

HS1500

Continuous Observation at High Temperature



Rotating Quartz Window

For continuous sample observation and high resolution imaging

Ultra-High Temperature

Accurate temperature control between ambient and 1500°C

Rapid Heating Rates

Of up to 150°C/minute

Introducing the HS1500

The HS1500 high temperature stage is optimised for sample characterisation where volatiles are released from the samples when heated. The stage features an observation window which can simply be rotated to expose a clear area to continue viewing and imaging the sample.

Featuring a ceramic heating cup which together with the ceramic cover creates a micro oven around the sample and heats at an incredible rate of up to 150°C/min reaching a maximum temperature of 1500°C. The system is supplied with a water circulatory pump which will keep the stage body at a safe temperature.

It is also provided with a T95 controller which is available with either LINK software or LinkPad touch screen controller.



Features

ROTATABLE QUARTZ WINDOW

The stage features a rotatable quartz window which prevents condensates obstructing the field of view and allowing continuous observation. The high optical quality quartz window enables high resolution imaging of samples.

HIGH TEMPERATURE

The stage is optimised for the study of metals, ceramics and geological samples with temperatures ranging from ambient up to 1500°C.

HEATING RATES

Wide range of heating rates between 0.01°C/minute and 150°C/minute, ideal for state transitions experiments.

TEMPERATURE CONTROL ACCURACY

The T95 controller accurately controls the multiple variables of your experiment, including temperature which is controlled to one degree accuracy.

QUICK RELEASE GAS PORTS

Simple and easy stage purging to allow atmospheric composition control.

Application Examples

Use the HS1500 to safely recreate a high temperature environment within your laboratory. For example in the study of molten magma and iron ore, where rapid heating rates and accurate high temperature control is vital. Other examples include:

Geology

The HS1500 is being used by many top universities and institutes to advance paleoclimatic research. Other examples include:

Fluid Inclusions

Thermal Maturation

Volcanology



Metals

Within metallurgy, the HS1500 has many applications including the melting point analysis of composites. Other examples include:

Iron Ore

Grain Analysis

Oxidation



Ceramics

The HS1500 has many applications within the ceramics field from composition studies to manufacturing. Other examples include:

Powder Composition

Processing

Degradation



Technical Specification

Temperature Range

Ambient to 1500°C

Heating Rates

0.01°C/min to 150°C/min

Temperature Stability

1°C

Sample Size

5.5mm diameter, a mass of up to 70mg-100mg

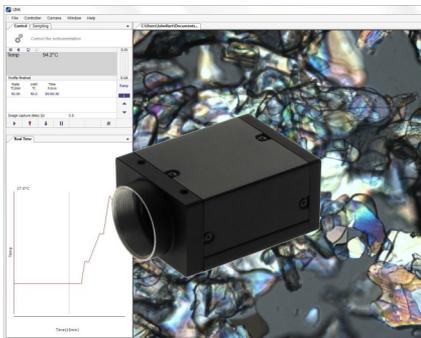
Objective Lens Working Distance

6.6mm

Compatibility

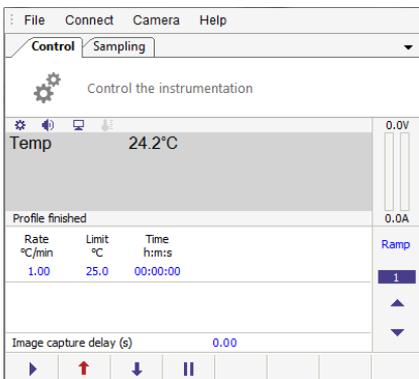
Reflected light microscopes & Raman

Discover More...



LINK Imaging Systems

Get more out of your Linkam stage, recording the temperature is only half the story. Seeing how your sample changes with changing environment such as temperature, humidity, vacuum, tensile or shear force can provide important information about your sample. Changes to the physical characteristics of your material such as surface structure, colour, opacity, size and shape can be analysed from the images. Add one of the LINK Imaging Systems to record images of your sample automatically during your experiment. There are a range of LINK Imaging Systems available optimised for use with Linkam stages.



LINK Control Software

Take control of your experiment with the new LINK software. In addition to temperature, LINK can control or monitor many of the other stage parameters such as vacuum, humidity, tensile force and shear force (dependent of stage type and sensors). LINK can be programmed with up to 100 ramps and provides real time graphical feedback. LINK supports a number of modules to further enhance your system, including LINK Imaging Module for synchronised image capture, LINK Extended Measurements module for recording the measurement of key features in your images, LINK 21CFR11 Module for data regulatory compliance and LINK TASC providing image analysis based thermal analysis.



Imaging Station

The Imaging Station is compatible with all Linkam heating and cooling stages. It has been specially designed with a pivoted mechanism to allow greater access to your samples. There are reflected and transmitted light options available and it is compatible with a range of long working distance objective lenses.

Contact Details

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We make scientific instruments that help characterise materials from polymers to biological tissue and metals to composites. Our instruments are used for research by the world's most advanced scientific organisations and companies. Each of our instruments are designed and manufactured in-house by our team of highly experienced electronics, software and mechanical design engineers. We design and develop solutions for sample characterisation by collaborating with the best scientists in the world. Will you be next?