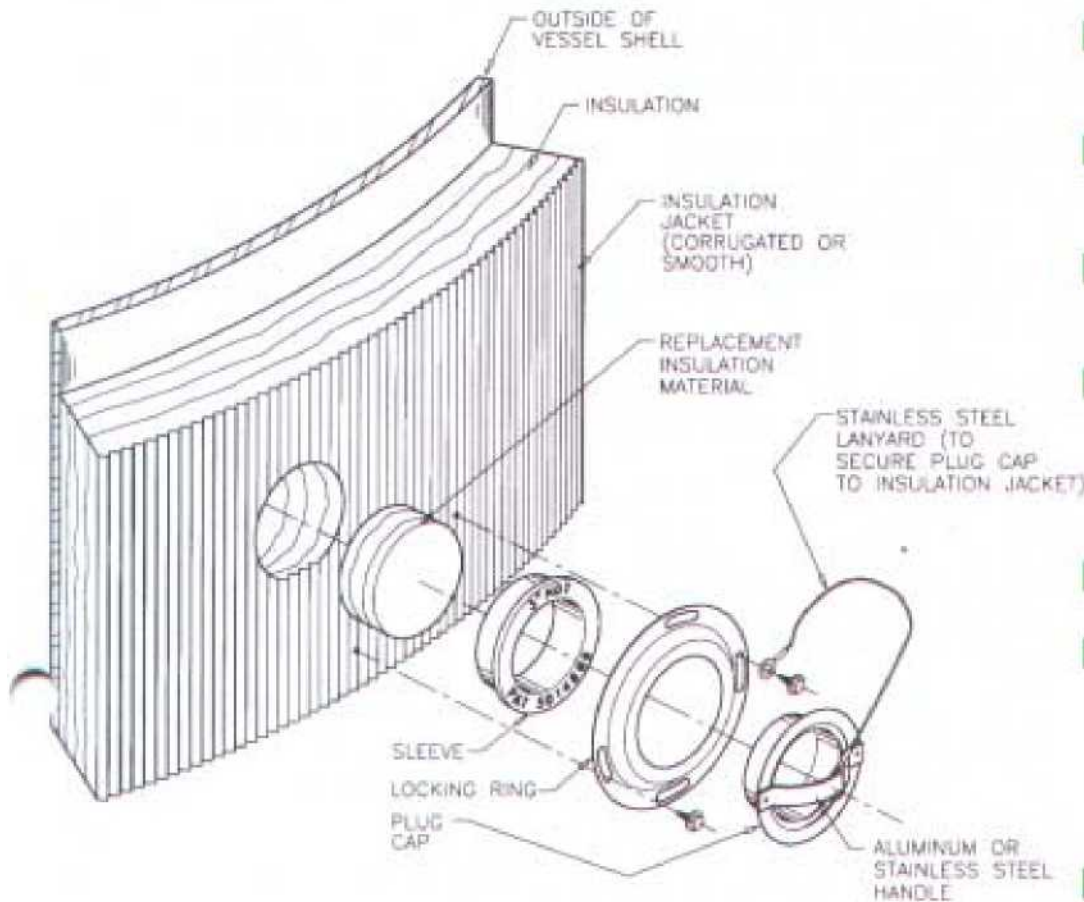


NDT INSPECTION PLUGS



- EPA and OSHA inspection point access
- Reduces time for periodic inspections/tests
- Installs on both smooth and corrugated jacketing
- No special tools, O-rings, transition gaskets, contoured flanges or "goof plates" required
- Reusable
- Patented design seals and protects against corrosion under the insulation (CUI), chemical and UV exposure of the elastomer sleeve
- Lanyard stops plug cap loss
- Available in 1½, 2½, 3 and 5 in. (38.1, 63.5, 76.2 and 127.0 mm) sizes with or without handle, lanyard and locking ring, as shown

Petroleum Refining • Chemical • Petrochemical • Paper and Pulp
Power Generation • Air Handling • Manufacturing • Transportation

Reference to:

OSHA 29 CFR 1910.119/261
(Monitor Process Equipment)

API 510/570/653
(Inspection Codes)
API RP 578/579/581

US Patent # 5,014,868

***Install Once-
Inspect As Often As You
Choose!***

***Easy, Resealable Access For
Non-Destructive Testing of
Insulated Pipe and Equipment***

Design Specifications:

NDT Plug Size Available	Recommended for Insulation Jacket OD
1½ in. (38.1 mm)	Small Diameter Piping
2½ in. (63.5 mm)	Minimum 6 in. (152.4 mm)
3 in. (76.2 mm)	Minimum 9 in. (228.6 mm)
5 in. (127.0 mm)	Vessels & Equipment

Inspection Access Procedure:

- Locate and mark the insulation jacket where the test is required.
- Use either tin snips or a hole saw to penetrate the insulation.
- Remove the final layer of insulation in the safest and most convenient manner (using your hand or knife) to expose the substrate for electronic and visual inspection.
- After inspection, re-insert the insulation or replace with a high density material.
- Insert the Sleeve. (Caulk around the sleeve for cold applications is recommended.)
- Secure the Locking Ring and Lanyard (if applicable).
- Insert the Plug Cap to affect a seal.

Contact For Sales Information:

Material Specifications:

The NDT Inspection Plug has two parts:

1. The **Sleeve** is made of 50 durometer EPDM (Ethylene Propylene) as follows:

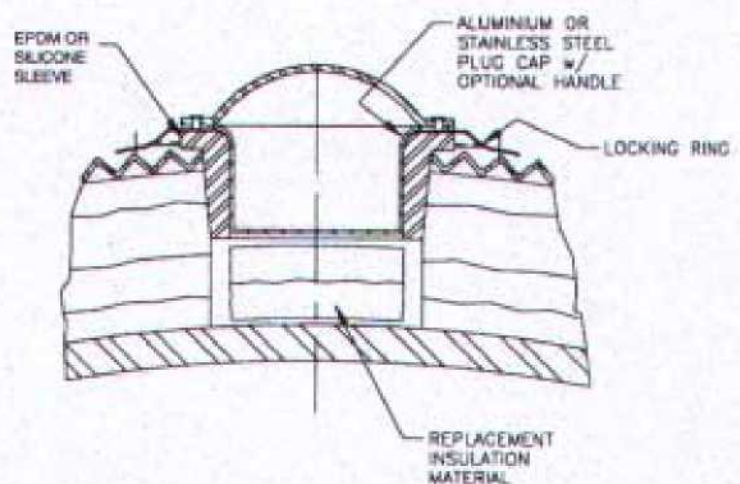
Chemical Resistance: Excellent
Ozone, Water/Steam Resistance: Excellent
Permanent Set Resistance: Excellent
Temperature Range: -65°F to +300°F
(-54°C to +149°C)
Tensile Strength: 1400 psi
Elongation: 300%
ASTM D2000 2BA 510 A₁₄B₁₃C₁₂F₁₇

The **Sleeve** is also available in silicone.

2. The **Plug Cap** is made of dead soft aluminum #5052 or (304) stainless steel

Special identification options, such as stainless steel tags, bar-coded and/or color-coded labels, are available and will be quoted on request.

Section Thru Plug:



WARRANTY: N-D-T Seals, Inc. warrants that, at the time of manufacture, this product meets the specifications set forth above. Since we have no control over customers' use of the product, N-D-T Seals, Inc. disclaims all implied warranties of merchantability or fitness for a particular purpose. No warranties beyond those expressed herein are applicable.

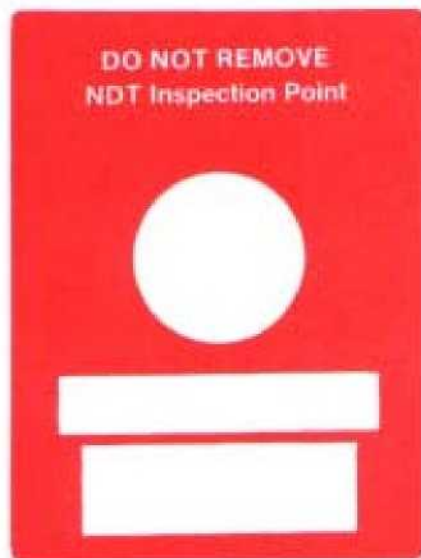
Note: As we improve our products, N-D-T Seals, Inc. warranties, application information, code approvals and performance specifications are updated. If this piece is more than one year old, please contact the company for the latest information.

NDT INSPECTION POINT LABELS

■ High Quality Thickness Measurement Location (TML) Labels for Pipe and Equipment Process Safety Management

■ Low-Leachable, High-Strength Adhesive

■ Temperature Resistance -40°F to +300°F (-40°C to +149°C)



A



B



C/D



E



F



G



H



J SCTS05D0105.00



K



M

*Petroleum Refining • Chemical • Petrochemical • Paper and Pulp
Power Generation • Manufacturing • Transportation*

Reference to:

OSHA 29 CFR 1910.119/261
(Monitor Process Equipment)

API 510/570/653
Inspection Codes
API RP 578/580

■ Contact for Samples, Quotes and Sales:

■ **Standard Label Product Descriptions:**

Label "A" - Measures 3"x3.875" with a 1.25" diameter opening for inspection and blank spaces for on-site inscription. A 7.0 mil UV laminate is an integral part of the label with a removable tab to overlay the inscribed marking. The standard label is bright orange. Wording: "DO NOT REMOVE", "NDT INSPECTION POINT".

Label "B" - Measures 2" x 3" with blank spaces for on-site inscription. A 4.0 mil UV laminate is an integral part of the label with a removable tab to overlay the inscribed marking. The standard label is bright orange. Wording: "DO NOT REMOVE", "NDT INSPECTION POINT".

Label "C" - Measures 1"x2" with a .75" diameter opening for inspection and a blank space for on-site inscription. Includes a 3.0 mil UV laminate. The standard label is bright orange. Wording: "DO NOT REMOVE", "NDT PT.".

Label "D" - Identical to Label "C" with a 4.0 mil UV laminate supplied as an integral part of the label with a removable tab to overlay the inscribed marking.

Label "E" - Measures 1.5" in diameter with a 4.0 mil UV laminate. The standard label is bright orange. Wording: "TML LOCATION", "DO NOT REMOVE".

Label "E2" - (Not Pictured) Identical to Label "E" in size, color and wording, but the label stock is 1.8 mil destructible vinyl with UV cured ink. NOTE: Maximum continuous use temperature is +200°F. (+93°C).

Label "F" - Measures 1.25" in diameter with a .75" diameter opening and a 4.0 mil UV laminate. The standard label is bright orange. Wording: "UT LOCATION", "DO NOT PAINT".

Label "G" - Measures 1.25" in diameter with a 4.0 mil UV laminate.

Label "H" - Measures 1.5"x1.5" with a .625" diameter opening and a blank space for on-site inscription. A 4.0 mil UV laminate is an integral part of the label with a removable tab to overlay the inscribed marking. The standard label is bright green. Wording: "DO NOT PAINT", "NDT POINT".

Label "J" - Measures 2.5" X .75" to accommodate up to 14 characters. These bar-coded TML labels are printed on 2.0 mil white polyester stock, per customer specifications, for on-site application or as an integral part of Labels "A" or "B". Any bar-code symbology can be printed. Set-up charges may apply.

Label "K" - Measures 2.25" X 1.25" with a 4.0 mil UV laminate. The standard label is bright orange. Wording "800-261-6261" "UT X TML", "Do Not Remove."

Label "K2" - (Not Pictured) Identical to Label "K" in size, color and wording, but the label stock is 1.8 mil destructible vinyl with UV cured ink. Note: Maximum continuous use temperature is +200°F (+93°C).

Label "L" - (Not Pictured) Identical to Label "K" in stock, color and wording, but is smaller and measures 2.0" X 1.25".

Label "M" - Measures 1" X .5" with a 3.0 mil UV laminate produced as a perforated "tape" for use on any diameter piping. The standard label is bright green. Wording: "DO NOT REMOVE" and two arrows.

Label "N" - (not pictured) Measures 1.5" X 2.5" with the same attributes as Label "D".

■ **General Product Specifications:**

The typical label stock is 3.5 mil matte silver mylar polyester material. The matte coating resists degradation from scuffing, chemicals, moisture and wide temperature fluctuations.

The adhesive is a high performance acrylic for strong bonding on textured surfaces.

Leachable chloride, fluoride and sulfur in the adhesive, as measured by ion chromatography - PPM - is 3, less than one, and less than one, respectively.

■ **General Product Application Guidelines:**

Minimum application temperature for the adhesive is 58°F (15°C). For best bonding conditions, application surface should be at room temperature or slightly higher.

For maximum bond strength, the surface should be clean and dry. The application surface should be free of loose particulate, such as dust, dirt and corrosion. A typical cleaning solvent is heptane or an industrial grade isopropyl alcohol. Consult the manufacturer's Material Safety Data Sheet for proper handling and storage of solvents.

The acrylic adhesive requires 48-72 hours to achieve 90% of its ultimate bond strength. Several weeks are required to achieve 100% of its ultimate bond strength. Higher initial bonds are achieved through increased rub down pressure.

■ **Customization and Accessories:**

Special design labels (color, logos, etc.) can be quoted.

Stainless steel tags (1" x 1" and 1" x 3") are stocked for use with NDT Inspection Plugs. Custom design metal tags can be quoted.

Industrial strength permanent markers for inspection plugs, labels and tags are available.

WARRANTY: N-D-T Seals, Inc. warrants that, at the time of manufacture, this product meets the specifications set forth above. Since we have no control over customers' use of the product, N-D-T Seals, Inc. disclaims all implied warranties of merchantability or fitness for a particular purpose. No warranties beyond those expressed herein are applicable.

Note: As we improve our products, warranties and application information, code approvals and performance specifications are updated. If this piece is more than one year old, please contact the company for the latest information.

