ROBOTERM

Induction Heaters for Forging

50 years of experience in induction heating

300 manufactured induction heaters

200 customers in 16 countries

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ROBOTERM

COMPLETE EQUIPMENT FOR INDUCTION HEATING

Induction Heaters for Forging

Parameters:

- Powers from 10 kW do 5 000 kW
- Frequencies from 50 Hz to 50 000 Hz
- Transistor or thyristor converter
- Built-in or separate converter
- Continual or static heating

What we heat:

- Steel and non-ferrous metals
- Billets of any cross section
- Rods and tubes of any cross section
- Ends of rods and tubes
- Workpieces of any shape and size

Efficiency **Power** **Minimal waste** **Quick start** **Versatility**

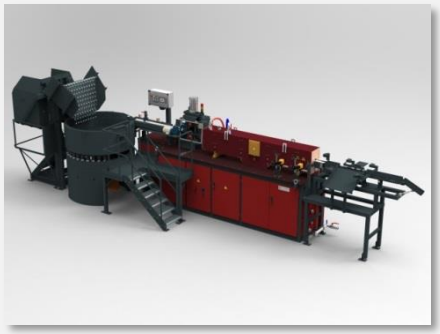
Temperature uniformity **Automation** **Ease of use** **Footprint dimensions**

Reliability **Service life** **Repairability** **Safety** **Ecology**

We deal with all this from the beginning of the heater design. With an emphasis on the individual requirements of a specific application we design the best solution that best meets the customer's needs.

Single-stage Billet Heaters

- The best price
- Easily replaceable inductor
- Set of inductors for different billet sizes
- Automatic feeding
- Built-in converter
- Hot billet sorter



Multi-stage Billet Heaters

- High versatility
- High efficiency in the entire power range
- Quick inductor exchange system
- Automatic emptying system
- Built-in converters
- Hot billet sorter

Parallel Billet Heaters

- Extreme high powers
- Large billet diameters
- Minimal heater length
- Hydraulic or electromechanical pusher
- Separate converter

Rod End Heaters

- Manuel feeding
- Pneumatic ejection of heated rods
- Temperature recording
- Pneumatic inductor clamping
- Small footprint

Special Workpiece Heaters

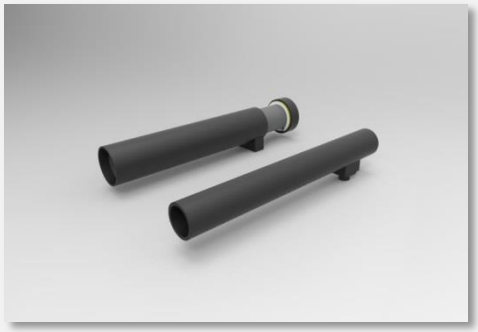
- Suitable for automatic production line
- Separate converter
- Electromechanical pusher
- Robotic feeding
- Pneumatic inductor clamping

Frequency Converters

- Thyristor 200 – 10 000 Hz up to 1 200 kW
- Transistor 6 000 – 50 000 Hz up to 250 kW
- Large power range
- Large frequency range
- Self-diagnosis
- Interchangeable units for easy repair

Pyrometers

- For temperatures from 700 to 1400°C
- Aiming distances from 250 to 1500 mm
- Wavelength 0,8 – 1,1 µm
- Output voltage 0 – 10 V
- Cooled housing
- Induction interference resistant



Inductors

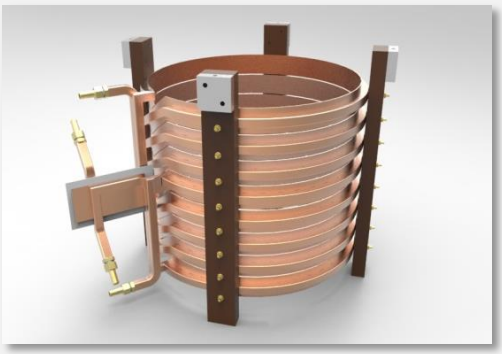
We manufacture and repair inductors of all shapes and sizes.

Inductors for Continual Billet Heating

- Easy exchange and quick connection
- Heavy-duty connectors and quick couplings
- Cooled copper end boards
- Wear-resistant coated skid rails
- Temperature sensors for all cooling circuits
- Coil and refractory optimized for best efficiency

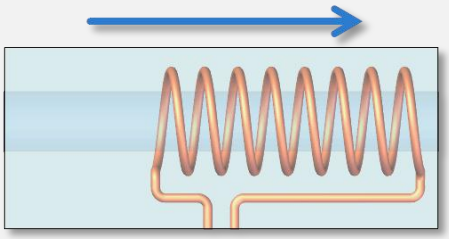
Repairs of Inductors and Coils

- Production of a new refractory lining
- Production of spare parts
- Repair of leaks
- Insulating coating of the coil
- Flushing and cleaning of cooling circuits
- Pressure and flow test



Do you run your heater economically?

Using computer simulation we will perform free an analysis of a specific heating process on your billet heater and eventually design an inductor to reduce losses or improve billet temperature uniformity.

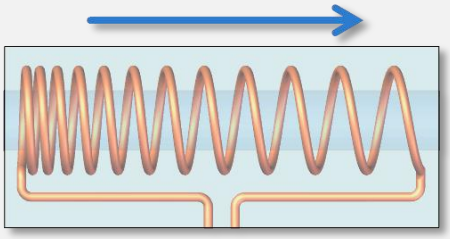


Short-coil Inductor

- Saves energy in low power rate
- Prevents sticking / welding of billets
- Reduces scale formation

Accelerated-heating Inductor

- Eliminates problems with underheated core
- Enables shorter cycle and higher productivity
- Allows to minimize the length of the heating line



Automatic feeding

Vibratory bowl feeders

- Patented elliptical oscillation technology
- Large range of diameters and lengths of billets
- Abrasion resistant steel for long life
- Quiet operation
- Speed regulation according to load
- Stock weight monitoring

Step feeders

- Fastest feeding
- Suitable for very high production rate
- Abrasion-resistant steel steps and hopper
- Low position of the hopper
- Transport of billets to great heights

Bin tippers

- Loading by a forklift or a crane
- Low platform position for loading by a forklift
- Large rotation angle for safe dumping
- Hydraulic or electromechanical driven
- Standard load capacity up to several tons

Hot material manipulation

- Chain conveyors
- Hot billet sorters
- Roll and clamp extractors
- Gravity chutes
- Single-purpose manipulators
- Preparation of the billet for taking by a robot