

Kerotest Insulators

MIJ—Monolithic Isolation Joint



Product Brief

The Kerotest MIJ Insulators bring the highest quality monolithic isolation joint manufacturing and assembly capabilities to North America. MIJ Monolithic Isolation Joints, built right here in the U.S., use advanced corrosion prevention technology, testing equipment, tracking procedures, materials and coatings. The quality management system of our Mansura, Louisiana, facility meets the requirements of ISO 9001:2015, and now houses Kerotest's new MIJ manufacturing operations. With this new state-of-the-art equipment and capability, our customers will benefit from short lead times, ready inventory and reduced shipping costs.

Kerotest has produced and delivered WEI insulators for more than 48 years now. That experience led us to the design and development of the MIJ Insulator—a natural progression in maintaining current standards and meeting changing industry needs in both performance and production. The Kerotest MIJ Insulator fittings are designed for the most demanding cathodic applications in new and existing natural gas and petroleum pipelines.

Features/Benefits

- **No maintenance required**
- **Sizes**—NPS 3/4 through NPS 24
- **Available pressure classes**—ANSI Class 150, ANSI Class 300, ANSI Class 600
- **Meet or exceed** all industry codes and regulations
- **Provides electrical isolation** for gas, water and oil pipelines
- **Compact design**, low profile
- **Non-conductive epoxy coated** internally and externally
- **Pipe buttweld ends per API 5L** (ANSI B16.25 available upon request)
- **Tested**—100% hydrostatic and electrical tested
- **Eliminates shorts** and stops stray current
- **Install above or below ground**
- **Competitively priced and built in the USA**
- **Economical**—quick install and no maintenance required
- **Fast turnaround** from approved order to shipment
- **Factory assembled**—eliminates flanges, bolting torque requirements and pipe alignment issues



An Employee-Owned Company

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Standard Specifications

	ANSI 150	ANSI 300	ANSI 600
Design Pressure	285 psi	740 psi	1480 psi
Hydrostatic Test Pressure	450 psi	1125 psi	2225 psi
Temperature Range	-20° F to +200° F	-20° F to +200° F	-20° F to +200° F
Dielectric Strength	> 5 kV at 50 Hz for 1 minute	> 5 kV at 50 Hz for 1 minute	> 5 kV at 50 Hz for 1 minute
Electrical Resistance	> 25 MOhms at 1000 Vdc	> 25 MOhms at 1000 Vdc	> 25 MOhms at 1000 Vdc

Other options available upon request.

Materials of Construction

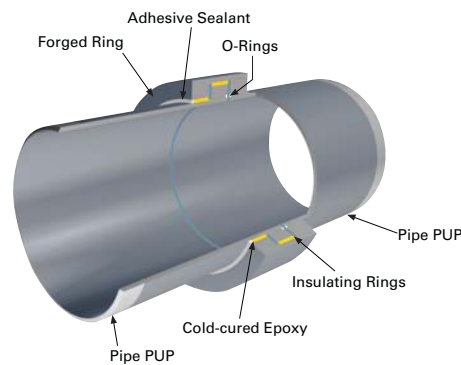
Component	Material
Pipe PUP	API-5L
Forgings	ASTM A105, ASTM A694
Insulating Spacer	ASTM D709 Type IV G10
O-Rings	Buna-N/Nitrile, 70 Durometer, ASTM D2000 (FKM/Viton available upon request)
External Coating	Epoxy Resin – 4–8 mils (101–203 µm)
Internal Coating	Epoxy Resin – 4–8 mils (101–203 µm)
Insulating Filler Material	Cold Cured Epoxy Resin
Adhesive Sealant	Silicone

Design Codes and Standards

ASME/ANSI B16.5
ASME VIII Division 1 Appendix 2
ASME/ANSI B31.3, B31.4, B31.8
ASME BPVC IX/API 1104
API 5L Pipe
API 5L Weld Ends

Mechanical and Electrical Properties

Hydrostatic Testing to 1.5X the Design Pressure
Bending Moment—Longitudinal stress of 75% SMYS minimum
Torsional Stress of 5% SMYS minimum
Dielectric Strength > 5 kV at 50 Hz for 1 minute
Insulation Resistance > 25 MOhms at 1000 Vdc



Factory Production Testing

Dielectric Strength Test ①
Insulation Resistance Test ①
Air Tightness Test 80–100 PSI
Hydrostatic Test—1.5X Design Pressure
100% NDE—MPT according to ASME BPVC VIII App. 6
WPS according to API 1104
Painting Check—DFT Measured
Radiographic Examination (available upon request)

① Before and after hydrostatic test.

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Kerotest Manufacturing Corp.
5500 Second Avenue • Pittsburgh, PA 15207
412.521.7688 • Fax: 412.521.5990
www.Kerotest.com • Sales@Kerotest.com