

# linn



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# High Therm

Industrial furnaces / kilns  
Microwave heating  
Laboratory furnaces  
Induction heating  
High temperature technology  
Sample preparation for spectroscopy

***METAL CERAMIC GLASS R&D***



***BURNING FOR YOU***

# History



*Horst Linn driven, fast, and ready to take risks. Race in a factory - Steyer Puch 650 TR, 1973*

In 2002 L.E.N.A Industrieofenbau was acquired (successor to Linn Industrieofenbau). This expanded the product range to large industrial furnaces and kilns.



*Horst Linn's first employments in the 60's, Kienzle Computer-Design and AEG-Elotherm Induction heating*

Linn High Therm was founded in 1969 as Linn Elektronik by Horst Linn, born 1944.

The new plant was focused on high-temperature furnaces, induction heating, microwave technology, and sample preparation units for spectroscopy.

Besides LINN HIGH THERM Plant II in Bad Frankenhausen, LINN HIGH THERM has its own sales and service offices in Pilsen (CZ), Vienna (A), Shanghai (CN) and Bangkok (TH) and sales and service representatives in about 40 countries worldwide.



*Horst Linn, President*

His father August Linn had established Linn Industrieofenbau in 1942. He was a true pioneer in the field of industrial furnaces. Horst Linn started his endeavour by producing laboratory furnaces and induction casting machines (dental/jewelry).

The company developed more and more into a furnace / kiln producer, hence the name changed to LINN HIGH THERM and the company moved from Hersbruck to Eschenfelden into a new facility.



*Induction casting units, 1970*

Today, Linn High Therm specializes in designing custom made furnace systems.

Horst Linn jr., after technical / electronics college, has been working in the R & D Department for HF / RF-Generators + ICP sources and is already fully integrated into the company. His future tasks will be the international sales and co-operation of LINN HIGH THERM and LINN HIGH THERM Plant II; this plant in Thuringia was acquired in 1990 after the reunification. Furthermore, he will be involved in developing the LINN HIGH THERM business in Eastern Europe and Asia.



*Horst Linn jr. 1985, learning by doing*



*Horst Linn, Techn. Univ. Munich, calibrating wave guide*



*Horst Linn jr., Vice president*



# The company

Linn High Therm with over 100 employees is based in Eschenfelden, Bavaria. It specializes in the production of industrial and laboratory furnaces/



*Reception desk*

kilns, microwave furnaces, sample preparation units for spectroscopy, induction heating systems, precision fine casting systems, and custom built units.



*Sales dept.*

There are only a few companies of such qualification and production spectrum:



*Design dept.*

R&D, design, production, and quality control all under one roof with 33 years of outstanding experience. From prototype to pilot-scale in almost no time.

Linn is serving the following industries worldwide: Metal, ceramics, chemicals, glass,



*Production facility*

building materials, research and development, medical, nuclear, recycling, education, and food. You can find Linn products anywhere heat treatment takes place - also in your production.

Linn High Therm is a family owned business offering a wide variety of products on the highest technical level with an outstanding production depth.



*Electronics assembly*

The profound foundation is laid by continued training. Only a person who has mastered all the steps in the production process can



*Training*

comprehend the overall picture of Linn systems. We especially value training seminars on a regular basis for all our sales executives, service engineers, and national and



*Sales & service training*

international customers. Linn is looking back on over thirty years of experience, flexibility driven, and never satisfied with past success. Innovation and continuous improvement is our mission. To provide our customers with the best applicable solution is our goal.



*Patents*

Over 70 registered patents are proof of this quest.

To ensure continuation and to ease the generation succession the Linn group has implemented an advisory board. Its main responsibility is to ensure expansion and access to national and foreign markets by improved marketing strategies.



*Advisory board*

ISO 9001 certified in 1994.



# Projects



*Tempus - Texas  
D1 - D2 Mission  
1985 - 1993 Prestige!*



*New materials  
2300 °C / 200 bar  
Erlangen University, 1995  
Most expensive furnace!*



*Production system for the  
growth of  
2" SiC single crystals, 2000  
The Future!*

# Products

## Industrial

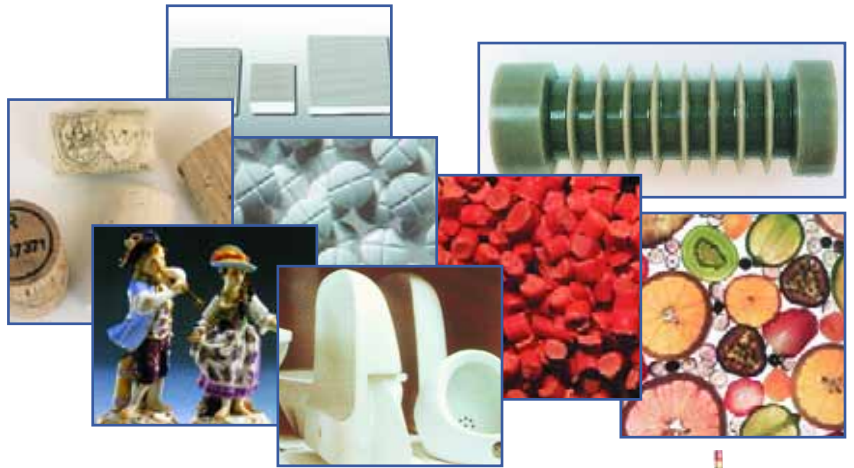


Ceramics and metal heat treatment, brazing, hardening, annealing, sintering, and debinding in atmosphere, protective gas, or vacuum. Systems for batch or continuous operation.



# Microwave heating

Batch and continuous microwave systems for applications in drying and sterilizing of bulk materials, insulation materials, pharmaceutical products, and natural produce. Other applications include hardening of plastics, debinding and sintering units for ceramics and sintered metals, as well as flow heaters.



# Laboratory

Standard laboratory, chamber, and tube furnaces, rotary tube furnaces; all systems available with protective gas and vacuum.



# R & D

High temperature furnaces, crystal growing devices, heaters for test units and custom built furnaces. Applications in institutional and industry research, nuclear, and aerospace industries.



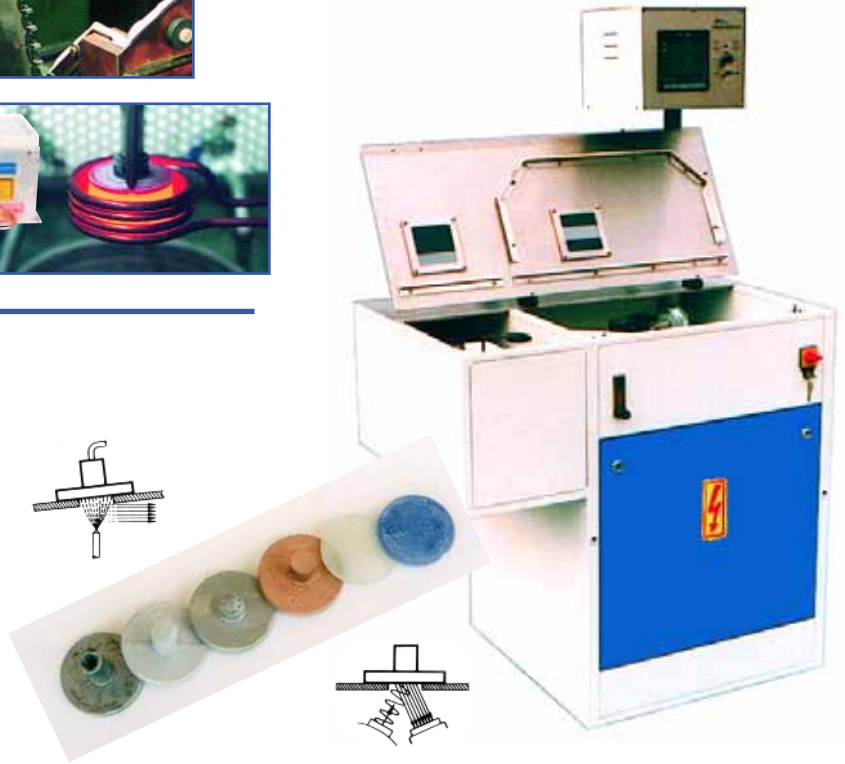
## Induction heating



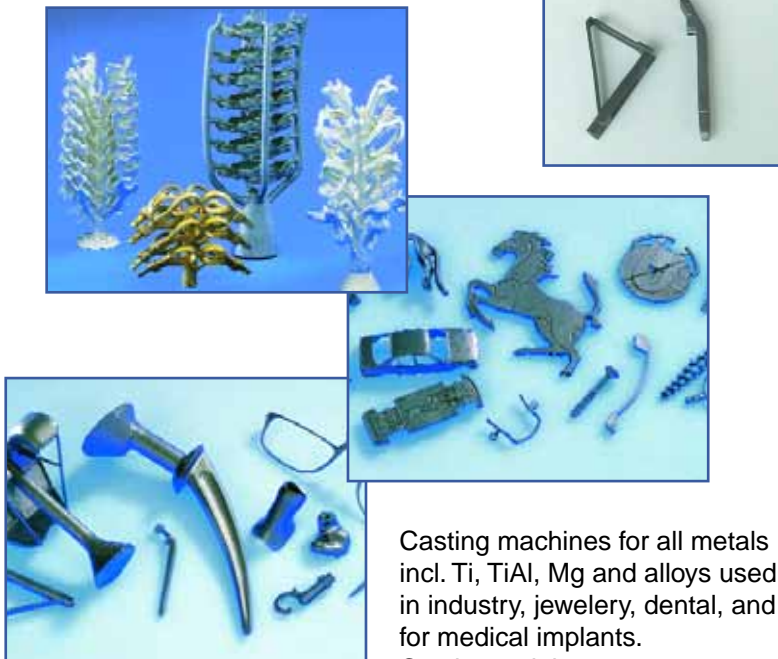
High/Medium frequency generators/inverters with power up to 80 kW for brazing, soldering, hardening, melting, bonding, preheating, and shrinking. Heating systems for crystal growing, plasma, excitation, testing equipment, surface modifications in research, development, and production.

## Sample preparation for spectroscopy

Induction heated sample preparation machines for spectroscopy for remelt and fusion of oxidic materials, metals, development of alloys and standards. Suited for XRF/RFA, Emission, AAS, ICP, X-Emission.



## Precision fine casting for industry, jewelry, dental



Casting machines for all metals incl. Ti, TiAl, Mg and alloys used in industry, jewelry, dental, and for medical implants. Casting weights up to 3000 g.





# ***THE LINN WAY TO DO BUSINESS WITH YOU*** ***Made in Germany***



ISO 9001/2000

QUALITY  
EFFICIENCY  
INNOVATION  
AUTOMATION  
EXPERIENCE  
QUALITY-CONTROL  
LONG LASTING USE  
SPECIAL FURNACES  
UP-TO-DATE HIGH-TECH  
DURABILITY PRODUCTION  
SPARE PARTS & CRUCIBLES  
SAFETY FOR GAS & VACUUM  
ENERGY-SAVING-DESIGN  
CUSTOM DESIGNED FURNACES  
24-HOUR AFTER-SALES-SERVICE  
MAINTENANCE-FRIENDLY-DESIGN



**linn**   
High Therm