

# Industrial furnaces

## Industrial furnaces



◀ **Crucible Melting Furnace**  
 Gas-heated crucible melting furnace  
 70-100 used for salt-bath-line  
 Capable for hardening of gearbox parts

▶ **Chamber Furnace**  
 Electrical-heated chamber furnace  
 (air circulation furnace)  
 Capable for annealing and tempering



◀ **Shaft Furnace**  
 Electrical-heated shaft  
 furnace capable for  
 tempering and gas nitriding  
 with vacuum



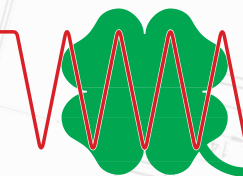
## Consulting and engineering

### Our scope of supply and services:

- Materials selection
- Thermotechnical calculations
- Complete technical documentation with CAD
- Specifications for heating-up and drying
- Working and assembly instructions
- Creation of complete engineering drawings for new systems
- Damage analysis, fast and skilled eliminating of damages

### Saving energy – raising efficiency

- Minimization of wall loss
- Raising efficiency
- Analysis of weak spots
- Payback period rules
- Determination and visualization of potential



For more information  
 please visit our website  
[www.eich-gmbh.de](http://www.eich-gmbh.de)

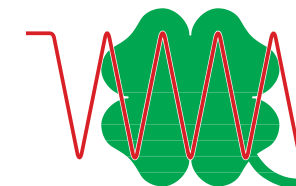
**EiCH**

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# Heat Insulating and Heating Systems custom-made

Technical heat insulating  
 Heating systems  
 Industrial furnaces  
 Consulting and engineering



[www.eich-gmbh.de](http://www.eich-gmbh.de)

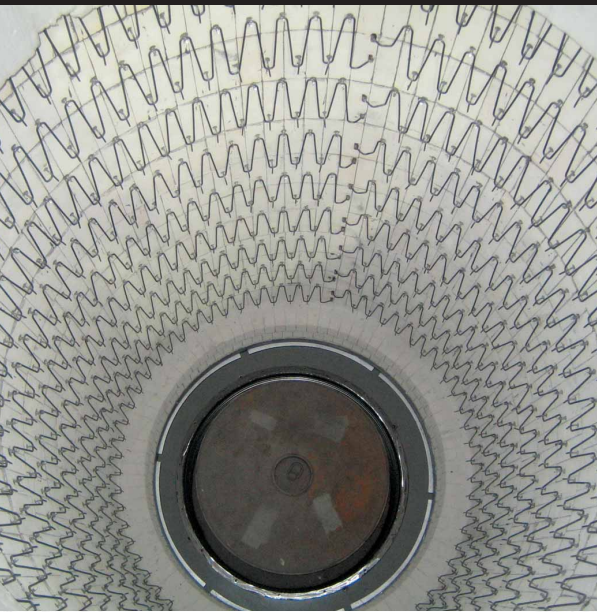
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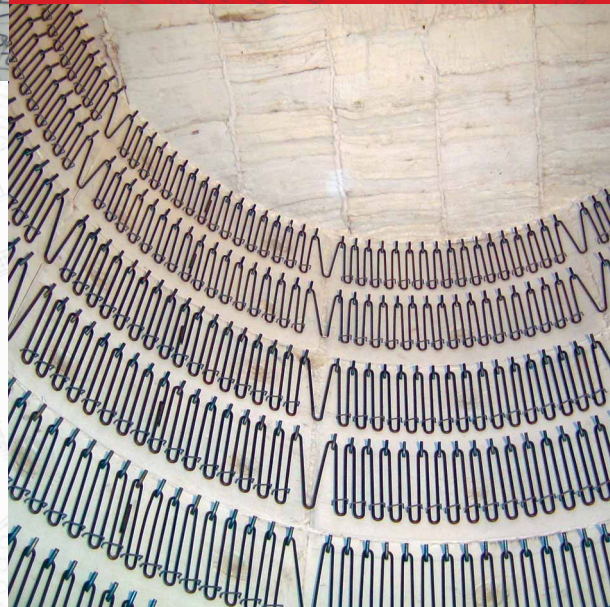


# Technical heat insulating

# Heating systems



Electrical heated shaft furnace in refractory brickwork with arch bricks. Flange of furnace with band-modules fixed with spezial anker-body out of CrNi-steel



Electrical heated hood-type furnace. Insulating with vacuum formed segments and suspended meander heating elements. Roof in tab-modules from ceramic fibres.



Complete refractory lining of a gas heated hearth furnace produced in refractory brickwork. Top of the furnace as vaulted ceiling (arched slab). Hearth plate made with refractory concrete.



Work on the insulating of a shaft furnace. Rear insulating with mineral wool.

We supply heating elements in various styles according to samples or construction drawings. According to application alloys of heating elements will be used only from highest quality up to a maximum temperature of 1400°C. At this we use the different kind of ferritic (CrFeAl) as well as austenitic (NiCr) alloys. For dimensioning and constructing of our heating elements we apply special in-house software.



Heating system of muffle furnace. Heating spirals supported by ceramic tubes. Chamotte slab used for support. Side wall in refractory fire brick work.

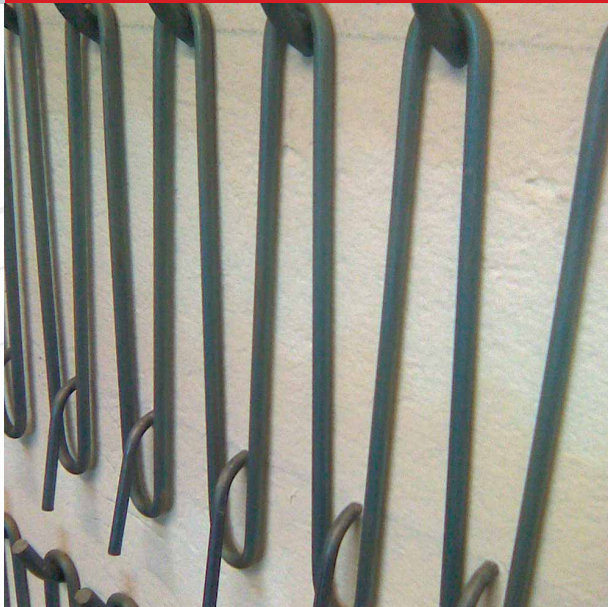


Meander heating elements mounted on vacuum preformed parts. Suspension with clamps.

Heating cylinder of an air circulation furnace. Heating spirals mounted on appropriate perches.



Electrical heating system of a chamber furnace. Heating elements in side and bottom mounted on vacuum preformed insulating parts.



## Where it is too hot for you, we are at home.

The company „Eich Wärmedämm- und Heizsysteme GmbH“ concentrates on the field of „heat treatment“. Thereby she trusts not only in profound knowledge of qualified labor but also in experience for decades in industrial furnaces.

We are specialized on refractory lining, insulating and heating systems for all type of furnaces. The range of production runs from installations and dismantling to repairs, maintenance up to complete new furnaces. A further main focus is lying on upgrading and modernization of existing systems.

The complete engineering incl. engineering drawings, calculation of heat transition and project documentation is created CAD-based in our engineering department.