

Non-Ambient

XRD Attachments

HTK 1500 High-Temperature Chamber



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The 'true' environmental heater, HTK 1500, guarantees the highest temperatures without compromising accuracy.



The HTK 1500 High-Temperature Chamber is the new benchmark of environmental heaters for X-ray diffraction (XRD). It allows you to homogeneously heat all types of sample materials, including crystalline powders and bulk samples, up to 1,500 °C. The position of the heating rods, together with a highly accurate temperature measurement, makes HTK 1500 the only 'true' environmental heater up to 1,500 °C.

The HTK 1500 High-Temperature Chamber is the best choice for XRD experiments where high temperatures need to be measured with outstanding accuracy.

Applications:

- → Define lattice parameters and coefficients of thermal expansion
- → Measure temperature-induced phase changes and chemical reactions
- → Observe annealing, sintering, calcination processes, and more

Features and benefits:

- → Environmental heater design for homogeneous temperature distribution in a temperature range from 25 °C to 1,500 °C, and precise temperature measurement by a thermosensor inside the sample holder
- → Facilitates fast conversion from reflection to transmission mode for measurements of air-sensitive and/or organic powders using a capillary extension
- → Premium design with a slider for the sample holder flange ensures easy handling and swift exchange of samples
- → Chemically inert sample carriers support a wide variety of sample types
- → The chamber design and the use of materials of high chemical resistance allow the user to perform measurements in different gas atmospheres
- → Sample spinning option provides the highest quality XRD data
- → Save time thanks to the seamless integration into XRDynamic 500 and XRDdrive control software, guaranteeing a high degree of automation with autorecognition and auto-(re)alignment



HTK 1500

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Temperature range	25 °C to 1,500 °C
Pressure range	10 ⁻¹ mbar to 0.5 bar rel.
Atmospheres	Air, vacuum, inert gases
Sample type	Powders, bulk samples
Sample carrier material	Corundum (inert)
X-ray geometry	Reflection and transmission