

Facilities and Process Applications

Advanced temperature sensing and control solutions for power generation



For more than 50 years, Minco has provided temperature sensing and control solutions for advanced power generation applications. We understand the demanding requirements of these applications and deliver proven, engineered solutions to meet your requirements.

Protecting Facilities and Processes

Protect your valuable equipment and process media with ultra-reliable Minco sensors. Rely on Minco to monitor and maintain your facility operations. Our temperature sensing solutions are engineered to provide reliability and performance through our advanced designs, proprietary manufacturing technologies and custom development.

- Comprehensive portfolio of flexible, high performance products and custom capabilities
- Reliability you can count on, backed by comprehensive testing, certifications and a three-year warranty
- Cost-effective solutions designed for easy installation and maintenance
- Comprehensive global support through a responsive worldwide network of engineering, sales and customer service support
- Custom engineered solutions to meet specific applications requirements

Minco Offerings

Minco offers a broad array of products for facilities and process applications, including standard products, configurable products, and custom engineered assemblies and solutions.

Probes and assemblies



Non-invasive sensors



Transmitters, monitors and alarms



Testing and Certifications

Minco understands the critical requirements of your applications. We will work with you to ensure that our products meet your requirements for testing and industry certifications, including:



Probes and Assemblies



Application specific configurations engineered to provide performance and reliability

Production Information

- Installed against bearings or in fluids to provide over-temperature protection
- Single and dual RTD elements and Thermocouples
- Temperature ratings to meet demanding application requirements
- Broad range of configuration options to provide optimal performance while addressing demanding environmental and installation requirements
- Certified for use in hazardous areas

Product Advantages

- **Electrical isolation** – Isolated tip probes for installation where bearings are electrically hot
- **Field modification** – Stainless steel or fiberglass constructions can be user-shortened in the field
- **Fast response** – Copper tip sensitive probes with hollowound technology deliver fast time response
- **Accurate and reliable** – Advanced welding processes ensure reliable connections and accurate performance in high vibration and high temperature atmospheres
- **Intimate sensor contact** – Innovative spring-loaded fittings with fluid seal and tool-free installation ensure intimate contact with bearing or machinery housing
- **System accuracy** – Match calibrated transmitters improve system accuracy
- **Environmental protection** – Stainless steel connection heads enable use in corrosive environments, as well as certified assemblies approved for use without the need of a thermowell
- **Flexible installation** – Thick-walled, hand bendable probes allow custom installation routing
- **Electrical and mechanical protection** – Twisted, shielded, and armored cable options for electrical noise and mechanical protection

Non-invasive Sensors



Designed for easy installation without disrupting process flow

Product Information

- Installed on tanks, pipes, and various surfaces for temperature monitoring
- Install as primary temperature monitoring or temporary back-ups
- Hose clamp sensors and flexible Thermal Ribbons mount on the outside of piping and do not require cutting into the pipe
- Flexible thermal ribbons also can be mounted any flat or curved surface
- RTD or Thermocouple elements
- Temperature ratings to meet demanding application requirements
- Thermal Ribbons are certified for use in hazardous areas

Product Advantages

- **Reliable transitions** – Minco-pioneered etched foil transition tabs (used in Thermal Ribbons) ensure reliable transitions between delicate sensing element wire and robust lead wires in wire-wound constructions
- **Consistent performance** – Extensive material processing knowledge delivers the highest stability and reliability to ensure accurately measurement over time
- **Electrical and mechanical protection** – Twisted and shielded cable options for electrical noise and mechanical protection
- **Accurate and reliable** – Advanced welding processes ensure reliable connections and accurate performance in high vibration and high temperature atmosphere
- **High strength** – Specialty lead wire manufacturing techniques optimize lead pull strength and sealing for demanding applications

Transmitters, Monitors and Alarms



Designed for fast response and flexible mounting in harsh environments

Product Information

- Variety of programmable transmitters to convert RTD and thermocouple input for communication over long distances
- Transmitter communication protocols include HART, FOUNDATION Fieldbus, PROFIBUS PA, and standard 4-20mA
- Monitors and alarms to safeguard equipment and process fluids, offering up to 12 temperature inputs and controls output based on user-programmable set-points
- Monitor communication include Modbus over USB, RS-485 or RS-232

Product Advantages

- **System accuracy** – Reduced system error through match calibrated transmitters to improve accuracy over the complete temperature range
- **Easily installed** – Industry standard DIN packaging allows drop in capability
- **Environmental protection** – Electronics encapsulated in epoxy resists contaminants and protects components
- **Safe use** – recognized and tested by authorities for safe use in hazardous areas

For more information on the advantages of working with Minco to develop advanced temperature sensing solutions for your power generation applications, contact your local Minco representative.

Additional Capabilities

Minco's broad development, integration and assembly capabilities make us more than just a sensor supplier. Our capabilities enable optimal functional and packaging efficiency, as well as greater flexibility for your organization. We offer:

- Comprehensive development support
- Seamless integration of sensors, controllers, heaters, flex circuits and other electronics
- Broad based assembly capabilities