

Large Industrial Chamber Furnace - LCF

General Information

The robust construction of the LCF large chamber furnaces makes them ideal for applications such as the heat treatment of steels and alloy, ceramics sintering and aerospace heat treatment.

The LGP range is often customised in order to precisely meet the user's requirements. This range also provides a foundation upon which a wide range of custom modifications can be added. Typical examples of which are the more sophisticated control systems and data recording that is required for applications such as AMS 2750E heat treatment under Nadcap. Solutions are available to handle heavier loads or assist in loading and unloading the furnace, or larger chamber sizes than are offered in the standard range.



Standard features

- 1200°C & 1400°C maximum temperatures
- Programmable 3216P1 controller
- Over-temperature protection
- Excellent uniformity and control
- Robust construction using hollow steel section & zinc coated steel sheet
- Double skin construction ensures safe outer case temperature
- Manually operated vertically opening door keeps the hot face away from the operator
- Low thermal mass insulation for high energy efficiency
- Hard wearing silicon carbide tiled hearth
- 1200°C range heated by heavy gauge wire elements in roof and below the hearth
- 1400°C range heated by high quality silicon carbide elements in roof and below the hearth
- Safety door interlock isolates power from the elements whenever the door is opened

Options (specify these at time of order)

- A range of sophisticated digital controllers, multi-segment programmers and data loggers is available. These can be fitted with RS232, RS485 or Ethernet communications
- Pneumatically or electrically operated doors
- A range of retorts can be supplied for using modified with atmospheres up to 1000°C
- Remote control module
- Designs for compliance with AMS 2750E (Nadcap) and other industry standards

Technical Specifications

Large Industrial Chamber Furnace - LCF

LCF 12/202

Max temp (°C)	1200
Volume (litres)	202
Max continuous operating temp (°C)	1150
Dimensions: Internal H x W x D (mm)	300 x 600 x 1120
Dimensions: External H x W x D (mm)	2310 x 1180 x 1590
Max power (W)	24000
Thermocouple type	R

LCF 12/405

Max temp (°C)	1200
Volume (litres)	405
Max continuous operating temp (°C)	1150
Dimensions: Internal H x W x D (mm)	450 x 750x x 1200
Dimensions: External H x W x D (mm)	2620 x 1440 x 1750
Max power (W)	35000
Thermocouple type	R

LCF 12/560

Max temp (°C)	1200
Volume (litres)	560
Max continuous operating temp (°C)	1150
Dimensions: Internal H x W x D (mm)	500 x 750 x 1500
Dimensions: External H x W x D (mm)	2700 x 1500 x 2300
Max power (W)	45000
Thermocouple type	R

LCF 12/675

Max temp (°C)	1200
Volume (litres)	675
Max continuous operating temp (°C)	1150
Dimensions: Internal H x W x D (mm)	500 x 750 x 1800
Dimensions: External H x W x D (mm)	2700 x 1500 x 2600
Max power (W)	60000
Thermocouple type	R

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LCF 12/720

Max temp (°C)	1200
Volume (litres)	720
Max continuous operating temp (°C)	1150
Dimensions: Internal H x W x D (mm)	600 x 1000 x 1200
Dimensions: External H x W x D (mm)	2950 x 1575 x 1810
Max power (W)	60000
Thermocouple type	R

LCF 14/125

Max temp (°C)	1400
Volume (litres)	125
Max continuous operating temp (°C)	1400
Dimensions: Internal H x W x D (mm)	250 x 500 x 1000
Dimensions: External H x W x D (mm)	2310 x 1340 x 1650
Max power (W)	30000
Thermocouple type	R

LCF 14/350

Max temp (°C)	1400
Volume (litres)	350
Max continuous operating temp (°C)	1400
Dimensions: Internal H x W x D (mm)	400 x 760 x 1130
Dimensions: External H x W x D (mm)	2545 x 1549 x 1800
Max power (W)	48000
Thermocouple type	R

LCF 14/480

Max temp (°C)	1400
Volume (litres)	480
Max continuous operating temp (°C)	1400
Dimensions: Internal H x W x D (mm)	500 x 800x x 1200
Dimensions: External H x W x D (mm)	2560 x 1650 x 1900
Max power (W)	60000
Thermocouple type	R

Large Industrial Chamber Furnace - LCF

LCF 14/725

Max temp (°C)	1400
Volume (litres)	725
Max continuous operating temp (°C)	1400
Dimensions: Internal H x W x D (mm)	500 x 720 x x 1790
Dimensions: External H x W x D (mm)	2620 x 1480 x 2470
Max power (W)	60000
Thermocouple type	R