

# HIGH TEMPERATURE RESISTANCE FURNACE

This type of high temperature resistance furnace is characterized by its lining with robust light refractory bricks. This version is recommended for processes producing aggressive gases or acids, such as under glass melting. (Qty 01 No)

Main features should be;

- Molybdenum disilicide ( $\text{MoSi}_2$ ) heating elements
- Robust refractory brick/fiber insulation and special backing insulation that can withstand temperature up to  $1700^\circ\text{C}$
- Furnace floor made of lightweight refractory bricks accommodates high charge weights
- Max. Operating Temperature =  $1700^\circ\text{C}$
- Chamber Size (Inner Dimensions)  $w \times d \times h = 500 \times 550 \times 550 \text{ mm}$  *Preferably*
- Capacity/Volume = 160 L
- Connected Load = 21 kW (3 phase, 400 V, 50 Hz)
- Lift door with electro-mechanic linear drive.
- Separate wall-mounting or floor standing cabinet for switchgear.
- Defined application within the constraints of the operating instructions
- Uncontrolled or controlled cooling system with frequency-controlled cooling fan and motorized exhaust air flap, switchable via the program.
- Stainless steel exhaust gas top hats
- Protective gas connection to purge with non-flammable protective or reaction gases
- Manual/automatic gas supply system
- Cooling fan for shorter cycle times.
- Inner process box to improve the gas tightness and to protect the furnace chamber against contamination.
- Standard controller (the controller regulates the furnace temperature reliably and is equipped with an integrated USB-interface for documentation of process data (NTLog/NTGraph))
- Process control and documentation via VCD software package for monitoring, documentation and control (compatible with standard controller).

- Over-temperature limiter with adjustable cut-out temperature for thermal protection class 2 in accordance with EN 60519-2 as temperature limiter to protect the furnace and load.

### Accessories

- Round saggers with lid (article no 699000408 & 699000984) ( $\varnothing=115\text{ mm}$ ) for furnace,  $T_{\text{max}} 1700\text{ }^{\circ}\text{C}$  (Qty. 05 Nos.)
- Square saggers with lid (article no 699000279 & 699000985)
- Heat resistant gloves capable to bear temperature up to  $800^{\circ}\text{C}$  for loading and unloading of crucibles (article no 491041101) (Qty 03Nos)
- Tongs 300mm (article no 493000002) (Qty 03nos)
- Tongs 500mm (article no 493000003) (Qty 03nos)
- Ceramic collecting pan  $T_{\text{max}}.1300$  (article no 691600512)( $240 \times 220 \times 20\text{mm}$ ) (Qty 06no)
- Steel collection pan (article no 691404623)( $85 \times 100 \times 20\text{mm}$ ) (Qty 02 nos)
- Steel collection pan (article no 691402096)( $110 \times 170 \times 20\text{mm}$ ) (Qty 02 nos)
- Heating elements compatible with furnace model (Qty 06nos)
- Standard controller compatible with furnace model (Qty 02nos)
- Chimney with fan compatible with furnace model (Qty 01nos)
- Hardening Tongs (Qty 03 nos)

### Proposed Model:

HFL 160/17 by M/S. Nabertherm, GmbH or equivalent.

### Note:

- Spares and accessories must be compatible with the equipment.
- European, US, and Japanese manufacturers will be preferred for these items.
- All documents e.g. operation, maintenance and support manuals must be provided in English.
- Quotation should reflect Ex-works value, Freight charges, FOB and C&F value distinctly.