

HAST Feedthroughs

Highly Accelerated Stress Testing (HAST) exposes semiconductor devices to elevated temperature, humidity and pressure to evaluate reliability and identify premature failures. These demanding conditions also place significant stress on the wires, insulation and seals used to connect sensors and measurement equipment inside the chamber.



Our HAST feedthroughs by Conax Technologies provide reliable, leak-tight connections for bringing electrical and thermocouple wires through the chamber wall while maintaining the integrity of the test environment. Designed for repeated thermal pressure and humidity cycling, the assemblies are available in a wide range of configurations to accommodate different measurement and chamber requirements.

TYPICAL FEEDTHROUGH EXAMPLES



HAST feedthrough with nickel plated copper wires and Teflon® insulation for bias measurement

This style feedthrough features nickel plated copper wire to minimize corrosion of the wires. These compression seal feedthrough can be supplied with straight threads (bulk head fitting style as shown), with NPT threads or flanged connection.



High capacity thermocouple wire HAST feedthrough with Teflon® insulated wires using multiple high density feedthroughs

This style feedthrough features 24 AWG, PTFE insulated wires. The wires may be supplied in J, T, K, or E thermocouple calibrations to allow for temperature validation in the X, Y, Z coordinates of the chamber. Within a given High Density Feedthrough tube, the wires may be mixed or matched between nickel plated copper signal wires and thermocouple wires. Multiple High Density tubes may be grouped together in a common fitting to minimize penetrations through your chamber wall. These High Density tubes come in **12, 24, 40 and 60 wire densities**. Options include having thermocouple sets come with junctions pre-made, thermocouple wires twisted into pairs, having thermocouple connectors pre-installed on the wires, etc.

The PTFE insulation on the wires, for both of these feedthrough solutions, stand up to steam and flexing better than Kapton® insulated wires. The feedthroughs are rebuildable. After aging, the wires and sealant may be replaced, allowing the metal components of the body to be reused.

Kapton® is a registered trademark of E.I DuPont de Nemours Company.

Contact us with your requirements. We will happily work with you to find the best configuration!

