Fast-Firing Furnaces

LS 12/13 and LS 25/13

These models are ideal for simulation of typical fast-firing processes up to a maximum firing temperature of 1300 °C. The combination of high performance, low thermal mass and powerful cooling fans provides for cycle times from cold to cold of under 35 minutes.

- Tmax 1300 °C
- Very compact design
- Ceramic grid tubes as charge support
- Floor and lid heating
- Two-zone control, bottom and lid
- Integrated cooling fans, programmable to speed up charge cooling including housing cooling
- Programmable lid opening of approximately 20 mm for faster cooling without activating the fan
- Thermocouple PtRh-Pt, type S for top and bottom zone
- Castors for easy furnace moving
- Controls description see page 60

	1	Inner dimensions in mm			Outer dir	nensions	in mm	Connected	Electrical	Weight
D°	w	d	h	in I	W	D	н	load kW	connection*	in kg
LS 12/13 1300	350	350	40	12	600	800	985	15	3-phase	130
LS 25/13 1300	500	500	100	25	750	985	1150	22	3-phase	160

*Please see page 60 for more information about supply voltage

Firing curves LS 12/13 and LS 25/13

Gradient or Lab Strand Annealing Furnaces

GR 1300/13

The furnace chamber of the gradient furnace GR 1300/13 is divided in six control zones of equal length. The temperature in each of the six heating zones is separately controlled. The furnace is usually charged from the side through the parallel swivel door. A maximum temperature gradient of 400 °C can then be stabilized over the heated length of 1300 mm. On request the furnace also is designed as a strand furnace with a second door on the opposite side. Other available additional equipment consists of fiber chamber separators dividing the furnace chamber into six equally sized chambers. Charging then occurs from above by opening the large lid.

- Tmax 1300 °C
- Heated length: 1300 mm
- Heating elements on support tubes providing for free heat radiation in the kiln chamber
- Charging from the top or through the right side door
- Gas damper suspension of the lid
- 6-zone control
- Separate control of heating zones (each 160 mm long)
- Temperature gradient of 400 °C over the entire length of the kiln chamber, each zone can individually be controlled
- Controls description see page 60

Additional equipment

- Up to ten control zones
- Fiber separators dividing the chamber in six equally sized chambers
- Second parallel swivel door for use as strand furnace
- Vertical instead of horizontal strand furnace

Model	Tmax	Inner dimensions in mm			Outer dir	mensions	in mm	Connected	Electrical	Weight
	°C	w	d	h	W	D	н	load kW	connection*	in kg
GR 1300/13	1300	1300	100	60	1660	740	1345	18	3-phase	300

*Please see page 60 for more information about supply voltage



GR 1300/13



Furnace chamber of the GR 1300/13 with second door as additional equipment



labertherm