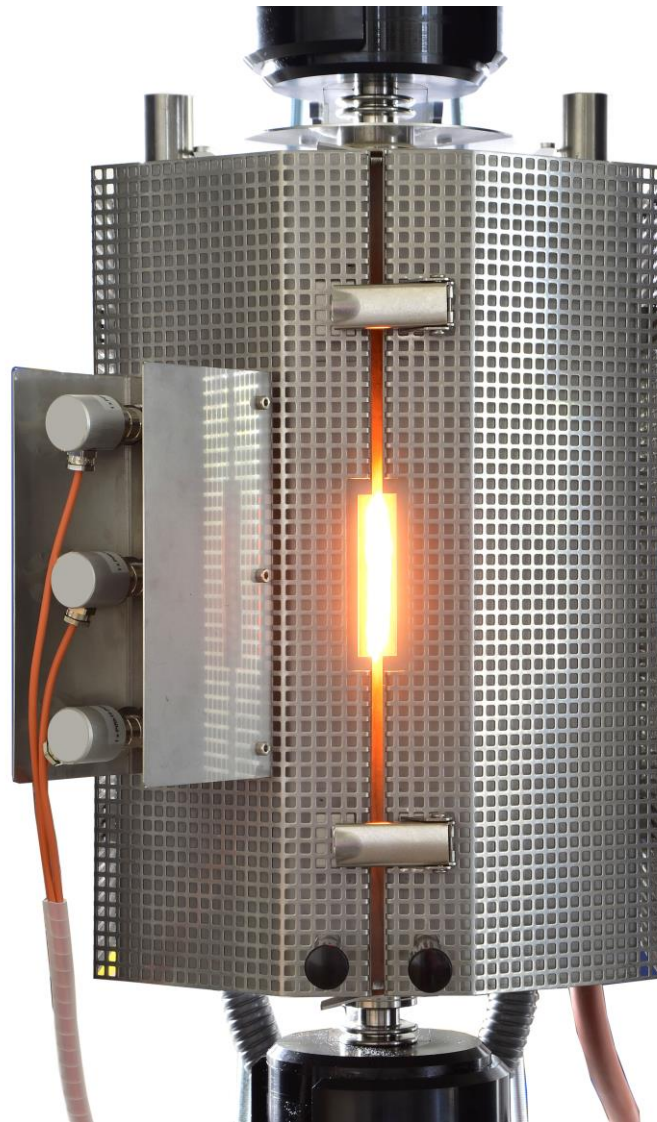




Product information

# High temperature furnaces



Technical data:

Article number	STE-12/ LRA-3	STE-13/ LRA-3
Temperature range	300°C - 1000°C freely selectable	300°C - 1250°C freely selectable
Dimensions furnace	outside: diameter ca. 264mm; height ca. 360mm inside: diameter ca. 100 mm; height ca. 210mm	outside: diameter ca. 290mm; height ca. 400mm inside: diameter ca. 100 mm; height ca. 210mm
Application	e.g. for determining the warm-elastic behavior, the high-temperature strength and the high-temperature limit of elasticity	
Design	<p>circular hinge furnace with three heating and control zones</p> <p>case stainless steel blasted</p> <p>front of the furnace with recess for radial strain gauges</p> <p>lateral temperature receiving element passages at a distance of 2x75mm</p> <p>temperature receiving elements displaceable, attachment to linkage at top, sample and linkage at bottom</p> <p>linkage through holes: top / bottom Ø44mm or by arrangement</p> <p>measuring / control system designed as laboratory table housing (4HE)</p>	
Heating system / control unit	electric resistance heater / PID Eurotherm 3208N	
Dimensions control plant	550 x 500 x 220mm (WxDxH)	
Weight	furnace: ca. 20kg / control unit: ca. 40kg	
Electrical power	2.3 kW, 3NPE 400VAC/50Hz/2.6kVA/3.8A, 16CEE	
Included in delivery	<p>1 furnace (as described above)</p> <p>3 temperature receiving elements PtRh-Pt (type S)</p> <p>1 measurement and control plant with interface RS485 ModBus</p>	
<b>Linkage through holes top and bottom for Hegewald &amp; Peschke standard high temperature - clamping</b>		

#### Options:

- version 3-zone-measuring/ control system LRA-3 as 19"-slide-in unit for control cabinet installation
- additional thermal element-implementation at furnace STE-12/STE-13
- additional/ alternative thermal element for furnace STE-12/STE-13
- shielding gas connection for test with inert gas atmosphere (argon)
- calibration thermal element with factory test certificate
- expansion by two measuring channels for specimen temperature detection, for furnace STE-13
- expansion by three measuring channels for specimen temperature detection, for furnace STE-13 for measuring acc. to DIN EN ISO 6892-2
- expansion by three measuring channels for specimen temperature detection and specimen temperature regulation, for furnace STE-13 for measuring acc. to DIN EN ISO 6892-2

#### Accessories:

- thermal element for furnace STE-12 with ceramic shell and connector
- high temperature-clamping,  $F_{max}=50kN$  (16-024-015)
- high temperature-adapter for flat specimen (16-022-954)
- high temperature extensometer up to  $1700^{\circ}C$  (15-020-020)
- changing devices for the easy handling of multiple furnaces or furnaces and extensometers (16-008-1xx)
- LabMaster-AddOn for Eurotherm (18-050-001)
- LabMaster-module temperature treatments SteadyRise (18-014-030)



Fig. 1: Control unit for high-temperature furnaces

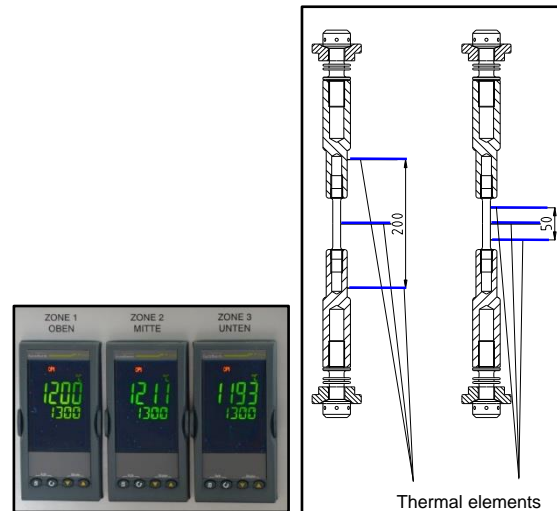


Fig. 2: Control display and thermal elements



Fig. 3: Changing device for 1 high temperature furnace and 1 long distance extensometer



Fig. 4: Changing device for 2 high temperature furnaces

**Configurations of testing systems:**



Fig. 5: Material testing system warm tensile testing

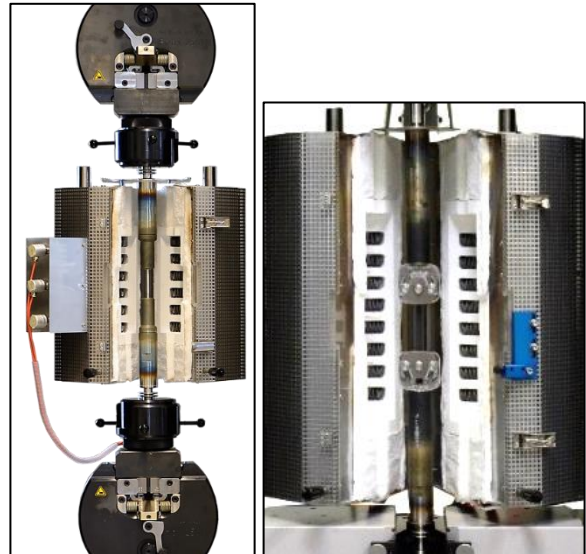


Fig. 6: Configurations tensile test at thread specimen (left) and flat specimen (right)

The temperature controllers of the high-temperature furnaces can be controlled and managed directly via the LabMaster module SteadyRise for heat treatment.

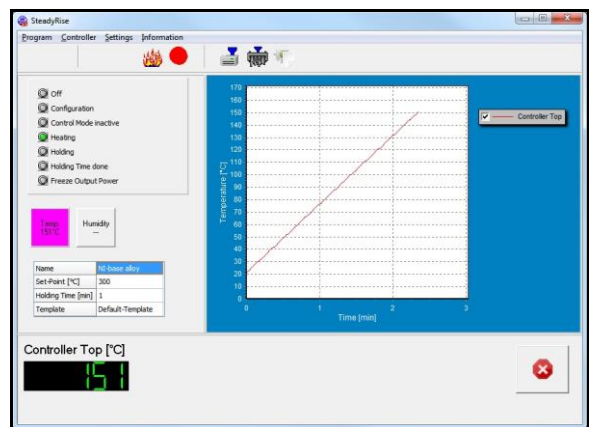


Fig. 7: Communication and parameter setting of the furnace control by SteadyRise

Your contact person: