

# The Innovative FURNACE Concept For PRESS HARDENING



**heat X press**

# AICHELIN GROUP

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## GLOBAL SETUP



AICHELIN was founded in 1868 and with 1100 employees around the globe is one of the largest providers of heat treatment solutions in the world.

AICHELIN has manufacturing plants in EUROPE, the USA, CHINA and INDIA and can provide worldwide service coverage.



## INNOVATIVE FURNACE TECHNOLOGY

In 1985, AICHELIN delivered a roller hearth furnace for hot forming to a customer in Lulea, Sweden. A few years ago, we re-entered the hot forming business with the idea of providing a different and better solution than the ones that are common on the market.

This solution is our step-chain conveyor furnace called heatXpress.



## heatXpress IS SUITABLE FOR

- Direct process with coated or uncoated blanks
- Indirect process with load carriers
- Hot metal gas forming of coated and uncoated tubes (blow forming)
- Cylindrical profiles
- Tailored property parts



heatXpress furnace for direct process & cylindrical profiles



heatXpress furnace for indirect process

# STEP-CHAIN CONVEYOR FURNACE

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## THE STEP-CHAIN TRANSPORT PRINCIPLE

The transport chain moves forward and backward. During the forward movement the blanks lie on the chains (red).



During the backward movement of the chain the parts are lifted and then rest on the lifter beams (yellow).



These variable steps are repeated till the blanks reach the furnace outlet. The parts are loaded, unloaded and centered with special fork loaders.

For a video check out the QR code or visit [www.youtube.com/watch?v=5SGmVEEX3I8](https://www.youtube.com/watch?v=5SGmVEEX3I8)



## FLEXIBILITY

- Transport of complex profiles
- Direct & indirect process
- No furnace width limit
- Individual burner layout

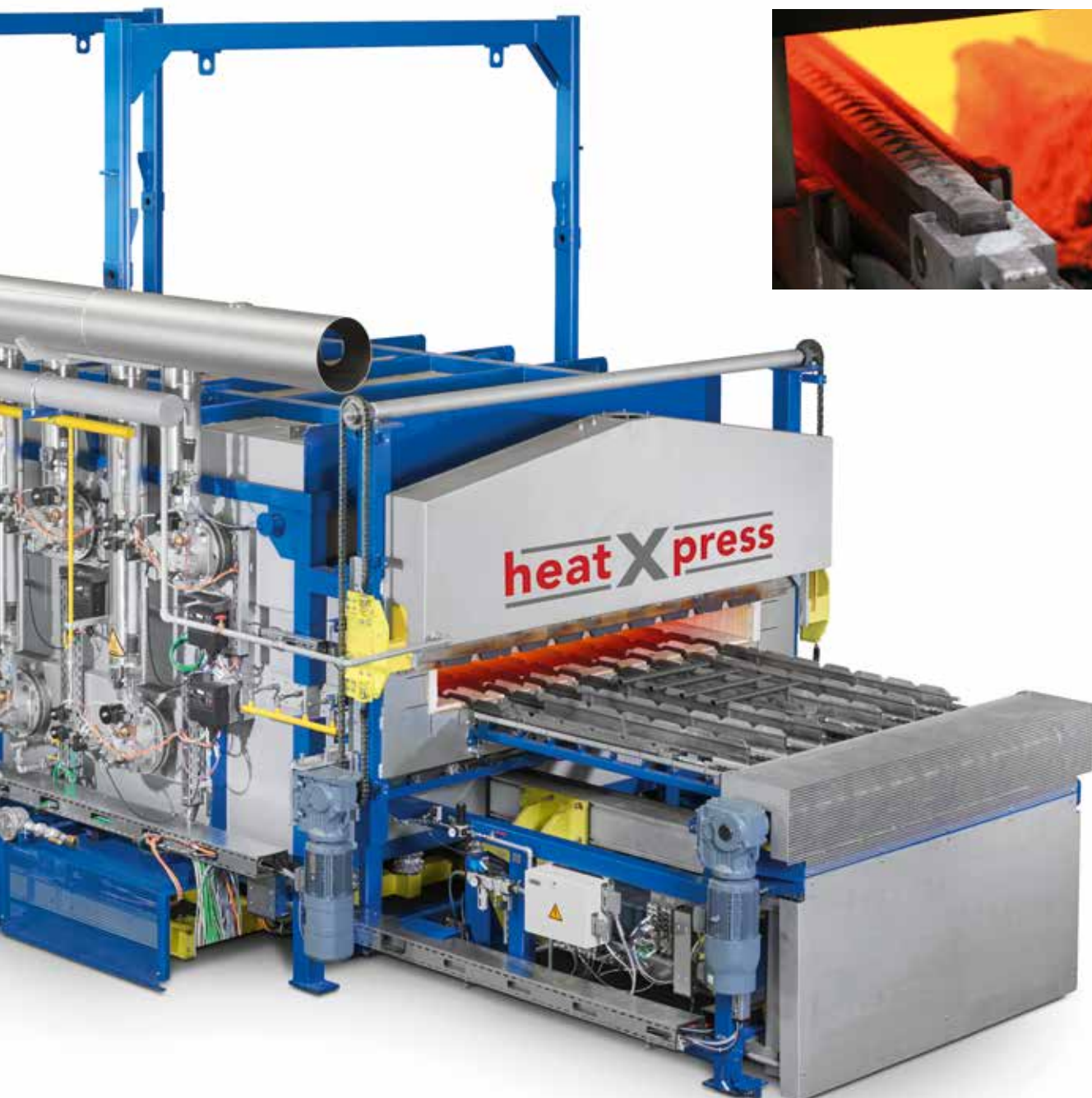


## RELIABILITY

- Heat treatment experts since 1868
- High-quality equipment
- Your global on-site partner
- High service availability

## ADVANTAGES

- Chain lifetime of at least 4 years
- No roller fractures or pollution
- No oscillation during production  
breaks necessary
- High positioning accuracy

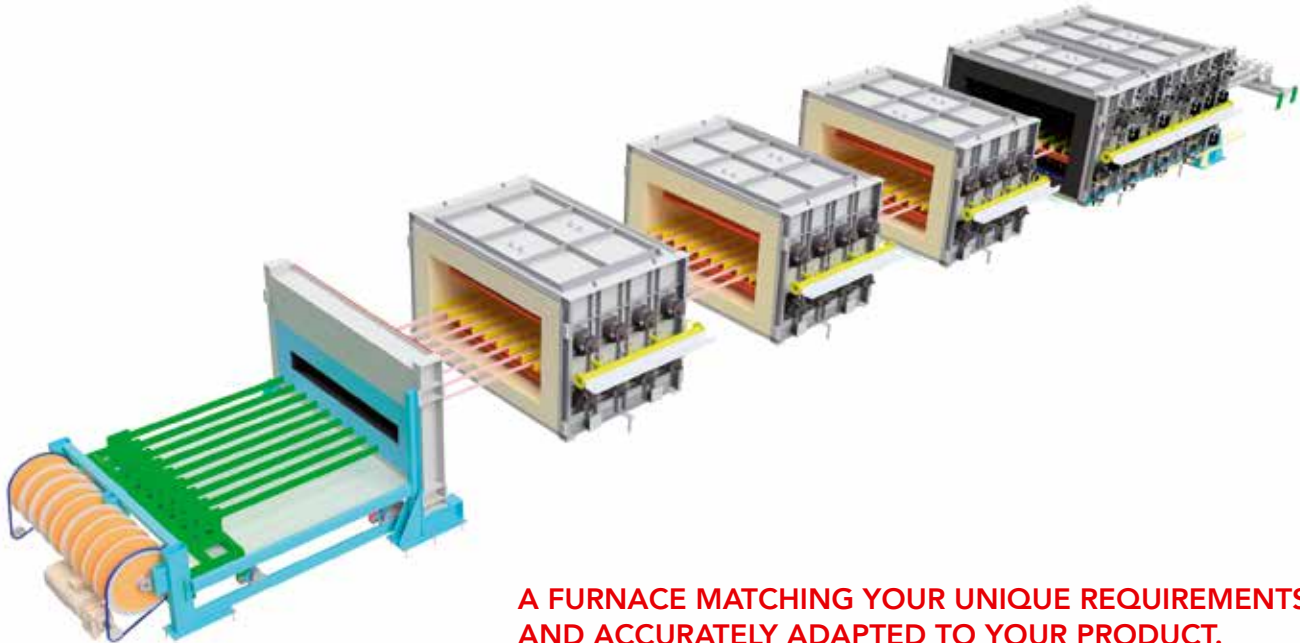


# STEP-CHAIN CONVEYOR FURNACE

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## MODULAR CONCEPT

- Variable furnace lengths
- Easy installation
- Short lead times
- Installation on existing foundation



**A FURNACE MATCHING YOUR UNIQUE REQUIREMENTS AND ACCURATELY ADAPTED TO YOUR PRODUCT.**

## ATMOSPHERE

- Air
- Nitrogen with natural gas
- Dew point control

## HEATING

- Gas and/or electric heating
- Self-recuperative burners
- SiC radiant tubes at top and bottom
- Working temperature up to 980° C

## GENERAL

- Cycle time down to 10s
- Removable furnace covers
- Tailor-made solution
- Life cycle on-site support



## WITH FOCOS 4.0 THERE'S MORE TIME FOR IMPORTANT THINGS

FOCOS 4.0 real time process control and documentation system.

- ... How can I get a better overview of my production?
- ... How can I improve and simplify my analyses?
- ... How can I integrate the data from my furnace plant into my IT infrastructure?

We've heard these and similar questions from our customers, and they are the reason we developed the new FOCOS 4.0. This software offers you priceless insight into your production.

## FOCOS 4.0 - YOUR ADVANTAGES AT A GLANCE

- Simple, fast analysis of your production (including "offline workstations")
- Reliable and fraud-proof documentation
- Perfect reporting functions – even for maintenance
- Connection options for data import and export to existing production systems
- Customized reports
- A variety of expansion options for your future needs
- Everything at one glance and in real time!



**COI-9** Speed  
Quality Report **Export**  
**Documentation** Integration  
Efficiency **Import**  
**Overview** Audit Customized Analysis  
decentralized workstation



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Subject to technical changes.  
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