

Power Generation Applications

Advanced temperature sensing and control solutions



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.

Flexible, High Performance

- Comprehensive portfolio of temperature sensing products to meet a broad range of power generation application requirements
- Extensive packaging and material compatibility expertise enables application specific thermal solutions that will perform with unmatched accuracy, repeatability and time response
- Custom engineered products available to address unique application requirements and deliver optimal performance

Reliability You Can Count On

- Global certifications for quality and safety, providing high reliability in applications where failure is not an option, including hazardous environments, medical implants, aircraft and satellites
- Complete in-house testing and calibration of temperature sensors traceable to NIST, enabling Minco to back up our product quality with a three-year warranty.
- Comprehensive testing and certifications, including:



Custom Engineered Solutions

Minco's experienced engineering team will work with you to understand your requirements and engineer a custom solution for your specific application.

The result: optimal performance, reliability, technology and value for your application.

| Power Generation Applications | | |
|--|--------------------------------|----------------------|
| Motors & Generators | Pumps, Compressors & Gearboxes | Facilities & Process |
| Minco standard and custom engineered solutions | | |
| Stator sensors Bearing sensors Anti-condensation heaters Probes and assemblies Process assemblies Non-invasive sensors Transmitters Monitors and alarms | | |

Technical Superiority

- Bifilar-wound sensing elements makes Minco RTD's immune to electrical noise, preventing erratic or erroneous measurements
- Ruggedized design creates superior lead pull strength for use in industrial applications

Cost-effective


- Supports new installations, or as a direct mechanical and electrical replacement for competitive products
- User-friendly product features, such as spring-loaded holders and non-invasive sensing, enable fast and simple installation and maintenance
- Continuous improvement culture with a focus on lean and six sigma to enable efficient manufacturing

Comprehensive Global Support

- Global supplier with over 50 years of experience supporting advanced sensors for demanding applications
- Responsive worldwide network of engineering, sales and customer service support

Offerings for Power Generation Applications

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

| Motors and Generators | | |
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|  | ◀ Stator sensors | Installed between stator windings to provide continuous temperature protection |
| | ◀ Bearing embedment sensors | Installed directly in bearing shoes to provide over-temperature protection |
| | ◀ Thermal ribbon sensors | Installed on end turns of stator winding when stator slot is not accessible |
| | ◀ Anti-condensation heaters | Installed on windings or housings to prevent moisture that could lead to corrosion or frost damage and resulting breakdowns |
| | ◀ Probes and assemblies | Installed through motor equipment frame, exhaust or against bearings to provide over-temperature protection |
| | ◀ Transmitters | Converts RTD and thermocouple input for communication over long distances, with protocols including HART, FOUNDATION Fieldbus, PROFIBUS PA, and standard 4-20mA |
| | ◀ Monitors and alarms | Safeguards equipment, with up to 12 temperature inputs and controls output based on user-programmable set-points |

Pump, Compressor and Gearbox Assemblies



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| ◀ Probes and assemblies | Installed against bearings or equipment frame to provide over-temperature protection |
| ◀ Transmitters | Converts RTD and thermocouple input for communication over long distances, with protocols including HART, FOUNDATION Fieldbus, PROFIBUS PA, and standard 4-20mA |
| ◀ Monitors and alarms | Safeguards equipment, with up to 12 temperature inputs and controls output based on user-programmable set-points |
| ◀ Bearing embedment sensors | Installed directly in bearing shoes to provide over-temperature protection |
| ◀ Anti-condensation heaters | Installed on housings to prevent moisture that could lead to corrosion or frost damage and resulting breakdowns |

Facilities and Process



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| ◀ Probes and assemblies | Installed in process flows to monitor and control fluid temperature |
| ◀ Non-invasive sensors | Installed on tanks, pipes, and various surfaces for temperature monitoring |
| ◀ Transmitters | Converts RTD and thermocouple input for communication over long distances, with protocols including HART, FOUNDATION Fieldbus, PROFIBUS PA, and standard 4-20mA |
| ◀ Monitors and alarms | Safeguards equipment and process fluids, offering up to 12 temperature inputs and controls output based on user-programmable set-points |

Additional Capabilities

Minco's broad development, integration and assembly capabilities make us more than just a sensor supplier. Our capabilities can help 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.

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.