

TRADITION AND PROGRESS

The company was founded in 1961 as Wolfgang KOHNLE Wärmebehandlungsanlagen GmbH. Many years of experience and dedicated, competent employees have made our name synonymous with superior quality to meet your individual thermal treatment needs.

Consistent growth and continuous advancement in our product segment of continuous feed equipment are our goals, based on satisfied customers and mature technologies at good price-performance ratios.

Interaction between design and manufacturing housed in the same facility is the foundation for quality equipment design with short lead times.

Presently and in future, our efforts focus on the more efficient use of energy to contribute to the preservation of resources and protection of the climate as well as offering our customers cost-efficient equipment.



DIVERSITY IS OUR STRENGTH!

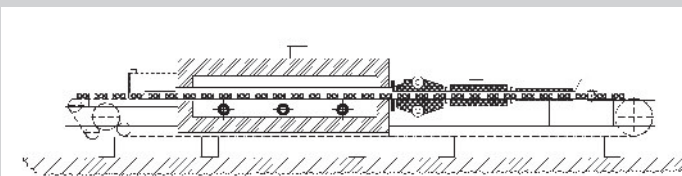
The diversity of requirements and our extensive experience have resulted in eight fundamental product lines.

Based on this, we develop customized solutions to problems from a flexible modular system with proven components and auxiliary units.

Economics, ecology and longevity are the objectives we continuously implement successfully in our equipment.

Tell us your requirements and together we will work on the perfect solution. Guaranteed!
Further information on the different types of equipment is available upon request or at www.kohnle.de.

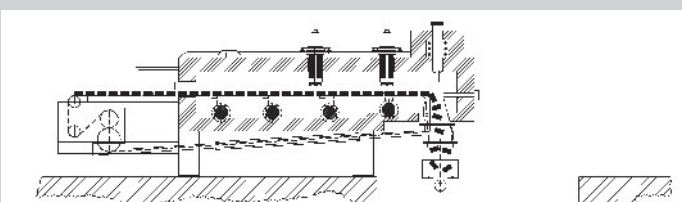
Product line 1



Continuous mesh belt furnace type: T/HT
Capacity: max. 500 kg/h

For heat treatment types, tempering, annealing, soldering, nitrocarburizing, sintering under protective atmosphere up to 1,180 °C in conjunction gas rapid cooling or indirect water cooling line.

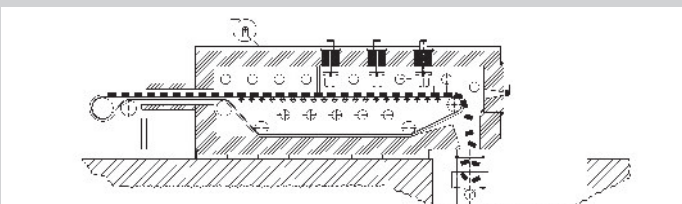
Product line 2



Conveyor belt retort furnace type: BLH
Capacity: max. 500 kg/h

For austenitizing, carbonitriding, gas carburizing, nitrocarburizing under protective atmosphere at temperatures up to 950 °C in conjunction with quenching in oil, polymer, salt or water. Process area surrounded by Ni/Cr retort. Rapid change between different atmospheres possible. Wire belt conveyors with feed in cold zone.

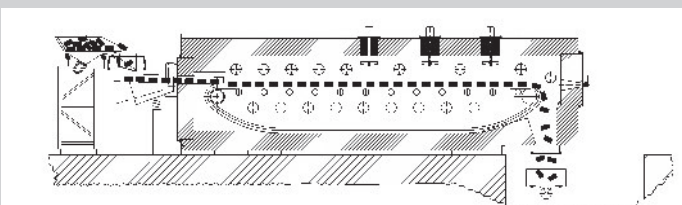
Product line 3



Mesh belt furnace type FH
Capacity: max. 1,000 kg/h

For austenitizing, carbonitriding, gas carburizing under protective atmosphere at temperatures up to 950 °C in conjunction with quenching in oil, polymer, salt or water. Wire belt conveyors with feed in cold zone. Energy recovery through heat recuperation at the furnace inlet. Conveyor on anti-friction load-bearing rollers.

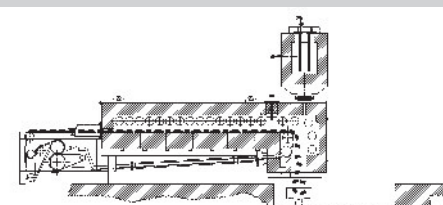
Product line 4



Castlink belt furnace type FHI
Capacity: max. 2,000 kg/h

For austenitizing, gas carburizing at temperatures up to 950 °C in conjunction with quenching in oil, polymer, salt or water. Castlink conveyor circulates through interior of furnace. Feeding via optional inlet gate/vibratory chute in heated zone. Conveyor on anti-friction load-bearing rollers.

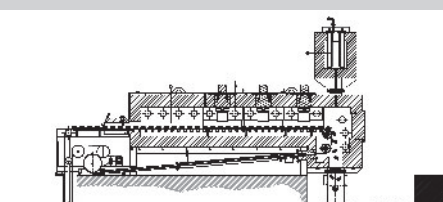
Product line 5



Mesh belt furnace type FHT
Capacity: max. 500 kg/h

For austenitizing, gas carburizing under protective atmosphere at temperatures up to 950 °C in conjunction with quenching in oil, polymer, salt or water. Belt run over SiSiC slide plates. Wire belt conveyors with feed in cold zone. The wire belt conveyor is guided over a cooling channel and a water sealing.

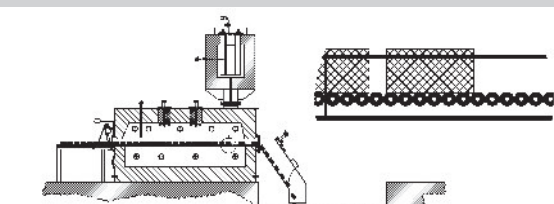
Product line 6



Meshbelt furnace type FHK
Capacity: max. 1,000 kg/h

For austenitizing, carbonitriding, gas carburizing under protective atmosphere at temperatures up to 950 °C in conjunction with quenching in oil, polymer, salt or water. Conveyor on anti-friction load-bearing rollers. Wire belt conveyors with feed in cold zone. The wire belt conveyor is guided over a cooling channel and a water sealing.

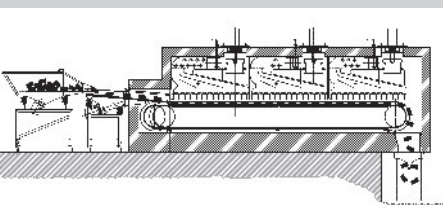
Product line 7



Roller hearth furnace type RMH
Capacity: max. 500 kg/h

For austenitizing, gas carburizing, annealing under protective atmosphere at temperatures up to 950 °C in conjunction with quenching in oil, polymer, gas or salt. The goods for heat treatment are transported over SiSiC rollers. Feed and discharge fast runs are possible.

Product line 8



Conveyor belt furnace type LGO
Capacity: max. 500 kg/h

For solution annealing and artificial aging of aluminum at temperatures up to 650 °C in conjunction with water quenching. Temperature uniformity guaranteed in holding zones at max. +/- 3 °C. Cast link conveyor circulates through interior of furnace. Feeding via vibratory chute in heated zone.



COMPETENCE FROM ONE SOURCE HEAT TREATMENT EQUIPMENT TECHNOLOGY





COMPETENCE IN PLANNING AND DESIGN

In our endeavors for economy and quality we already support our customers with intensive consultancy during the project development phase. We are bound to find a suitable solution for every application with our extensive and individual product portfolio of customized equipment for continuous heat treatment of mass small parts up to 1,180 °C and throughputs between 5 and 2,000 kg/h.

Worldwide we supply numerous and renowned customers, for example, in the

- automotive supplies industry
- connecting technology
- building industry
- furniture industry
- roller bearing industry
- jewelry/watch industry
- medical engineering
- heat treatment services
- NE semiconductor industry

Process technology, throughput capacity, type of feed and level of automation are some of the requirements for the planning of a heat treatment plant. Specific parts geometries, industry-specific guidelines or the integration of energy-

and resource-saving technologies round off the requirements profile from which we develop a bespoke concept for each of our customers.

The wealth of experience of our project engineers, designers, process and commissioning experts as well as the results of intensive testing on our test plants consistently contribute to our designs.

As we are convinced that optimal results stem from good teamwork, we offer our customers the opportunity of a dialog throughout the entire order procedure to help design and accompany the design characteristics of their plant.

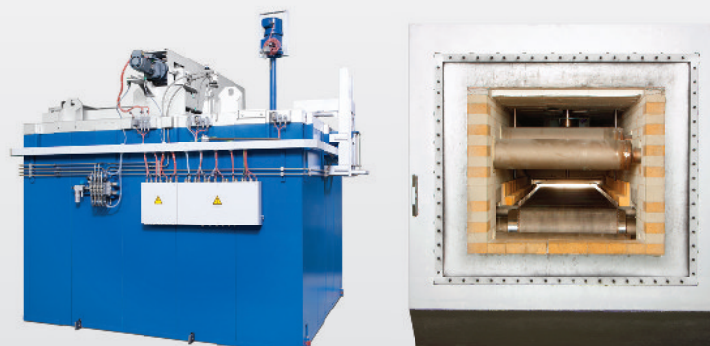
We only use our own highly dedicated and qualified personnel for manufacturing, installation and commissioning. The same applies to the training and familiarization of the operating and maintenance personnel of our customers worldwide.

After completion of the plant at the operating facility and the start of production we would be pleased to continue providing advice and support to our customers with competent and reliable service as well as a timely supply of spare parts.

BESPOKE EQUIPMENT FOR EVERY APPLICATION

Whether tempering, austempering, carbonitriding, gas carburizing, hardening, solution annealing, nitrocarburizing, inert gas soldering, sintering, recrystallization annealing or quenching and tempering - cost-effective and reliable solutions are always based on a high level of automation of the overall system, the maintenance-friendliness, homogenous material flow as well as the choice of the right components for all plant elements.

As one of the few manufacturers, we cover all design types in the segment of conveyor furnace equipment in terms of heat treatment processes, protective atmosphere technology, throughput capacities and process documentation (for example, CQI-9). In the choice of conveyor belts and bought-in components, we rely on longstanding partners who provide us with perfect quality for a prolonged service life.



PERFECTION FOR EVERY PROCESS

In protective atmosphere technology, we offer considerable experience and a broad spectrum of options: no matter whether economical direct gassing, forming gas, cracked gas or carburizing atmospheres - we can supply the appropriate solution. If required, and particularly for demanding brightness requirements, we determine the most economic protective gas composition in own test series to provide an optimal result.

The dialog with our customers, striving for highest, reproducible quality with close tolerances, and the permanently growing demands of the market, spur our innovation capabilities - for state-of-the-art plant technology.

This leading position is demonstrated by the efficiency and durability of our products as well as their environmental compatibility. This is more than confirmed by the positive feedback from over 1,500 customers worldwide.

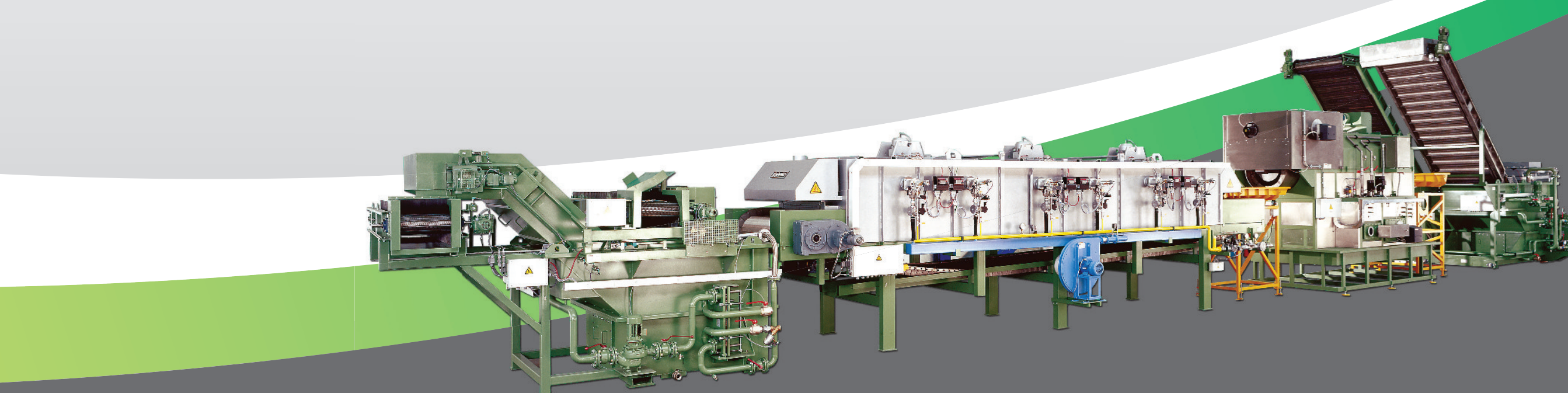
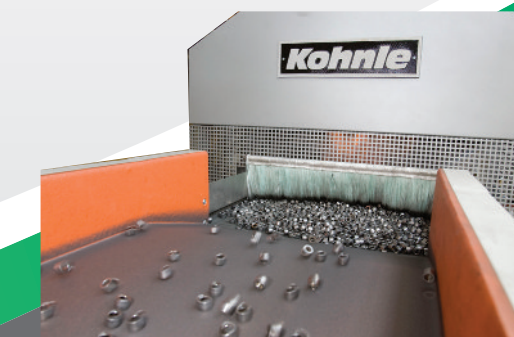
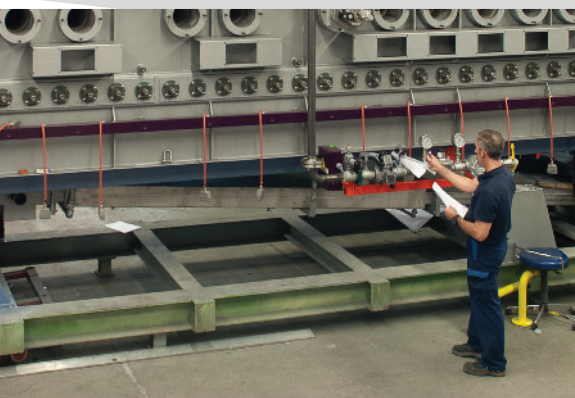
CUSTOMIZED EQUIPMENT WHATEVER YOUR REQUIREMENTS

Depending on the requirements, we integrate fully automated feeding, discharge or handling systems for an economic material flow and gentle to the product. The same applies for the removal of grease and oil residues, phosphate layers etc. to optimize the parts prior to heat treatment. A number of appropriate cleaning devices are available to remove the quenching agents used in the plant.

We offer part- and material-specific quenching and cooling systems in all standard designs for the media, salt, oil, polymer, water or gas (i.e. N_2/H_2). Special designs prevent the loss of material during transport. In conjunction with centrifugal cleaning units, we also place their drums under the discharge shaft in the quenching medium to ensure 100% sorting accuracy.

In addition to the indirect water cooling line we have also developed gas rapid cooling systems for the conveyor belt continuous furnaces. These allow more intensive quenching or shorter equipment designs or higher throughput at equal quality.

All high and low temperature furnaces can be supplied with gas or electric heating, each fitted transport belts appropriate for the application, for heat treatment under air or protective atmosphere. Modern fiber insulation, state-of-the-art drives and economical heating systems ensure reproducible production processes and product results.



COME AND BENEFIT FROM OUR EXPERIENCE!

Kohnle
WÄRMEBEHANDLUNGSANLAGEN