

Vulcanite 2000 Series High Performance Thermocouples for Glass and Silicon Process Technologies

Vulcan Electric's Vulcanite 2000 Series Thermocouple line features high performance alumina oxide (99.8% Al₂O₃) components designed for use in glass and silicon ingot manufacturing. The enhanced protection tube system is comprised of a proprietary ceramic formulation that produces an extremely chemical resistant thermocouple able to withstand the very high temperatures found within aggressive environments present in Heat Exchanger Method (HEM) multi-crystalline silicon ingot processes and other similar critical process applications. The Vulcanite 2000 series thermocouples are currently employed successfully by global glass and silicon producers. These innovative thermocouples provide superior thermocouple performance and extended operating life cycles which translates into substantial cost savings.



Typical Construction

Thermocouple Platinum Types R, S, or B
Standard Protection Tube Diameters 1/4", 3/8", 1/2", 3/4" & 1"
U.S. or Metric Process Connections
Alumina Oxide (99.8% Al ₂ O ₃) Components
KF (QF) Vacuum Mounting Flanges
Customized Sensing Tube Configurations

Features

Excellent Resistance to Graphite Environments
Innovative Double Seal Cold End Designs
Multi-Point Sensing Element Options
Maximum Service Temperature of 1700 Degrees C
Enhanced Protection Tube System
Excellent Wear Resistance at Very High Temperatures

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
Excellent Chemical Resistance

Application Examples

Multi-Crystalline Silicon Cell Manufacturing
Molten Glass Tanks
Heat Exchanger Method (HEM)
High Temperature Diffusing Furnaces
Gasification Systems
Metal Treating Furnaces

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