

Product Information

High-Temperature Furnace for Creep Tests up to 1,200 °C

CTA: 1 80308 263427



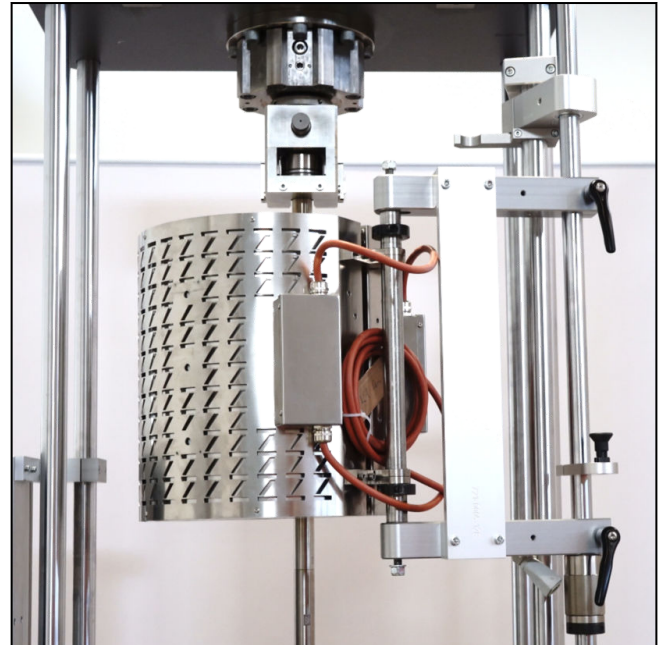
1,200 °C high-temperature furnace with three heating zones

High-temperature furnace

The high-temperature furnace is intended for determination of the thermo-elastic behavior, high-temperature stability and thermal yield point of high-temperature materials in air up to 1,200 °C.

Advantages and features

- Wide temperature range from 100 / 200 °C to 1,100 / 1,150 °C on the specimen
- Great temperature distribution due to three independently controllable heating zones
- Low energy consumption during long-term tests
- Three thermocouples for furnace temperature, 1-3 thermocouples for control of the specimen temperature
- Top and bottom feedthrough for pull rods (customizable sizes) and extensometers
- Front and rear vertical slots for feedthrough of thermocouples and extensometers
- Non-critical surface temperature through contact protection (double-wall stainless steel housing)
- Non-carcinogenic vacuum formed insulation based on non-classified polycrystalline high-temperature wool
- Simple and cost-effective replacement of individual wear parts



High-temperature furnace in test area

Mounting and swivel unit for high-temperature furnace

The mounting and swivel unit is used to hold and swivel the high-temperature furnace in and out of the test axis of the creep testing machine.

The high-temperature furnace is attached on the rear left or right to a column or to the load frame of the creep testing machine using a swivel unit. The high-temperature furnace is coupled to the mounting and swivel device by means of a hinge on both half-shells.

Advantages and features

- The furnace can be opened to allow for fast and convenient insertion and removal of the specimens.
- The high-temperature furnace can be completely swiveled out of the test area of the creep testing machine.
- Precise specimen temperature control through automatic and specimen-centered tracking of the furnace, even with large strains and long test durations.

Product Information

High-Temperature Furnace for Creep Tests up to 1,200 °C

Technical data

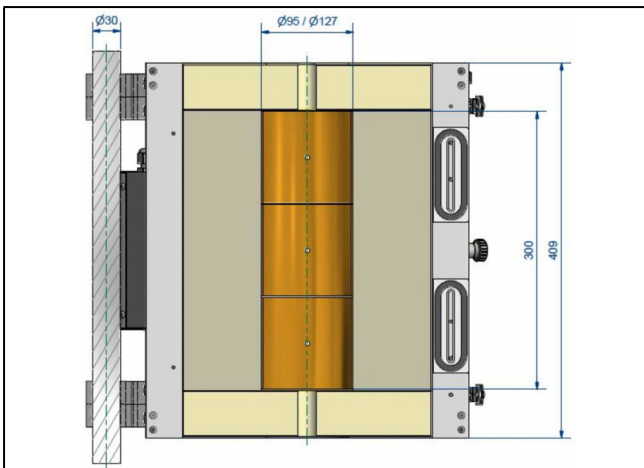
Description ¹⁾	MP00850	MP00851
Furnace temperature, max.	1,200°C	1,200°C
Specimen temperature, max.	1,150°C	1,100°C
Specimen temperature, min. ²⁾	100 °C / 200 °C	100 °C / 200 °C
Heating zones	3	3
Heating rates, max.	20 K/minute	20 K/minute
Furnace dimensions		
Outer diameter	Approx. 370 mm	Approx. 370 mm
Height	Approx. 409 mm	Approx. 409 mm
Heating area dimensions		
Height	Approx. 300 mm	Approx. 300 mm
Inner diameter	Approx. 95 mm	Approx. 127 mm
Heated length per zone ³⁾	Approx. 100 mm (vertical)	Approx. 100 mm (vertical)
Feedthrough for pull rod		
Top, max.	Ø 52 mm	Ø 52 mm
Bottom, max.	Ø 76 mm	Ø 76 mm
Vertical slots for thermocouples and extensometers		
Front and rear, max.	10 x 145 mm (W x L)	10 x 145 mm (W x L)
Weight	Approx. 30 kg	Approx. 30 kg
Heating element	Embedded Kanthal A1 heating elements	
Thermocouple	3x type S	3x type S
Insulation material	Non-carcinogenic vacuum formed components based on polycrystalline wool	
Housing	Stainless steel, double wall design, reduction of temperature between insulation and housing wall via convection air cooling, can be opened via a hinge, with side opening for thermocouples, snap closure for opening and closing the furnace	

1) Additional high-temperature furnaces are available upon request

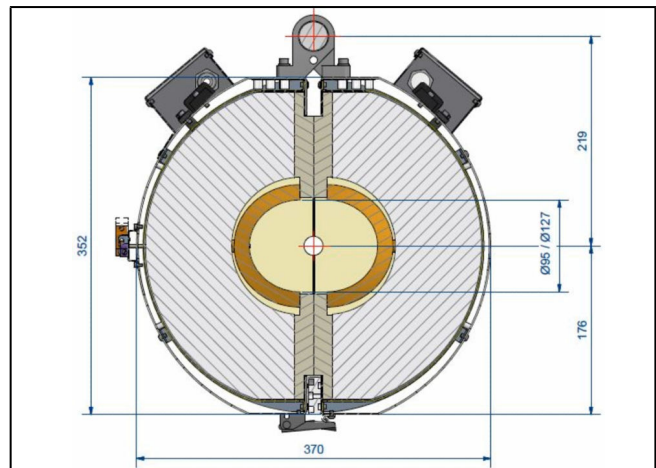
2) A temperature of 100 °C is verified in pretests with customer-specific parameters and specimens

3) Each zone is controlled independently

CTA: 263428 263429



High-temperature furnace dimensions



High-temperature furnace dimensions

All data at ambient temperature.

Subject to change in the course of further development.