Vulcanite 1000 Series High Performance Thermocouples for Corrosive Chemical Vacuum Processes

The Vulcan Electric Vulcanite 10000 thermocouple construction provides the most advanced base metal thermocouple technology for chemical vapor deposition and other corrosive chemical vacuum processes. The Vulcanite 1000 thermocouple construction typically outperforms conventional thermocouple technologies by a factor of 2:1 when applied in environments such as vacuum deposition processes employed in the production of photovoltaics. The Vulcan Electric proprietary thermocouple design and technology provide superior thermocouple durability and performance. Higher throughput efficiency and sgnificantly less down time translate into measurable cost savings. These versatile thermocouples are avialable in many standard and custom options including bendable sheaths and preformed configurations.





Typical Construction

Type K and Type N Thermocouple Calibration Options

316 Stainless Steel Sheath (other materials available)

TiN Coated (Titanium Nitride) over Sheath

Standard Size Termination Plugs

KF (QF) Vacuum Mounting Flanges

Customized Sensing Tube Configurations

Features

Excellent Corrosion Resistant Properties

Excellent Wear Resistance

Maximum Service Temperature of 525 C (atmosphere)

Maximum Service Temperature of 600 C (vacuum)

Bendable Tube MgO Insulated Probes

Adjustable High Pressure Vacuum Fittings

Benefits

Significantly Less Downtime Translate into Savings

Outperforms Conventional Temperature Sensor Designs

Durable, Extremely Hard Surface Finish

Superior Durability Under Extreme Conditions

Outstanding Temperature Sensitivity and Performance

Multiple Integrated Connection Options

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Application Examples

Chemical Vapor Deposition

Chemical Etch Processes

Critical Application Heat Exchangers

CIGS Vapor Deposition

Corrosive Acid Chambers

Corrosive Desalination Plants

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