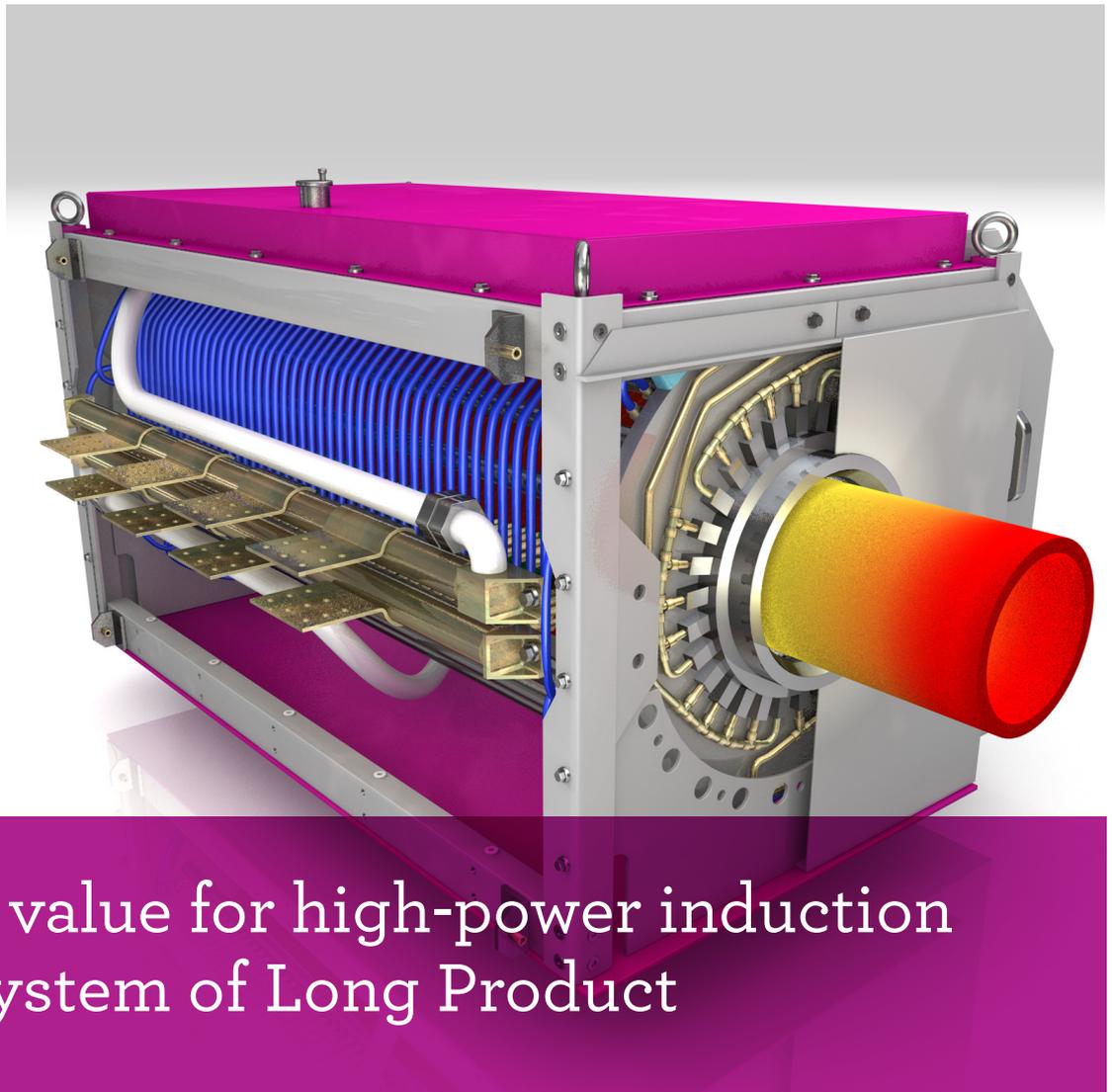


# CELINE\* - LP

## Induction Heating Solution

\* Compact Electromagnetic Induction Equipement



The safer value for high-power induction heating system of Long Product

#### HIGH FLUX:

- Power density x6 conventional inductors
- Electrical efficiency: 20 to 30% above conventional inductors
- One single inductor diameter for multiple product outer sections

#### APPLICATIONS

- Reheated billets for pressing, stamping, forging, or hot rolling
- Reheated pipes or rails for continuous heat treatment

**Celes CELINE LP** represents the current state-of-the-art of induction for in-line heating for long products the development of this high-flux induction heating solution.

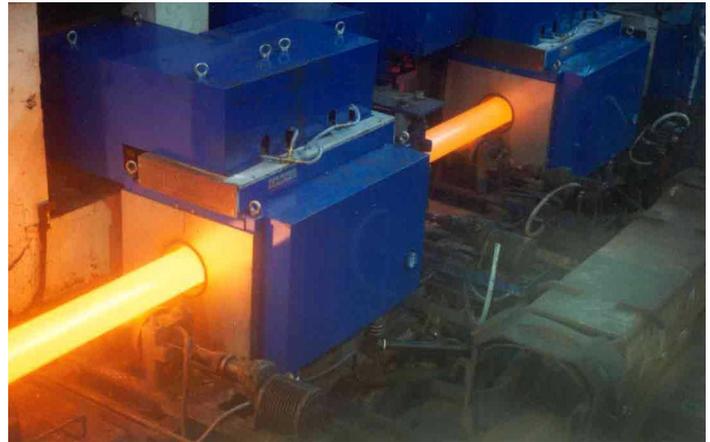
**The technology was developed based on Fives' experience in producing high-intensity magnetic fields generated by multilayer coiling.**



### Advantages of the Fives solution

The low loss conductor winding technique patented by Fives has enabled the development of this Hi-flux induction heating solution

- Power density: up to six times that of conventional inductors
- Electrical efficiency: 85% at Curie point and beyond, as opposed to 50 to 60%, with conventional inductors, thus representing considerable saving in production cost
- High power per Induction length:
  - 3 MW/m for bars
  - 6 MW/m for tubes
- Sizable capital saving: one single inductor for multiple product outer sections, thus reducing the investment, maintenance and down time
- Reduced maintenance: typically, once a year, an inspection is sufficient, mainly due to the absence of refractory and an adequate thermal and mechanical protection.



Celes CELINE LP inductors are powered by Celes IS high power generators, enabling a perfect heating control over the temperature range.

### Applications

Reheating Long products:

- Round or square billets
- Rails
- Tubes

Compatible materials:

- STEEL: all grades
- NON FERROUS: Copper, aluminium, silver

### Technical characteristics

Power generator type	IGBT Transistor
Output power	Up to 5 MW
Electrical supply	12 pulses 690 V
<b>Standard dimension</b>	
Overall length	1350 mm
Mechanical window	from 100 up to 300 mm

#### CONTACT-US: