Product information

High temperature furnaces LABORTECH





Description and use of high temperature furnaces LABORTECH

High-temperature furnaces from LABORTECH are used to determine thermo-elastic behaviour, heat resistance, strength and heat of recrystallization temperature of materials and whole products. One to three zone furnaces operating in the temperature range from 200 °C to 1600 °C can be selected, depending on the tested material.

Main advantages and features

- High quality technical processing with ideal ergonomic design and construction CE compliant.
- 1, 2, 3 zone design
- Steel plate from stainless steel
- Wide temperature range from 200 to 1600°C
- Expandable multiple external thermocouples, thus ensuring testing according to the standard.

- Multi-PID controller JUMO with options to connect to the PC via LAN interface or RS 232
- Configurable individual temperature zones, separately
- Fast and constant onset to the desired temperature
- Temperature control from Test & Motion and display of the temperature curve in the protocol
- Expandability of the chamber with inspection holes, which are designed for insertion of ceramic pincers of mechanical extensometers or a laser sensor of extension
- Simple and safe arrestment of the temperature chamber in the working area of the machine
- Precise ergonomic tripods both for the machine frame and separately with a simple adjustment in 3 axes with subsequent fixation positions
- Preparation for coolants

Manufacturer:

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Technical parameters	Units	HF90x300/60	HF90x300/80	HF90x300/100	HF60x180/120
Maximal temperature	°C	600	800	1000	1200
Number of heating zones		3	3	3	2
Height of the heating zone	mm	300	300	300	180
Maximum time of reaching the max. temperature without the specimen	min.	60	70	90	45
Openable halved furnace		ANO	ANO	ANO	ANO
external dimensions					
Height	mm	414	414	414	300
Diameter	mm	255	255	255	380
nner dimensions					
Height	mm	326	326	326	180
Diameter	mm	90	90	90	60
Diameter of guide rods gaps	mm	50	50	50	50
Heating element		Kanthal	Kanthal	Kanthal	Kanthal
Temperature regulator		Jumo IMAGO 500	Jumo IMAGO 500	Jumo IMAGO 500	Jumo DICON
Number of independent channels of PID control		4	4	4	2
Weight	kg	57	57	57	37
Power voltage	V	230 / 50 Hz	230 / 50 Hz	230 / 50 Hz	230 / 50 Hz
Fuse of the machine	A	16	16	16	16
Wattage	kVA	2,9	2,9	2,9	1,4
Interface		RS 232 (occupies the COM interface in the PC)			

Optional accessories:

Aperture size for the extensometer with ceramic spikes H x W 70 x 25 mm

Sight glass for a contactless extensometer

Thermocouple on the specimen

Articulated tripod, height-adjustable in axis y, x (item HF.S.K(H))

Module for temperature regulator Jumo type IMAGO 500 or Jumo DICON (Analysis of data for temperature regulator, interfacing with software)