

NO.: K-1483

REV.: B

DATE: 05-22-2020

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### MIJ INSTALLATION, OPERATION and MAINTENANCE INSTRUCTIONS

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#### General Information

- 1. The Kerotest MIJ insulating joint is delivered completely assembled and tested at the factory and should not be disassembled for installation.
- 2. Environmental Conditions: Temperature limits: -20°F (-29°C) to 200°F (93°C). Temperatures and/or humidity variations can impact the isolating properties of the insulating joint.
- 3. All joints are designed for fuel gas piping service either for above ground or buried service.
- 4. It is important to keep the inside of joint clean and prevent dirt or other contaminants from entering the joint during installation.
- 5. All joints are marked with a unique serial number, located both on the product label and scribed onto one of the joint ends, which is fully traceable to the steel used, process controls, and test results. It is suggested that the customer record the serial number at installation for future reference.
- 6. Store joint in original shipping package until installation.
- 7. Joints are identified and marked as follows;



Nominal Pipe Size (NPS)
"Additional Text" as needed per item ordered
ANSI Pressure Class Rating
Kerotest Part Number text and barcode
Production Date
Serial Number
Design Pressure
Test Pressure
Design Temperature
Weld End Pipe Material
Weld End Pipe Wall Thickness
Optional ASTM F2897 Tracking and Traceability code and

barcode or other tracking and coding system



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### **Installation Planning**

1. The joint should not be located near a tie-in to an existing piping system or located directly next to an elbow or tee.

- 2. Bending, torsion, and tensile loads induced by the piping system should be minimized and not directly transferred to the joint. The insulating joint should not support the weight of the piping system.
- 3. DO NOT anchor the joint directly.
- 4. DO NOT stretch or bend the joint to accommodate mismatched pipe.
- 5. The joint may be installed above and below ground. If the joint is installed vertically, ensure the **closure weld**, on the center hub, faces up (see Figure 1).
- 6. If a joint is to be installed in direct sunlight, a suitable UV resistant top coat, such as Amercoat® 450H, should be applied after installation to resist the UV effects of the sun. Ensure that the top coat is not conductive.

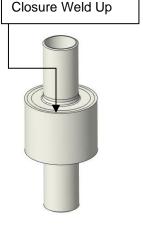


Figure 1

7. For installation in high hydrocarbon contaminated soil areas, contact Kerotest for more assistance.

## **Handling**

- 1. Joints are generally shipped in crates or on pallets. To protect the joint in transit and avoid external contamination, keep the joint in the original package until it is ready to be installed.
- 2. Once removed from packaging, handle carefully to prevent damage to the joint and the coating. Care must be taken when lifting the joint so that excessive bending loads are not introduced to the insulator.
- 3. DO NOT lift the joint by the ends, but only support with straps on the center hub section when installing as shown in Figure 2.



Figure 2



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#### Installation

- 1. Prior to installation, inspect the joint for any signs of inside or outside damage or debris inside.
- 2. The joint may be installed above and below ground.
- 3. DO NOT hammer, hit, or heat the joint ends.
- 4. The joint should rest on properly compacted soil with no rocks or other sharp objects in direct contact.
- 5. DO NOT weld the joint with welding equipment grounded on opposite side of joint. Make sure the joint is grounded to the same side of the weld. This will avoid damage to the dielectric properties due to welding current.
- 6. Welding operations shall be carried out by qualified welders, using an approved WPS. Welding and post weld heat treat shall be carried out in a controlled manner so the heat generated does not damage the insulating materials. The center Hub area of the joint must not exceed the maximum temperature listed above. Suitable welding cooling methods shall be employed and the temperature monitored during the welding process and post weld heat treat to avoid exceeding the maximum temperature.
- 7. Each joint is coated internally and externally with non-conductive epoxy paint. This coating helps to insure the insulating ability and long term durability of the joint. If the epoxy coating is damaged, see Maintenance section below. If additional coating (UV top coat) is to be applied, ensure that the applied coating is non-conductive and applied in suitable conditions and with appropriate surface preparation as recommended by the coating manufacturer. It is the responsibility of the user to assure the joint remains non-conducting if additional coating is applied.
- 8. When backfilling the ditch, do not drive heavy equipment over a partially buried joint, especially when compacting soil around the pipe. Backfill materials should not have rocks or other sharp objects in direct contact with the joint.

# **Operation**

- 1. All insulating joints are assembled and tested at the factory and function as an insulator. There is no field assembly required other than welding installation.
- 2. There is no preferred directional orientation for the insulating joint. However, when installed in the vertical position, the closure weld side should face up as shown in Figure 1.

### **Training**

- 1. Specific, formal training by Kerotest is generally not required. However, Kerotest is available to help users become comfortable with the product and answer any specific questions.
- 2. Do not hesitate to contact Kerotest as listed below with any specific requests.



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#### **Maintenance**

- 1. Kerotest Monolithic Insulation Joints have no user serviceable parts and are designed to be maintenance-free if adequate corrosion control methods and inspections are followed.
- 2. If the protective epoxy coating is damaged, ensure that the repair coating is non-conductive and applied in suitable conditions and with appropriate surface preparation as described in the Paint Repair Process below. It is the responsibility of the user to assure the joint remains nonconductive if additional coatings are applied. Color matched touchup paint can be supplied by Kerotest upon request.
- 3. Do not hesitate to contact Kerotest as listed below with any specific requests.

### **Paint Repair Process**

If the original coating is damaged and needs paint repair, it is the responsibility of the end user to ensure the joint remains non-conductive after the repair procedure.

- 1. Remove oil, grease, and loosely adhering deposits. Follow paint manufacturer's recommendations for metal preparation prior to painting.
- 2. Care must be taken not to damage the adhesive sealant during the abrasion process. Manual abrading practices should be used in this area. See Figure 3.
- 3. Ensure abraded surface is cleaned of any debris with air blast or clean lint free cloth.
- 4. Follow paint manufacturer's requirements for paint application.

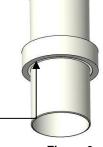


Figure 3

Adhesive Sealant

#### **Document history**

Rev	Date	Written By	Eng Approval	QA Approval	Sales Approval	Description
Α	08-12-2019	G Groll	D Frederick	W Copeland	J Miller	EAN S-1442 Initial Release
В	05-22-2020	G Groll		William Copeland 2020.05.22 14:39:08 -04'00'	Joe Miller 2020.05.26 13:26:54 -04'00'	Update sample Label EAN S-1582

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