

Experience the future of  
aluminum recycling with  
Insertec electrical furnaces.

Designed to drastically reduce CO<sub>2</sub> emissions  
and improve energy efficiency, our furnaces  
achieve up to 30% energy savings compared to  
conventional systems.



[insertec.biz](https://insertec.biz)

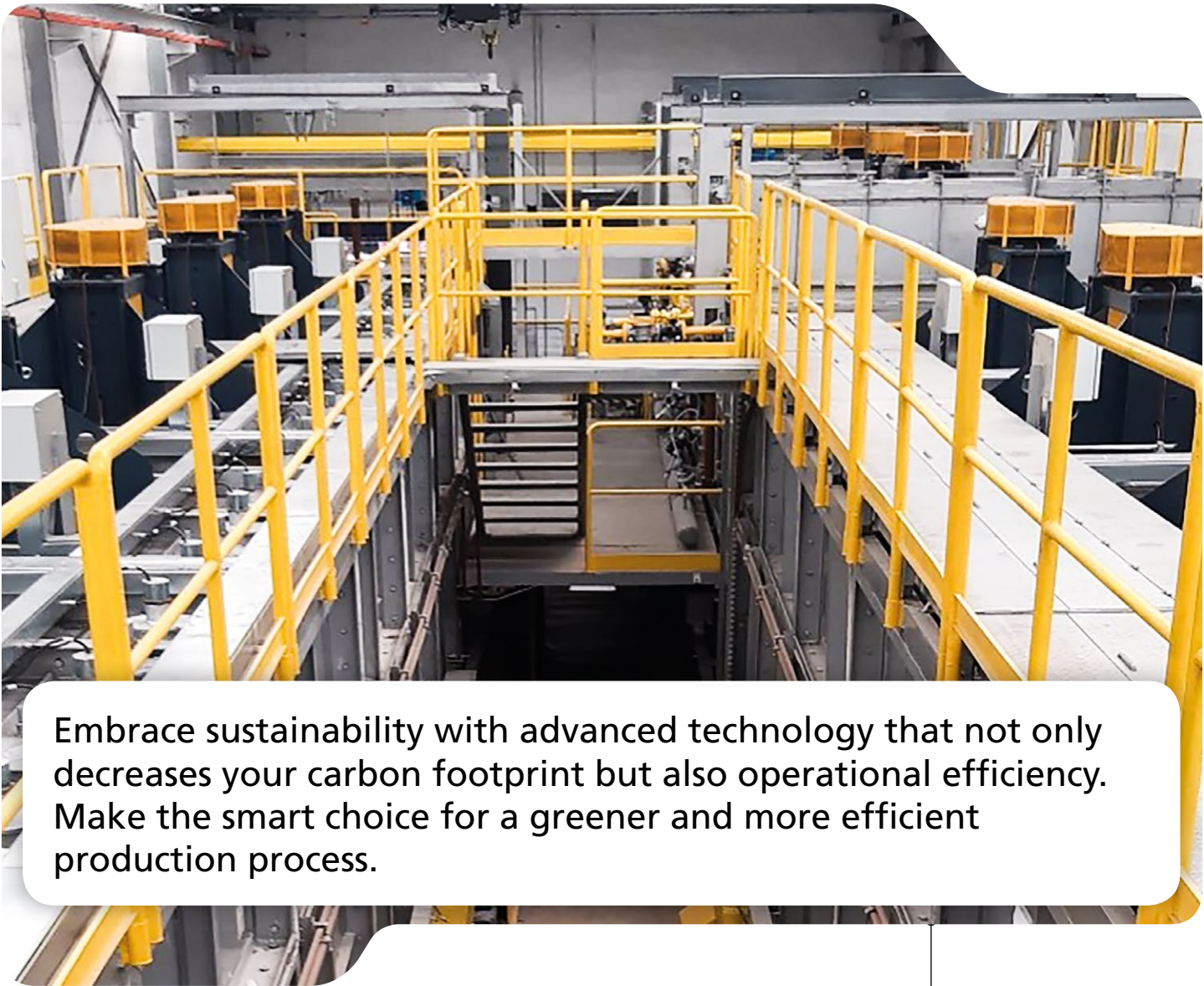
**Electrical  
Furnaces for Heat  
Treatment \**

T6





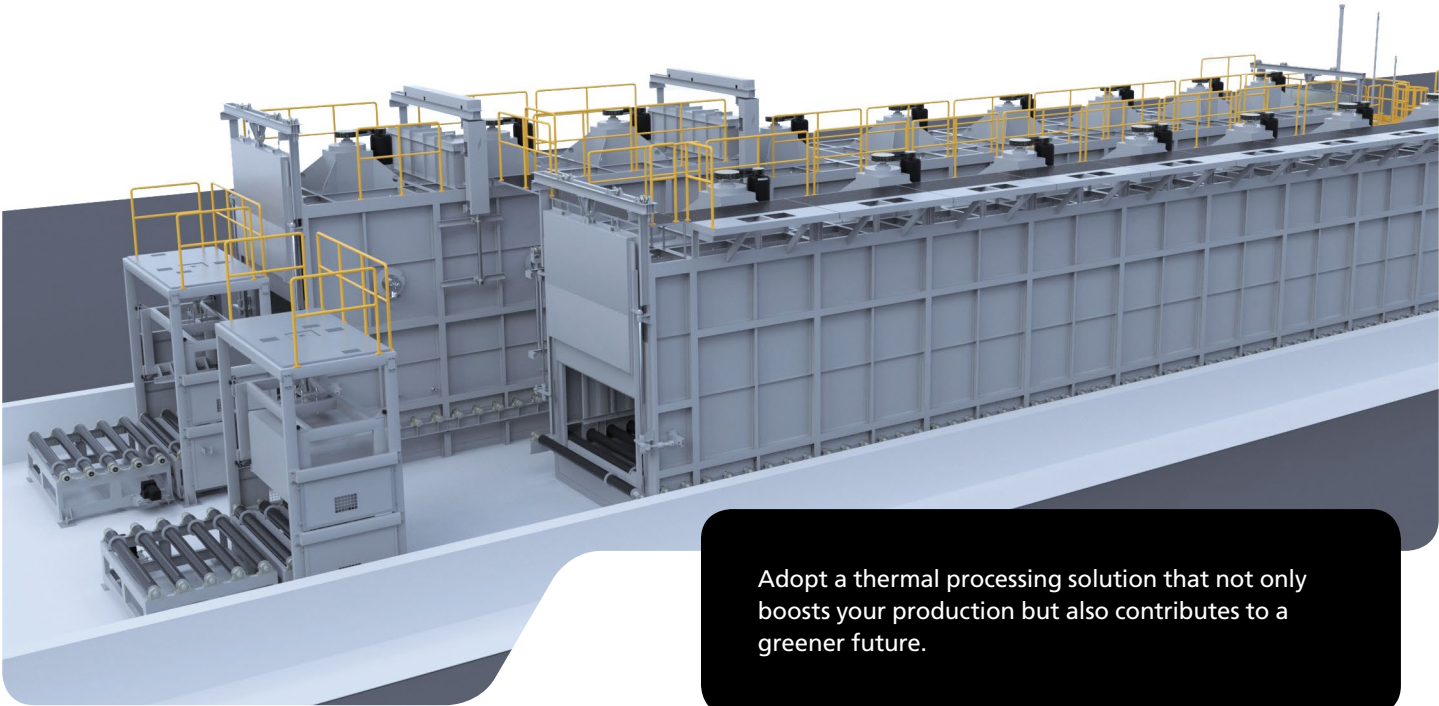
# Electrical Furnaces for Heat Treatment T6 \



Embrace sustainability with advanced technology that not only decreases your carbon footprint but also operational efficiency. Make the smart choice for a greener and more efficient production process.

## The importance of electrification in industry \

Annually, industry emits millions of tons of CO<sub>2</sub> into the atmosphere, which represents, approximately, a 20% of the total carbon footprint contribution. The importance of equipment electrification in industry, and in particular in the secondary aluminum production, is mainly due to the need to reduce greenhouse gas emissions.



Adopt a thermal processing solution that not only boosts your production but also contributes to a greener future.

## Transform your thermal processing with eco-friendly and efficient technology

Looking to reduce your carbon footprint and adopt more sustainable solutions?

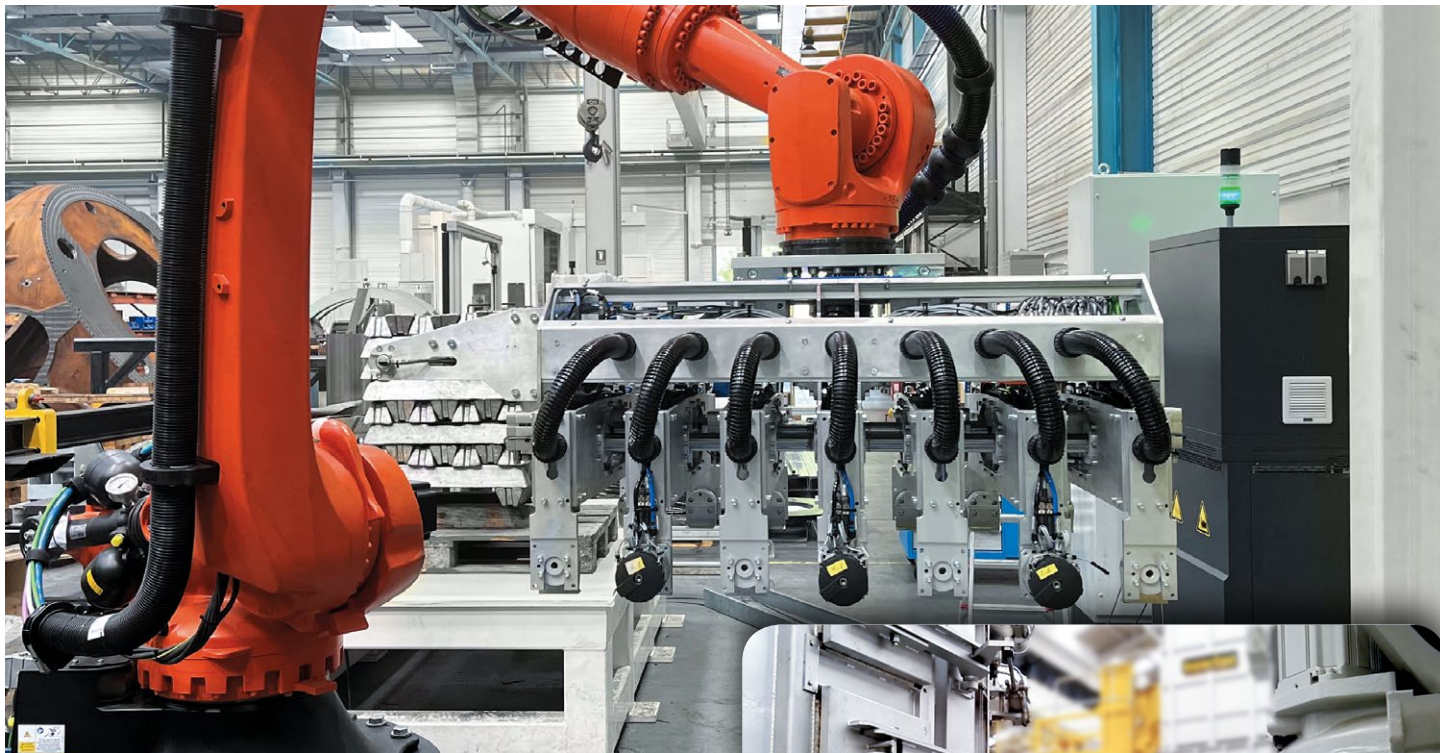
Discover our cutting-edge continuous T6 thermal processing installation, expertly designed to handle up to 300,000 LPDC aluminum subframes annually! Our tailor-made closed-loop system offers a revolutionary approach prioritizing sustainability and energy efficiency.

### The installation includes:

- **Hybrid Solution Annealing Furnace:** Combines gas and electric heating for superior efficiency and a significant reduction in carbon footprint.
- **Water Quenching Station:** Ensures controlled and rapid cooling.
- **Intermediate Straightening Area:** Precisely corrects any post-quenching deformations.
- **Transfer Table:** Seamlessly connects the two process lines.
- **Electric Artificial Aging Furnace:** Maximizes efficiency and consistency in hardening components.
- **Forced Air Cooling Chamber:** Effectively cools components.
- **Loading & Unloading Stations:** Simplifies handling with minimal effort and maximum precision.

### Key Benefits of Our Solution:

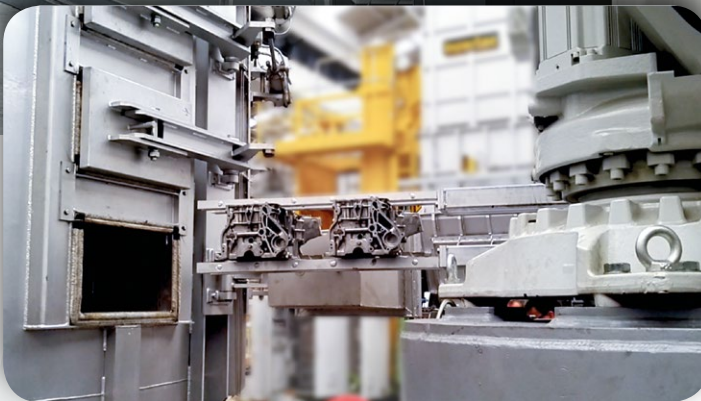
- **Significant Carbon Footprint Reduction:** Our hybrid system, integrating both electric and gas heating, achieves a notable decrease in CO emissions compared to fully gas-fired systems.
- **Advanced Electrification:** Incorporation of electric technologies reduces environmental impact and optimizes energy resource use.
- **Lower Environmental Impact:** Reduction in greenhouse gas emissions thanks to our state-of-the-art heating technology.
- **Complete Process Traceability:** Ensures thorough tracking and quality assurance for every treated part.
- **CQI-9 Certification:** Compliance with the highest industry standards.
- **Enhanced Operational Efficiency:** The closed-loop workflow minimizes handling and extends equipment lifespan, delivering significant operational savings.



## EUTSI \

- Multi-purpose handling system

1. Operations of handling and transporting parts inside heat treatment furnaces: the equipment is self-regulated without the intervention of the operator, ensuring maximum safety at maximum performance.
2. Handling and transporting final products with custom-made storage solutions. Sorting, weighing, labeling, palletizing and strapping of aluminum ingots.



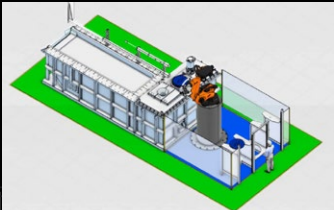
### Advantages:

- Fast and precise operations, equipment self-regulation, minimum downtimes and error minimization.

## R&D \

- Other ongoing developments

In order to improve plant efficiency, minimize risks and increase plant knowledge, our R&D team is working on new process automation solutions.



Sidewall skimming and impeller management robotic cell



Sow management robotic cell



Agile logistics and mold shop management robotic cell