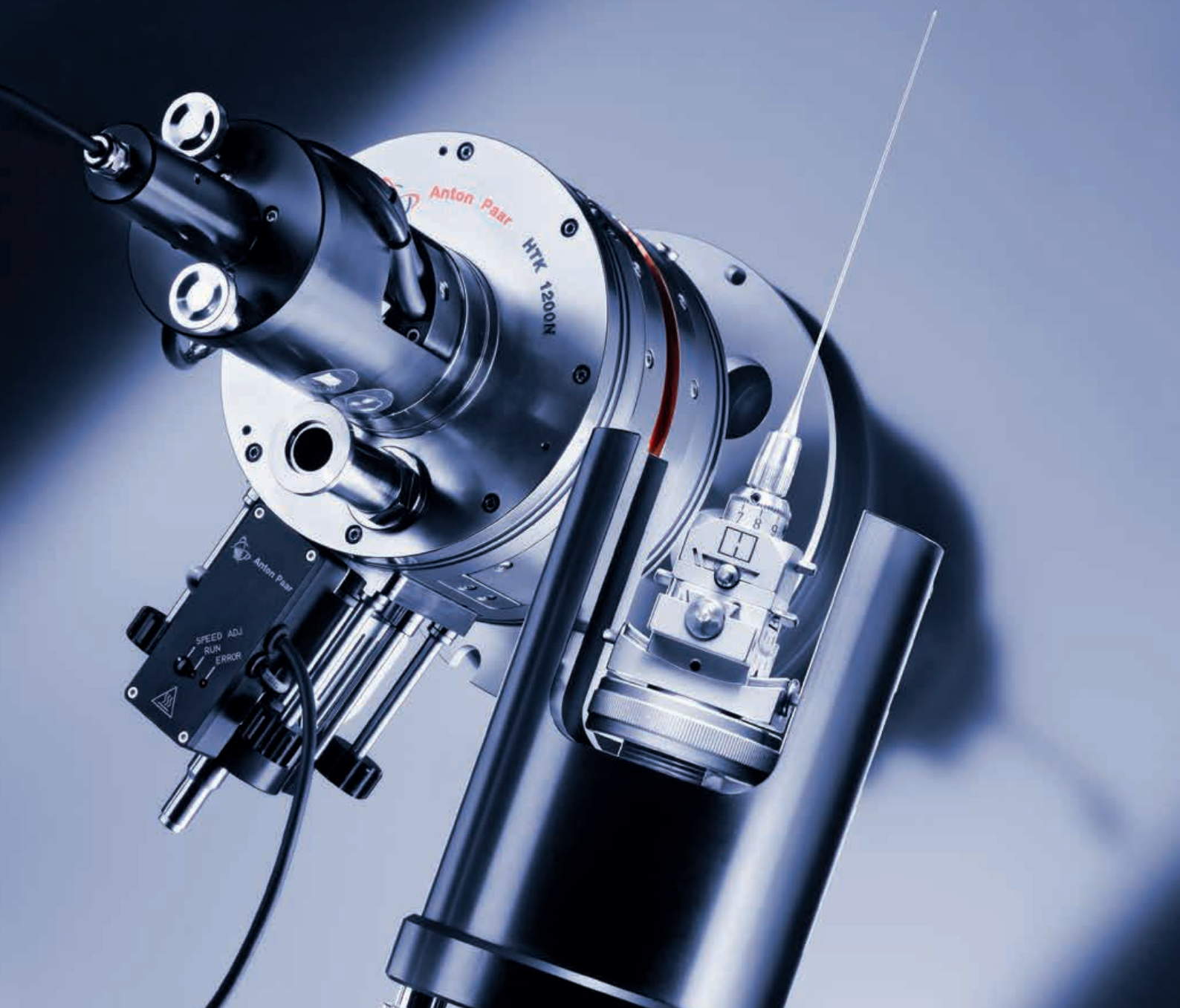




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::: Innovation in Materials Science



HTK 1200N Capillary Extension

The HTK 1200N Capillary Extension is a novel add-on for the well-known HTK 1200N High-Temperature Oven Chamber, turning it into a high-end capillary heater for transmission XRD up to 1200 °C. It combines the high temperature homogeneity and excellent temperature control of the HTK 1200N with easy capillary handling and alignment.

“Two-In-One”

Combined Reflection- and Transmission High-Temperature XRD !

One Stage for Flat Samples and Capillaries

For many years HTK 1200N has been the XRD heating attachment of choice for a great number of high-temperature investigations on flat samples. With the new HTK 1200N Capillary Extension we largely increase the range of possible applications of this versatile attachment by turning it into a powerful capillary heater from 25 °C to 1200 °C. Conversion from the standard geometry for flat samples to the capillary set-up and vice versa can be done in a few minutes, without removing HTK 1200N from the goniometer.

High Temperature with Excellent Accuracy

The surrounding heater inside HTK 1200N ensures highly uniform temperature across the irradiated volume of the capillary. The temperature is measured close to the capillary with the thermocouple inside the standard HTK 1200N sample holder, which yields very high accuracy and stability.



Wide Range of Samples

A variety of capillary holders and capillaries can be used, depending on the specific properties of a particular sample. Highly air-sensitive samples can be measured in sealed capillaries. For less sensitive samples, capillary holders which can retain unsealed capillaries with funnel tube offer easy capillary mounting and a means to investigate gas-releasing materials.

Easy Sample Preparation

The capillary spinner features a standard goniometer head for easy capillary mounting and alignment. The HTK 1200N Capillary Extension comes with a special, PC-operated video microscope for centring the capillary.

The capillary spinner with pre-centred capillary is mounted on the HTK 1200N High-Temperature Oven Chamber and directly aligned in the X-ray beam for optimum position.

Features and Benefits

- ▶ Converts the HTK 1200N High-Temperature Oven Chamber into a powerful capillary heater.
- ▶ Conversion is fast and possible without removing HTK 1200N from the diffractometer.
- ▶ The temperature range of the capillary heater is 25 °C to 1200 °C, with quartz glass capillaries up to 1000 °C.
- ▶ Mounting and alignment of the capillary are easy and do not require a microscope on the goniometer.
- ▶ Various types of capillary holders (open, closed, for sealed/unsealed capillaries) are available.
- ▶ Temperature uniformity of the irradiated sample volume is excellent.
- ▶ Sample temperature measurement is highly accurate and stable.

Technical Specifications

Operating temperature	HTK 1200N furnace:	25 °C to 1200 °C
	Quartz glass capillary:	25 °C to 1000 °C
	Borosilicate glass capillary:	25 °C to 700 °C
	Special glass capillary:	25 °C to 500 °C
Temperature measurement	Pt-10%RhPt thermocouple	
2 Theta range	1.5 to 88 °2θ	
Capillary dimensions	Diameter:	0.2 to 1 mm
	Length (incl. funnel tube):	85 mm
Capillary orientation	horizontal	
Speed of rotation	0.3 to 0.6 turns/s	

HTK 1200N Chamber with Capillary Extension

Diameter	150 mm
Depth (without adapter)	320 mm
Weight	7.5 kg

Your distributor: