

CUSTOM ENGINEERING LEVEL II

NEW PRODUCT DESIGN

*Quartz Sheathed Probes
Stand up to Molten Metal!*

A CASE IN POINT

An engine block manufacturer's Quality Control team needs a way to measure the temperature of molten aluminum in a large vat, prior to its being poured into individual mold castings. The temperatures at the bottom, middle and top of the vat need to be measured.

PROBLEM

The Inconel sheathed probes the customer currently uses last only a few measurements before failing, and are capable of measuring only one temperature point at a time. The temperatures being monitored are as high as 982°C (1800°F).

OMEGA® SOLUTION

To combat the harsh environment and thermal shock problems that arise when measuring molten metals, OMEGA supplies a quartz sheathed profile probe. Three separate Type K thermocouples are spaced at different points inside the length of the quartz protection tube to measure the top, middle and bottom temperatures in the vat. The probe has three feet of lead wire extending to three OMEGA® Model HH-21, handheld thermometers. The quartz sheathing provides inert protection to thermocouple sensors as well as excellent resistance to thermal shock.

The prices for this profile probe start at \$290. 



Quartz Sheath
Profile Probe
Performs up to
1100°C (2012°F)

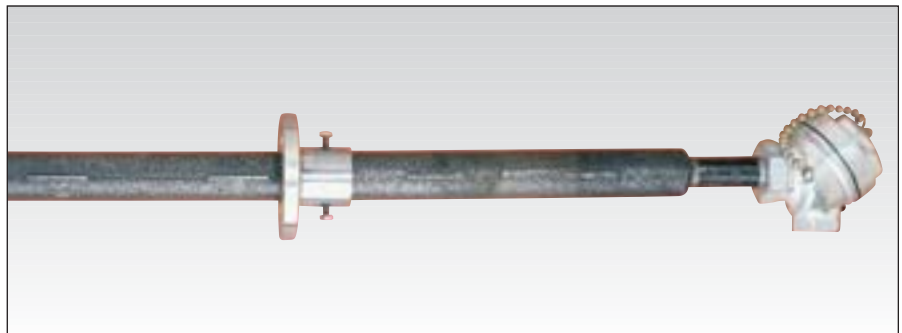
\$290

**OMEGA Can Manufacture Probes
of Any Specified Sheath Material.
Let Us Know What You Need!**

**DESIGN A TOTALLY NEW
PRODUCT ACCORDING TO
YOUR SPECIFICATIONS!**

- ✓ Superior Computer Aided Design/Computer Aided Manufacturing (CAD/CAM)
- ✓ Free Support Documentation Supplied and Kept on File for Your Convenience
- ✓ We Can Work with Your Raw Materials
- ✓ FAX or Phone with Your Special Requests

Other Examples of New Product Designs...



Heavy Duty Cast Iron Protection Tube with Adjustable Flange

\$370