

Precious Metal Thermocouples

Fibro[®] Platinum

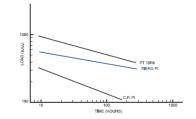
BASF's proprietary Fibro Platinum thermocouple wire can provide increased high temperature strength and longer service life. This is achieved by retarding grain growth, and minimizing slippage, while retaining all chemical and thermo-electric properties of pure thermocouple grade Platinum.

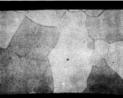
Product information

This wire can be used in thermocouples which are subject to abnormal handling or loading at temperature, such as in beaded assemblies used in profile and HIP applications.

Stress to rupture at 1450°C. Note the Fibro Platinum wire approaches the load bearing

Hot Tensile Test		
°C	Platinum Wire (p.s.i.)	Fibro® Pt Wire (p.s.i.)
400	38,000	38,000
500	14,000	31,000
600	11,500	16,500
700	9,500	12,000
800	8,200	9,500
900	7,000	8,000
1000	6,000	6,700
1100	5,000	5,500
1200	4,000	4,000
capabilities of Pt10Rh T/C wire (Pt13Rh is similar).		

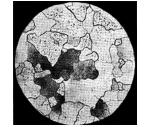




C.P. Pt -Longitudinal



Fibro Pt -Longitudinal



C.P. Pt -Cross Section

Fibro Pt -Cross Section

Photo micrographs of .032 dia. Fibro Pt wire and C.P. Pt wire after being heated to 1400° for 10 hours. Note the reduced grain growth of Fibro Pt (100x reduced 50%).

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.

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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