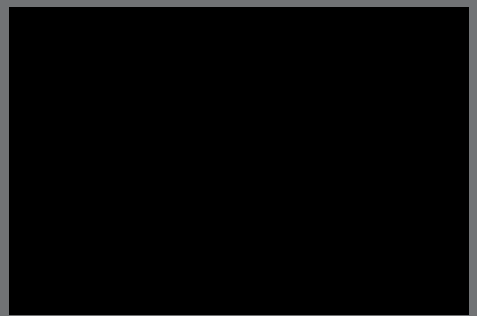

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