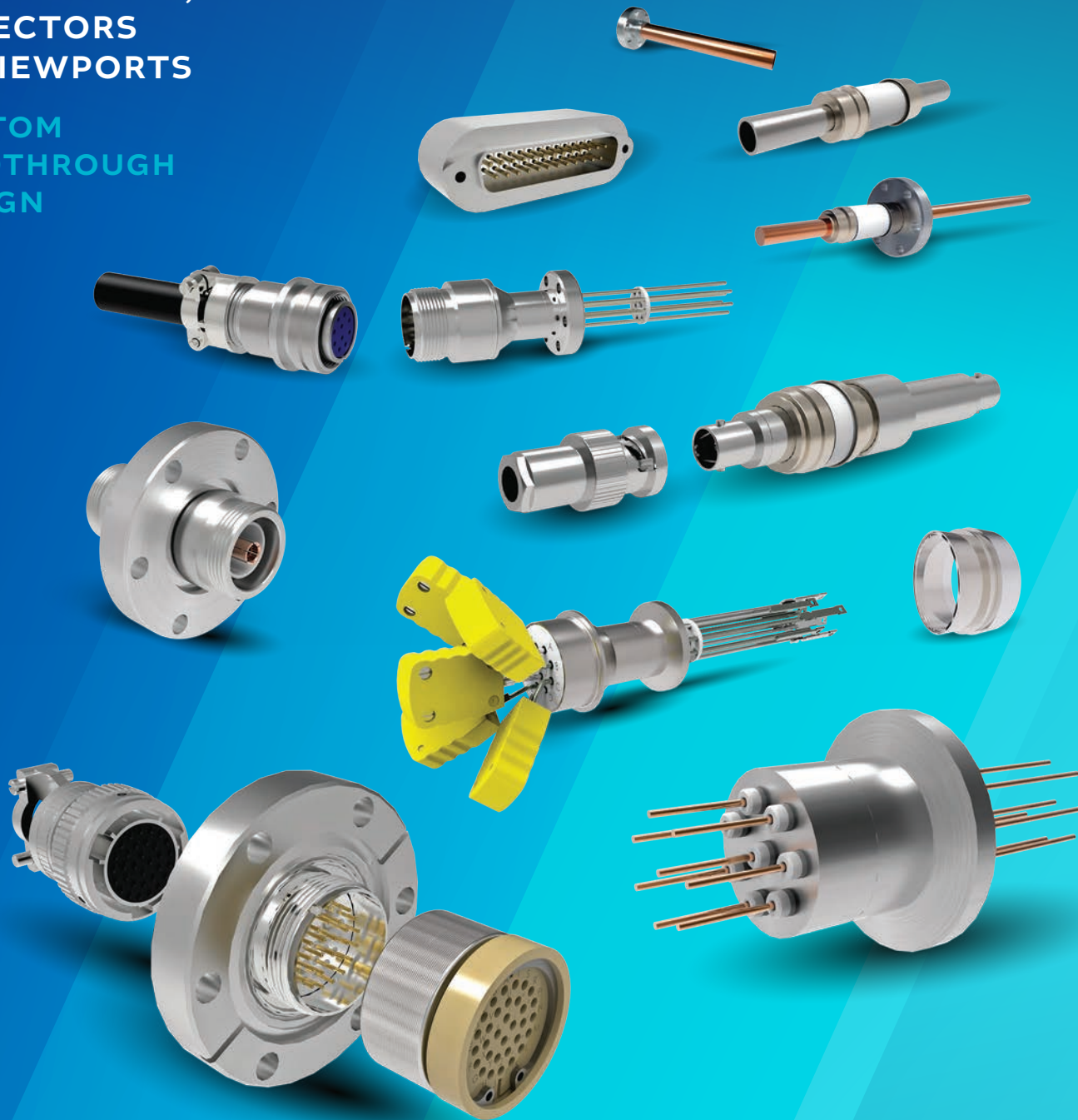




SOLID SEALING
TECHNOLOGY

**HERMETIC
FEEDTHROUGHS,
CONNECTORS
AND VIEWPORTS**

+ **CUSTOM
FEEDTHROUGH
DESIGN**





Solid Sealing Technology designs and manufactures essential electrical components for today's high-tech world.



Our innovative material-joining technologies bond ceramics and glass to metal to create hermetic feedthroughs and connectors tailored for use in vacuum environments.



Experts in design, SST offers a vast catalog of high-performance sealing solutions that improve reliability in demanding engineering settings. And for customers with unique challenges, SST's skilled engineering group creates fully customized parts from the ground up.

Our engineers work closely with every customer to deliver custom hermetic solutions that can be found behind the scenes of some of the world's most advanced technologies.

Examples include industrial, medical, and research facilities where SST parts are used in equipment like energy storage systems, MRI machines, and particle accelerators. We have even sent parts to Mars, empowering NASA's Mars Insight Mission to tackle the challenges of our solar system. Highly innovative, creatively bespoke, and impressively robust, SST hermetic sealing solutions help push the boundaries of technological advancement in an evolving world.

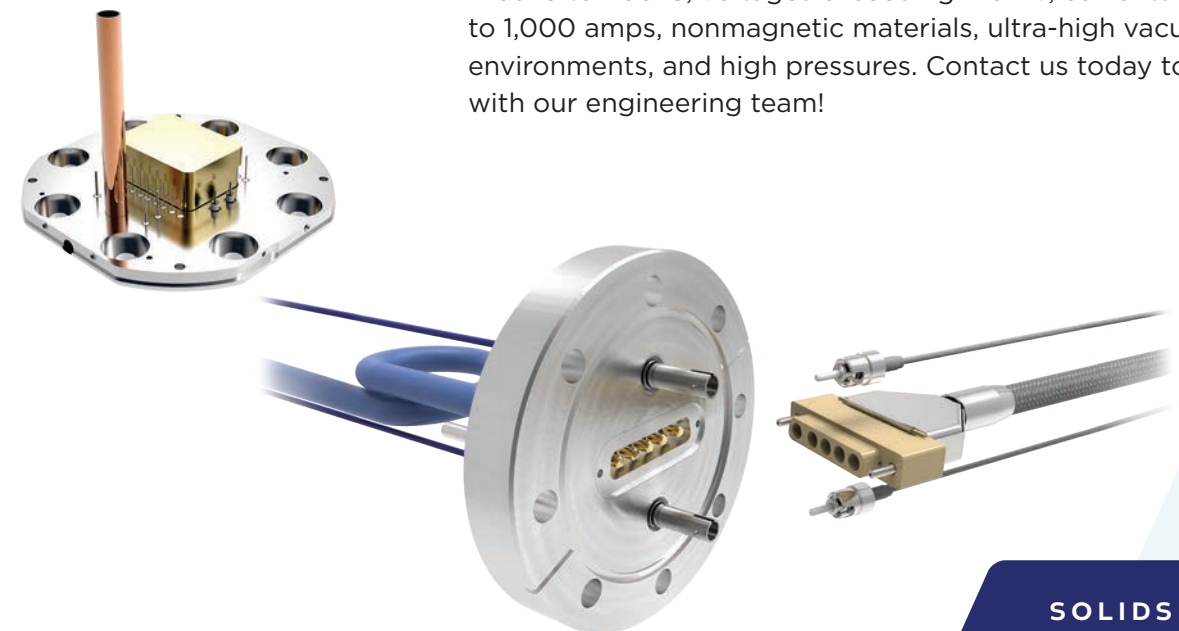
See How It's Made!
Watch our welcome video



LOOKING FOR SOMETHING CUSTOM?

SST creates custom solutions that range from small modifications of our catalog parts to fully custom designs built from the ground up.















We can accommodate a wide range of operating conditions and product requirements including: temperatures from -269°C to 450°C, voltages exceeding 125 KV, currents up to 1,000 amps, nonmagnetic materials, ultra-high vacuum environments, and high pressures. Contact us today to speak with our engineering team!



MARKETS

Solid Sealing Technology provides vacuum feedthroughs and hermetic connectors to a broad range of customers.

Below is a sample of markets and related applications where our unique sealing solutions can be found.

 AEROSPACE	 MEDICAL MRI & X-RAY EQUIPMENT	 SEMI-CONDUCTORS & ANALYTICAL EQUIPMENT
 HIGH-ENERGY PHYSICS	 NANOTECH	 TELECOM
 HOMELAND SECURITY & DEFENSE*	 OILFIELD & DOWNHOLE PRESSURE PRODUCTS	 THIN-FILM COATINGS
 INDUSTRIAL LASERS	 POWER DISTRIBUTION & GENERATION**	 VACUUM
 LIFE SCIENCES	 RESEARCH	

* Including Radiation Detectors, Chemical Detectors (Sniffers) and High-Power X-Ray Systems
 ** Including Superconductivity and Fuel Cells/Alternate Fuels

PRODUCTS

SST offers a large catalog of hermetic products in stock for immediate shipment, and we build solutions for your unique needs.

OUR HERMETIC PRODUCTS:

(A) Feedthroughs & Connectors

- Power and Signal
- Coaxial
- Thermocouple
- Fiber Optic
- Liquid

(B) Isolators

(C) Viewports

(D) Pinch-Off Tubes

(E) Plugs & Accessories

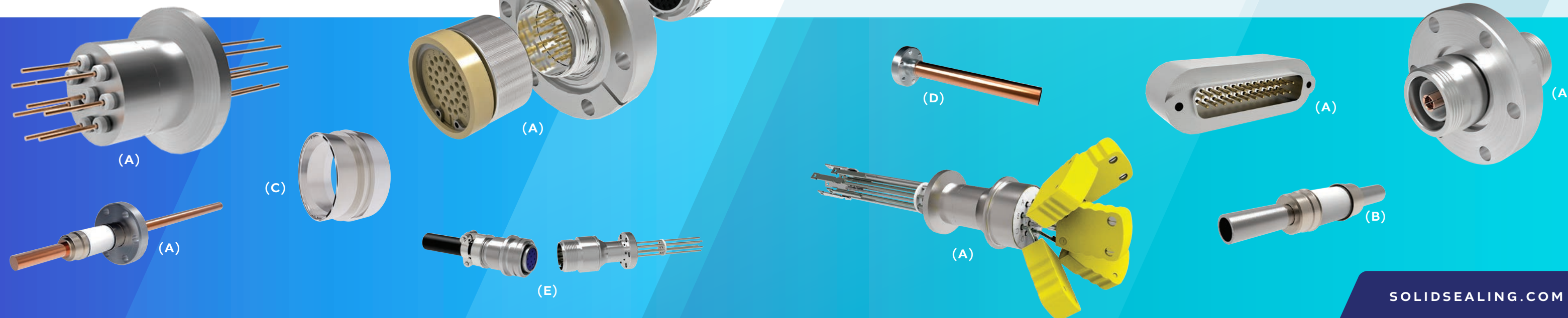
- Cables
- Contacts
- Hardware and Tools

PRODUCT EXAMPLES:

- High-Voltage Bushings
- Sapphire, Quartz, and Extended-Range Viewports
- X-Ray Tubes
- Vacuum Breaks and Multi-Layer Stacks
- Beamline Feedthroughs and Injector Tubes
- Small Vacuum Vessels and Hermetic Packages
- Specialty Metal-to-Metal Brazed Assemblies
- High-Pressure Feedthroughs

Looking for something not on the list?

Please contact us! We have worked with almost every major industry around the world.





CREATING YOUR PART

1— DESIGN REVIEW

The basis of most SST products is ceramic-to-metal sealing and/or glass-ceramic sealing. The process of making your part(s) begins with a comprehensive review of engineering needs that ensures a complete understanding of the application's requirements. Our skilled team will define a production plan that gets you your parts quickly.

2— MATERIAL SOURCING

Our materials and components are sourced from world-class suppliers. Detailed documentation and specifications are available to ensure our materials meet your needs.

3— PRECISION CLEANING

All components at SST must meet strict standards and are processed through our customized cleaning system. Our standardized process includes a specialty aqueous cleaner followed by a cascade DI water rinse. This cleaning process has been used and approved by key customers like Sandia National Labs and the United States' Army. The same process can be used for precision cleaning of metals, ceramics, and glass and is suitable for UHV environments.

4— MANUFACTURING

With your production plan in place, SST will begin manufacturing your parts. We offer a technology suite that includes metalizing and plating of ceramics, active metal joining, vacuum and hydrogen brazing, glass-ceramic sealing, TIG welding, spot welding, machining, and mechanical assembly.

5— FINAL INSPECTION AND SPECIAL TESTING

SST verifies all critical requirements before shipping, and our customer service team will provide any product-related resources you need. SST offers vacuum-bagging and other special packaging options if needed. Parts will arrive clean and ready to use out of the box.

Calibrated tools, vision systems, and a CMM are used to verify mechanical attributes. And electrical requirements are validated with the latest electrical test equipment. SST is certified compliant to ISO9001:2015 and often works within the more stringent requirements of defense and medical customers.

- Leak Testing - High-sensitivity Helium Mass Spectrometer
- 100% of SST parts are leak tested before being shipped. Parts are tested to a leak rate of less than 1×10^{-10} atm.cc/sec.
- Pressure Testing - Hydrostatic Pressure testing up to 30,000 psi.
- Electrical Testing - Continuity, HiPot/DWV (Dielectric Withstanding Voltage), Megohm Resistance, Capacitance, Heat Rise Testing
- Physical Testing - Torque, Push-Pull Testing, Engagement Force Measurement
- CMM, Vision Systems, Go/No-Go thread and pin gauges, Surface Profilometer, and certified metrology equipment for inspection and analysis
- XRF Thickness Testing of Coatings & Material Verification
- Basic Thermal Testing: LN2 exposure, vacuum bakeout
- Fiber Optic Insertion Loss Testing

Let's Get Started!

Get in touch to start building your custom hermetic product — our expert team of designers and engineers are here to bring your vision to life!

**CONTACT US TO BEGIN
CREATING YOUR PART**

 **+1 518-874-3600**
INFO@SOLIDSEALING.COM

SOLIDSEALING.COM

Our focus is always on customer satisfaction. We strive to constantly improve our quality management system and product performance, and we are proud to be ISO9001 certified. Our commitment to continuous improvement extends to all aspects of our business, from our first contact to delivery of your final part.



SOLID SEALING TECHNOLOGY

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HEICO
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ISO
CERTIFIED
9001:2015

ITAR
REGULATIONS
COMPLIANT

RoHS
COMPLIANT

REACH
COMPLIANT