



Product Digest

this month's topic **Heat Transfer**

Noncontact Thermometers Ensure Reliable and Repeatable Readings



The four models of the Cyclops line of portable, noncontact thermometers measure temperatures from 200°C to 3,000°C (390°F–5,400°F). A high-efficiency route manager allows users to identify each location with a description, an emissivity value, a window correction factor (if applicable), and a unique identifier. An industrial-rubber casing cover and lens hood protect against accidental damage. These products are appropriate for temperature measurement in environments such as petrochemical processing facilities, plastic manufacturing facilities, metal foundries, glass refractories, and laboratories.

AMETEK Land
landinst.com

Online Heat Transfer Calculator Simulates Numerous Scenarios

Heat Flow is an online steady-state heat transfer calculator that allows engineers to simulate an unlimited number of heat-transfer scenarios using the manufacturer's insulation and refractory products, as well as with other user-defined materials. It comes preloaded with nearly 400 products, and users can create and manage their own material databases and calculations as well. Regular updates to the material database provide immediate access to up-to-date information. The heat-transfer

calculations utilize the latest revision of the ASTM C680 formulas, which are recognized by the mechanical and thermal engineering communities as the international standard for estimating heat loss and surface temperature. The application can be accessed from most web browsers and is available for download on mobile devices.

Morgan Advanced Materials
morganadvancedmaterials.com

Blower Heater Withstands Harsh Environments



The CXH-A/EP line of blower heaters has been expanded with the addition of the extreme-duty model, CXH-XD, which can handle wet and corrosive environments. This blower heater is ATEX certified for explosive atmospheres and can provide primary or supplementary heat for comfort or freeze protection. Enhancements to this model include a corrosion-resistant coating on the heat exchanger and an optional Type 316 stainless steel and epoxy-coated frame. The fan motor is National Electrical Manufacturers Association's (NEMA) IP66 rated, corrosion-resistant, and washdown-rated to withstand direct water spray. The heater comes with power ratings of 3–35 kW and can provide heat output up to 119,420 Btu/hr. Heavy-duty magnetic contactors and a

low-voltage transformer simplify and speed installation. The CXH-XD is suitable for extreme environments, such as onshore and offshore drilling platforms, pump houses, power generation stations, water and wastewater plants, and chemical storage facilities, among others.

Chromalox
chromalox.com

Temperature Transmitters Simplify Monitoring



Field instruments for temperature measurement are needed to monitor operational safety and product quality — at times necessitating thousands of these devices throughout a manufacturing process. The SmartLine family of industrial temperature transmitters helps to simplify this network of instruments to reduce project costs and start-up time, avoid unplanned downtime, improve product quality, and shorten repair time. The transmitters improve plant and employee efficiency even in harsh process environments, with features such as an advanced display that can present process data in graphical formats and communicate messages from the control room. The modular component design simplifies field repair and reduces spare parts inventory. Maintenance is simple and intuitive, with diagnostic information available on the transmitter display to provide a real-time view of the sensor health.

Honeywell
honeywell.com