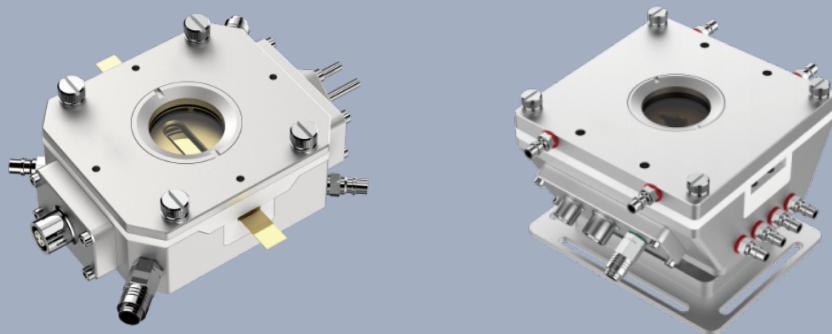


Mechanical TensileThermo Stage

An important equipment for the study of the micromechanical properties of materials

- Precise temperature control
- Diverse mechanical tests
- Convenient in-situ observation
- Strong compatibility



One Platform Many Possibilities

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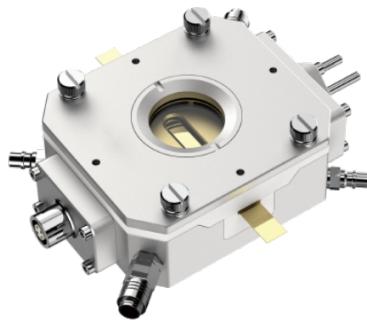
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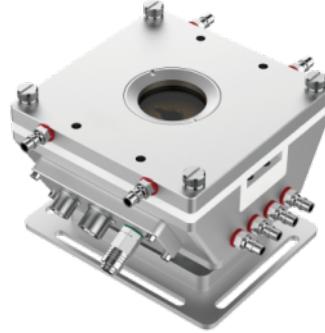
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VLM-190-600



VLM-190-600-HT

Overview

Introduction to TensileThermo Stage:

By comprehensively applying advanced refrigeration and heating technologies, precise control of the temperature in the test environment is achieved. In terms of refrigeration, some models adopt liquid nitrogen refrigeration, which can quickly lower the temperature to an extremely low level, reaching -190 °C, making it possible to study the brittle transition and cold brittleness of materials at low temperatures. For the heating function, high-efficiency resistance heating elements are mostly used, which can raise the temperature to 1000°C or even higher (depending on the specific model). Real-time monitoring is conducted through precision temperature sensors (such as thermocouples, PT100, etc.), combined with PID temperature control algorithms, to ensure that the temperature stability is maintained at an extremely high level. For example, it can reach $\pm 0.1^{\circ}\text{C}$ when the temperature is $< 600^{\circ}\text{C}$, and $\pm 1^{\circ}\text{C}$ when the temperature is $> 600^{\circ}\text{C}$.

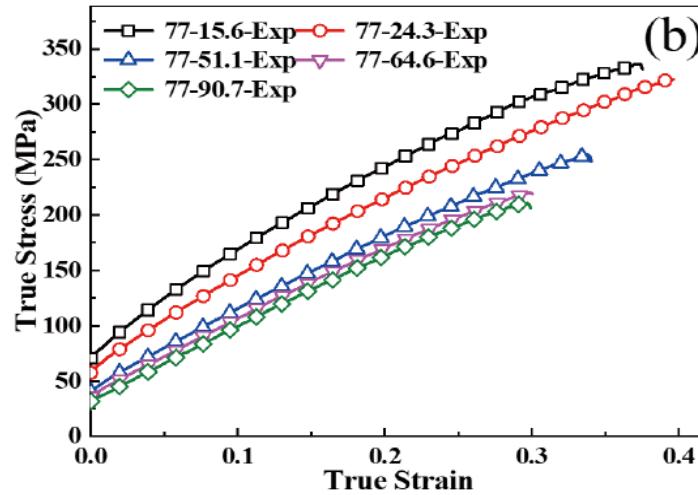
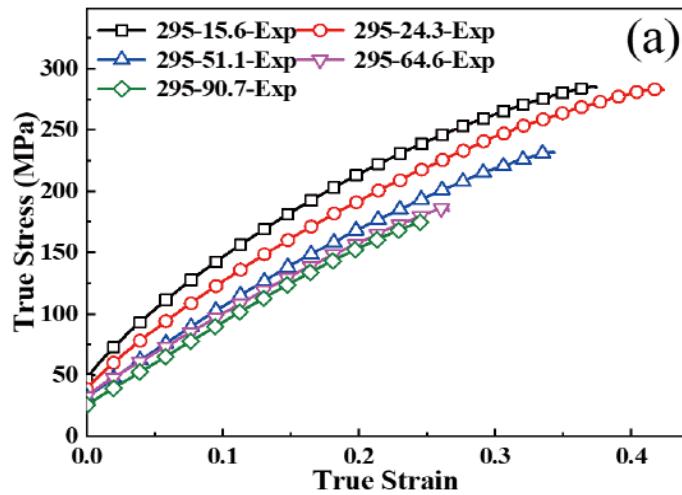
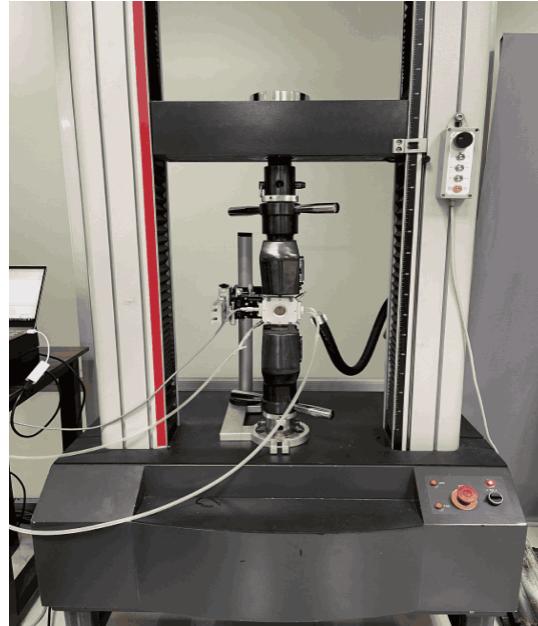
Specifications

Same parameters

Parameter	Description
Cooling and heating method	Liquid nitrogen refrigeration, resistance heating
Temperature range	-130 ~600
Temperature stability	± 0.1
Temperature control rate	Maximum heating rate: 100 /min, maximum cooling rate: 40 /min
Window material	JGS2 quartz glass (transmission band range 220nm~2500nm), can be manually disassembled and replaced
Chamber	Atmosphere

Application

Customize a thermal stage for a universal testing machine, which is used in high-entropy alloy research



Explore Series

Model	Net Weight	Overall Dimensions	Sample Stage	Temperature range
VLM-190-600	1kg	96mm×70mm×30mm	Brass; 30mm×25mm	-190°C~600°C
VLM-190-600-HT	2kg	160mm×143mm×83mm	Copper; 30mm×50mm	-190°C~600°C

 Get in touch with our team to explore configurations, request a quote, or learn more about customized solutions tailored to your needs.

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