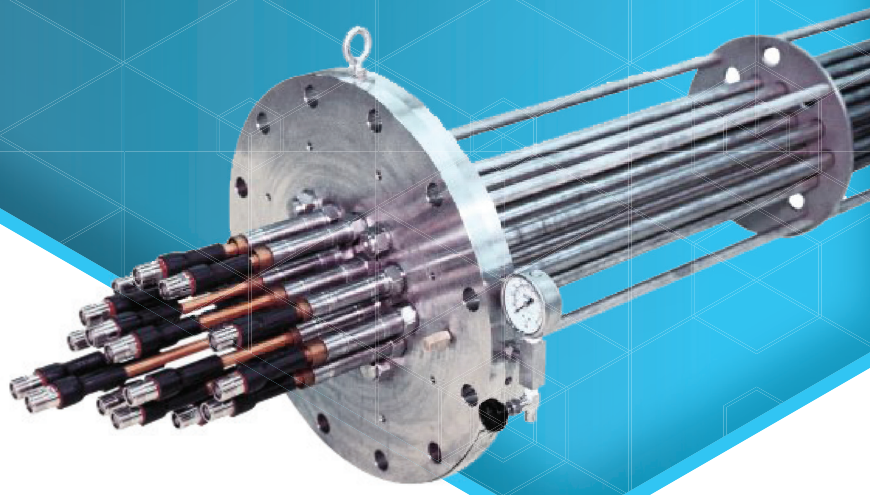
MIRION TECHNOLOGIES

Mirion Technologies (Conax Nuclear), Inc.



NUCLEAR CONTAINMENT SEALS

EPA

Electric Penetration Assembly

SERVICE CLASS

- Instrumentation
- Medium voltage power
- Low voltage power
- Low voltage instrumentation
- Low voltage control

DESIGNS

- Epoxy Module
- Swaged Modular
- Swaged Canister

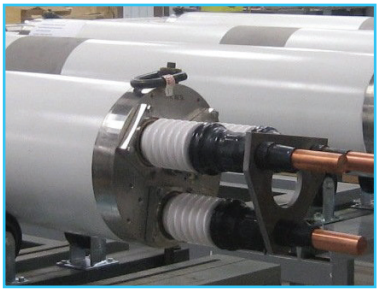
Featuring: conax nuclear

APPLICATIONS

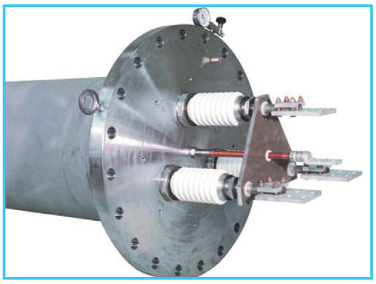
- Stainless Steel pressure boundary headerplate of ASME B &PV Code material and design.
- Modular conductor feedthrough for maximum flexibility of cable installation routing through the containment structure.
- Metal-to-metal seal of the conductor feedthrough module to the EPA headerplate.
- Feedthrough tube provides complete mechanical protection.
- Dual seals for integral leak monitoring system.
- EPA does not require nitrogen pressurization gas to maintain containment integrity during normal or accident conditions.
- Continuous, fully insulated, solid copper conductors from inboard to outboard, NO internal splices or brazing to metallic sheaths.
- Sealants in the conductor feedthrough module eliminate the possibility of voids, cracks and moisture intrusion.
- 100% shield of solid copper around all coax and triax signal conductors.

DESCRIPTION

Mirion Technologies (Conax Nuclear), Inc. is a worldwide industry leader of Electric Penetration Assemblies (EPA) to the Nuclear Power Industry. For over 50 years, our penetrations have been environmentally and seismically qualified for use in all of the major nuclear power plant designs. EPA provide the electrical and signal capabilities required inside containment, while maintaining the containment pressure boundary during normal and accident conditions. There are several designs to choose from to meet the needs of all power plants. Established in the 60's, our qualifications continue to be the gold standard in the industry.



Canister Design, Medium Voltage Power (5kV through 15kV)



Medium Voltage Power (5kV through 15kV)

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Electric Penetration Assembly (EPA) | NUCLEAR CONTAINMENT SEALS

SERVICE CONDITIONS

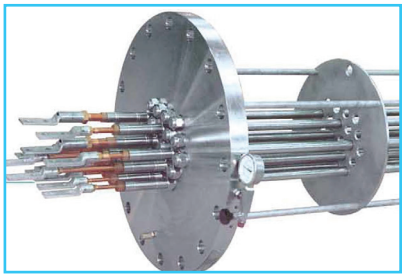
- 60 year normal service temperature: 150 °F (65 °C)
- Higher temperatures can be accommodated with an adjustment in ampacity
- Design basis temperature MSLB: Excess of 420 °F (216 °C)
- Design basis temperature LOCA: Excess of 340 °F (171 °C)
- Design basis pressure: 75 PSIG (517 kPa)
- Severe accident temperature/pressure: 700 °F (371 °C)/120 PSIG (829 kPa) for ten (10) days
- Radiation tolerance: 500 Mrads (5 MGy); gamma; 4,100 M Rads, beta
- Qualification reports to the plant-specific temperature, pressure and chemical spray conditions, with the requirements of IEEE-317, for 60 year service life

CONAX NUCLEAR FACTS

- More than 17,000 EPA installed worldwide in over 300 power plants
- Suppliers of equipment in the Nuclear Power Industry since 1952
- ASME Boiler & Pressure Vessel Code, NPT Stamp and N Stamp certification since 1974

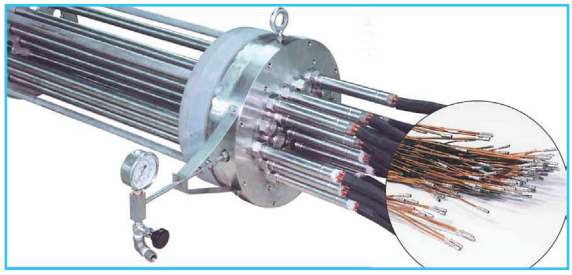
QUALIFICATIONS

- ASME Boiler and Pressure Vessel Code (NPT Stamp) for manufacture to Section III, Subsection NE, Class MC
- Qualified by test to the current standards of IEEE-317, IEEE-323, IEEE-344, IEC Publication IEG-60772, and KTA-3404
- Quality Assurance Program meets the requirements of 10CFR50, Appendix B, and ANSI/ASME NQA-1
- Equipment is provided with: Qualification Test Reports, Material Certifications, ASME Design Stress Reports, Drawings and Procedures
- Audited by: NUPIC; NIAC; NRC

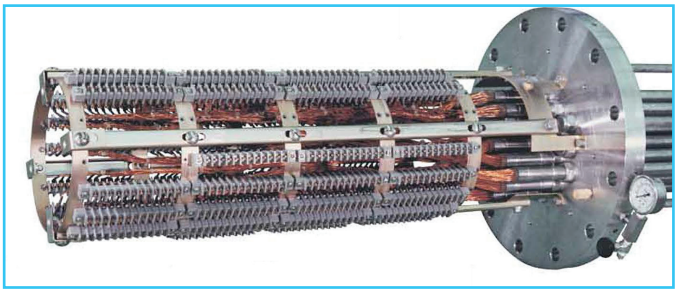


Swaged Construction, Low Voltage Power with NEMA spade connectors

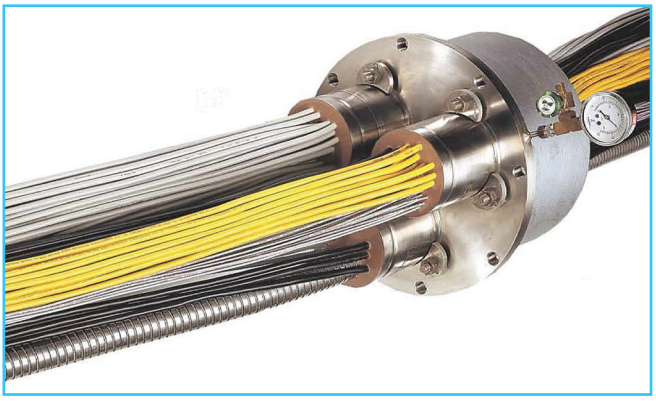
Epoxy Construction, Instrumentation



Swaged Construction, Low Voltage Instrumentation and Control with in-line butt splice connectors



Swaged Construction, Instrumentation and Control with Squirrel Cage Assembly



Epoxy Construction, Low Voltage Control

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