

# Epitaxial Thermocouples

## X3-Fibro® thermocouples

**BASF's Fibro® Platinum wire can decrease thermocouple failures prior to preventative maintenance on epitaxial reactors, which lowers cost by reducing the need to take the system down prematurely. Customers around the world have reported lifespan increases up to 80% over conventional epitaxial thermocouples.**

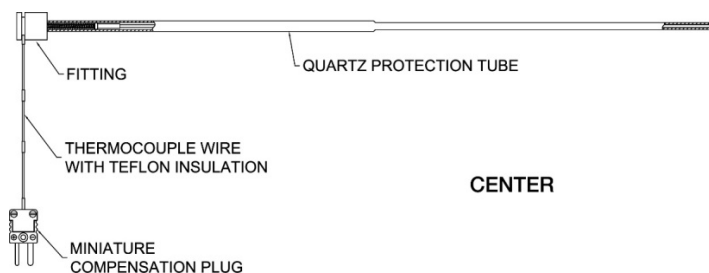
### The Fibro® advantage

Our thermocouples achieve their longevity through the use of BASF proprietary Fibro® Platinum wire designed to reduce grain growth which can contribute to the mechanical failure of thermocouple wires through necking down or flattening of the wire near the bead, or open junctions.

Fibro® Platinum wire retains the chemical and thermo-electric properties of reference/premium Platinum wire so quality remains the same. It can also increase throughput, since the thermo-couple is designed to be more stable.

### Features and benefits

- Lower overall cost of ownership by using Fibro® Platinum wire that is exclusive to BASF thermocouples
- Designed to decrease premature thermocouple failures for longer life
- Available for all wafer sizes on leading epitaxial reactors
- Superior mechanical stability and reliability at higher temperatures
- ISO 9001:2000 certified factory
- No offset adjustment required
- Precious metal recovery services



### Precious metals expertise

Metals – particularly those in the Platinum group – are critical components of many products made by BASF such as contact thermocouples. Ensuring that those raw materials are where they need to be, when they need to be there, in the form they need to be and at the lowest possible cost is what BASF's Precious and Base Metal Services group is all about. Given our unique understanding of market fundamentals, such as current and future supply,

technology changes and market risks, we help ensure that BASF and our customers have a cost-effective, reliable supply of the raw materials they need.

A fundamental understanding of precious metal and precious metal technologies is also critical. The experience of our research and development group in precious metal and precious metal technologies is unmatched.

We have led the industry with breakthrough innovations. No one knows more about precious metals. We are the precious metal experts.

### **Thermocouple handling hints**

- Minimize bending leads wire
- Unplug thermocouple holding connectors, not leads
- Avoid Sodium contamination of quartz by using gloves for any contact with the thermocouple
- Never run thermocouple wires parallel or across AC electrical lines
- Support thermocouple at mid-span whenever possible

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## **About Us**

BASF's Catalysts division is the world's leading supplier of environmental and process catalysts. The group offers exceptional expertise in the development of technologies that protect the air we breathe, produce the fuels that power our world and ensure efficient production of a wide variety of chemicals, plastics and other products, including advanced battery materials. By leveraging our industry-leading R&D platforms, passion for innovation and deep knowledge of precious and base metals, BASF's Catalysts division develops unique, proprietary solutions that drive customer success.

**BASF - We create chemistry**

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