ACCESS PLUG FLANGE, INC.

“The Worldwide Leader In Inspection Port Technology.”

Match your Inspection Ports to your Process Temperatures

-185 °F
-32 °F
600 °F
1200 °F
Match your Inspection Ports to your Process Temperatures with Access Plug Flange, Inc.

Access Plug Flange, Inc. helps customers in the oil, gas, and petrochemical industries by providing inspection ports and labels for Non-Destructive Testing (NDT) programs on insulated and non-insulated pipe and vessels to monitor CUI.

Our extensive product line of inspection ports will allow you to “match your inspection ports to your process temperature,” from cryogenic to steam and above. Our inspection ports are designed with the largest sealing and inspection area in the industry to provide the most reliable and insulation efficient port. Since the development of the inspection port in 1994, we have delivered over five million ports to multiple customers with world class reliability.

**Inspection port benefits:**

- Simple and reliable
- Temperature ranges -185°F to 1200°F
- Maintains system integrity
- Quality materials and standards.

We also provide inspection labels to identify inspection points on non-insulated pipes and vessels and vibration labels to identify inspection points on rotational equipment. Through our sister company, Southern Stud Weld, Inc., we can provide a complete line of insulation accessories like CD weld pins, self-stick insulation hangers, lacing anchors, refractory anchors, and complete stud welding systems.

Our products are manufactured at our facilities located in Houston and Irving, Texas. We have a global distribution channel to meet customers requirements across US, Canada, Mexico, South America, Asia, and European markets.

*Note: Products are manufactured and protected under US and worldwide patents.*
MATCH YOUR INSPECTION PORTS TO YOUR PROCESS TEMPERATURES

AMBIENT SERVICE
SILICON RUBBER PLUG
33°F TO 600°F

HIGH - SILVER
600°F
MEDIUM - RED
500°F
LOW - BLUE
350°F

HOT SERVICE
HT - 2
METAL CAP
600°F TO 1200°F

HIGH TEMPERATURE METAL PLUG
HT-2
600°F TO 1200°F

COLD CHECK
-185°F TO 32°F

HOT & AMBIENT SERVICE
AG - 1
(FOR THIN INSULATION)
METAL CAP
33°F TO 1000°F

HOT SERVICE
HT - 1
METAL CAP
600°F TO 1000°F

HOT & AMBIENT SERVICE
AG - 1
(FOR THIN INSULATION)
METAL CAP
33°F TO 1000°F

CRYO SERVICE
SILICON RUBBER PLUG
-185°F TO 32°F

Our products are manufactured at our facilities located in Houston and Irving, Texas. We have a global distribution channel to meet customers' requirements across US, Canada, Mexico, South America, Asia, and European markets.
SIZES, MATERIALS, AND STYLES AVAILABLE

MATCH YOUR INSPECTION PORTS TO YOUR PROCESS TEMPERATURES

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<th>Temperature Range</th>
<th>CRYO SERVICE</th>
<th>AMBIENT SERVICE</th>
<th>HOT SERVICE</th>
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<td>-185°F to 32°F</td>
<td>RED PLUG &amp; METAL CAP</td>
<td>BLUE PLUG to 350°F</td>
<td>HT1 &amp; AG1 to 1000°F</td>
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<td>32°F to 33°F</td>
<td>from -185°F to 32°F</td>
<td>RED PLUG to 500°F</td>
<td>HT2 to 1200°F</td>
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<td>33°F to 600°F</td>
<td>SILVER PLUG to 600°F</td>
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HT-1
2 1/2” INSPECTION PORT

CAP
FLANGE 2 1/2” DIA
METAL TO METAL AND O-RING SEALS

AG-1
2 1/2” INSPECTION PORT

CAP
FLANGE 2 1/2” DIA
O-RING SEAL

HT-2
2 1/2” INSPECTION PORT

CAP
FLANGE 2 1/2” DIA
O-RING SEAL WITH CUSTOMER SUPPLIED HIGH TEMP INSULATION PAD

1 3/4” INSPECTION PORT

PLUG
FLANGE 1 3/4” DIA
PRE-CONTOURED FOR 6” DIA PIPE

2 1/2” INSPECTION PORT

PLUG
FLANGE 2 1/2” DIA

2 1/2” x 12” INSPECTION PORT

PLUG
FLANGE 2 1/2” DIA

4” INSPECTION PORT

PLUG
FLANGE 4” DIA

5” INSPECTION PORT

PLUG
FLANGE 5” DIA

2 1/2” INSPECTION PORT

PLUG
FLANGE 2 1/2” DIA

NOTES:
- Stainless steel material available for all ambient service flanges. Material selection for caps and flanges: 3003 aluminum and 304 stainless steel;
- Neoprene corrugated transition gasket available for 2 1/2”, 4”, and 5” ambient service inspection ports;
- All flat flanges can be field contour. See page 7 for installation instructions.
ADVANTAGES

NO SPECIAL TOOLS OR HOT WORK PERMITS REQUIRED FOR FIELD INSTALLATIONS. THEREFORE, WORK CREWS AT SEVERAL LOCATIONS CAN BE INSTALLING ACCESS PLUG FLANGES AT THE SAME TIME.

USE ONLY THE AMOUNT OF SCREWS NECESSARY. SILICONE INJECTED UNDER THE FLANGE DOES MOST OF THE WORK. USE INJECTION PORTS/MOUNTING HOLES AS REQUIRED.

PULL CENTER NIPPLE TO BREAK SEAL

REMOVE RUBBER PLUG AS SHOWN

A UT METER IS USED TO MAKE PROPER INSPECTION
APF INSPECTION PORT - BRAND ADVANTAGE

A. LARGEST INSPECTION AND INSULATION AREA
- Inspection area / hole drill area is the best ratio in the industry;
- 30% more inspection and insulation area;
- Only port with optional EXTENSION SLEEVE.

B. LARGEST SEAL AREA & HOLDING POWER
- Adheres to jacketing surface with largest seal area, as opposed to competitor mostly sealing on jacketing edge;
- Large SILICONE VOLUME to absorb jacketing thermal expansion and contraction;
- Only ports built to hold temperatures from -185°F (Cryo) to 1200°F (HT2).

C. NO HOT WORK PERMIT & HOLE SAW NEEDED.

D. RELIABLE DESIGN to match your inspection commitment. Our port helps you achieve the structural validity required by ASTM C1729.

E. SILICONE RUBBER PLUG
- Designed to match multi-temperature processes from -112°F to 600°F;
- Patented seal breaker tab for one handed use to enhance safety;
  Molded in strain relief to prevent plug loss, thus minimizing CUI.
FIELD INSTALLATION

1 ¾” CORRUGATED GASKET ELIMINATES HIGH LABOR COSTS OF INSTALLING A CORRUGATED TRANSITION SHEET AVAILABLE IN 2 1/8”, 4” AND 5” SIZES

FIELD CUT OUTSIDE LIP BETWEEN INJECTION PORTS AND BEND FLANGE AS REQUIRED AS SHOWN FOR SMALL CONTOUR CHANGES.

* ALL FLAT FLANGES MAY BE CONTOURED BY SNIPPING FLANGE SKIRT AS SHOWN.
ACCESS PLUG FLANGES

FOR INSULATED PIPE
SILICONE RUBBER PLUG
PROCESS TEMPERATURE RANGES
HIGH SILVER    -    600°F
MED. RED       -    500°F
LOW BLUE       -    350°F

ACCESS PLUG FLANGE INTRODUCES THE ONLY LINE OF INSPECTION PORTS THAT ALLOW YOU TO MATCH YOUR INSPECTION PORT TO YOUR PROCESS TEMPERATURE.

- BANDING SLOT AVAILABLE FOR VAPOR BARRIER INSTALLATION
ACCESS PLUG FLANGE HAS DESIGNED AN ALL NEW HIGH TEMPERATURE METAL CAP WITH A MECHANICAL INNER SEAL AND A WEATHER TIGHT OUTER O-RING SEAL FOR STEAM LINE APPLICATIONS.
INTRODUCING THE FIRST AND ONLY INSPECTION PORT FOR HOT APPLICATIONS. DESIGNED TO BE USED WITH A CUSTOMER SUPPLIED HIGH-TEMPERATURE INSULATION PAD FOR RETAINING THE THERMAL INTEGRITY AND PREVENTING INSULATION LOSS DURING INSPECTIONS.

' O' RING WEATHER SEAL WITH RETAINED INSULATION PAD TO PREVENT B.T.U. & INSULATION LOSS

STAINLESS STEEL PIN AND WASHERS

BANDING STRAP OPTION

HT-2 - 600° F - 1200°F

FOR INSULATED PIPE HIGH TEMP WEATHER TIGHT METAL PLUG WITH 'O' RING SHOWN WITH CUSTOMER SUPPLIED HIGH TEMP INSULATION PAD
INTRODUCING THE FIRST AND ONLY INSPECTION PORT FOR HOT APPLICATIONS. DESIGNED TO BE USED WITH A CUSTOMER SUPPLIED HIGH-TEMPERATURE INSULATION PAD FOR RETAINING THE THERMAL INTEGRITY AND PREVENTING INSULATION LOSS DURING INSPECTIONS.

FOR INSULATED PIPE
HIGH TEMP WEATHER TIGHT METAL PLUG WITH ‘O’ RING DESIGN FOR CUSTOMERS USING THIN INSULATION BLANKET

HT-2   -   600°F - 1200°F

A SHALLOW PENETRATING FLANGE COMPATIBLE WITH THIN INSULATION BLANKET.

'0' RING WEATHER SEAL WITH METAL CUP DESIGN FOR EFFICIENT AMBIENT COOLING

FLANGE - LOW PROFILE

BANDING STRAP OPTION

AG-1   -   600°F - 1000°F
ACCESS PLUG FLANGE INTRODUCES THE FIRST AND ONLY INSPECTION PORT FOR ON LINE CRYOGENIC APPLICATIONS DESIGNED WITH AN EXTENSION SLEEVE, A SILICONE SADDLE GASKET AND A FOAM INSERT TO PRESERVE THE INTEGRITY OF THE VAPOR BARRIER WHICH WILL PREVENT ICE BUILD-UP.
LOCATE AND MARK ID. OF FLANGE.

WITH A UTILITY KNIFE, START CUTTING OUT TRACED HOLE.

WITH TIN SNIPS, CUT OUT COMPLETE HOLE OR DRILL WITH A 2 9/16” HOLE SAW.

CLEAN OUT INSULATION AS REQUIRED.

FILL BACKSIDE OF FLANGE WITH SILICONE.

INSTALL 2 SELF-STARTING SCREWS ACROSS FROM EACH OTHER, ONE FOR A SAFETY LINE.
FOR MOST APPLICATIONS, INSULATION TUBE WILL COME PRE-CUT TO PROPER LENGTH.

NOTE: TO HELP WITH ICE BUILD-UP DURING TESTING, SPRAY NON-TOXIC PROPYLENE GLYCOL ANTIFREEZE. 50 / 50 MIX = -70°F. NOT A HAZARDOUS CHEMICAL

FOR FIELD CUT, INSTALL INSULATION TUBE INTO SILICONE SADDLE GASKET, PUT IN PLACE AS SHOWN AND MARK. REMOVE FROM PIPE, CUT OPPOSITE END TO PROPER LENGTH. (DO NOT CUT MACHINED END OF TUBE) DEBURR.

APPLY SILICONE UNDER-FLANGE AND INSERT ASSEMBLY INTO POSITION. SECURE IN PLACE WITH 1/2" BANDING LOCKING STRAP.

PUT FOAM INSERT IN PLACE AND INSTALL RUBBER PLUG.
**ACCESSORIES**

**EXTENSION SLEEVE**
FOR SECURE PIPE INSPECTION

Dimensions: 0.020” THICK x 6” L x 2 1/2” DIA; Smooth Aluminum Jacketing, per ASTM B209, with poly-kraft moisture retarder.

**TRANSITION GASKET**
DESIGNED TO ASSIST IN INSTALLING OUR INSPECTION PORTS ON 1 1/4” CORRUGATED JACKETING

Material: compound #110-60 Neoprene; Available for 2 1/2”, 4” and 5” Flanges.

**LABELS**

**VIBRATION POINT**
FOR ROTATIONAL EQUIPMENT

**INSPECTION POINT**
FOR NON-INSULATED PIPE

Leachable chloride, flouride and sulfur in the adhesive, as measured by ion chromatograph -PPM- is 3, less than one, and less than one, respectively;

Operating temperature range is -40°F to 300°F. Minimum application temperature is 58°F;

Resistant to chemicals such as isopropyl alcohol, detergents, engine oils, and waters;

For optimum adhesion, the surface must be clean and dry.
MANY SIZES AND STYLES AVAILABLE FOR ALL YOUR PLANT APPLICATIONS

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INSPECTION PORT TECHNOLOGY

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