

Powerful Solutions for Iron & Steelmaking

Converteam is a world leading company in providing solutions for the steelmaking industry with more than 450 successfully commissioned projects.

Steelmaking is a complex chain of interdependent processes with a vast number of parameters which have to be closely controlled.



Typical scope of supply

- Electrical distribution equipment (from 220kV to 400V)
- Network compensation (harmonics filters, static var compensation)
- Power electronics equipment (rectifiers, inverters, drives)
- Process and automation equipment
- Instrumentation and auxiliary systems (CCTV, intercom, etc...)
- Design electrical and automation
- Engineering and testing
- Erection and commissioning
- Project management and planning

Benefits for our customers

Converteam solutions, based on high-performance power electronics and automation, exactly meet customers' need for more profitable production units with short production chains.

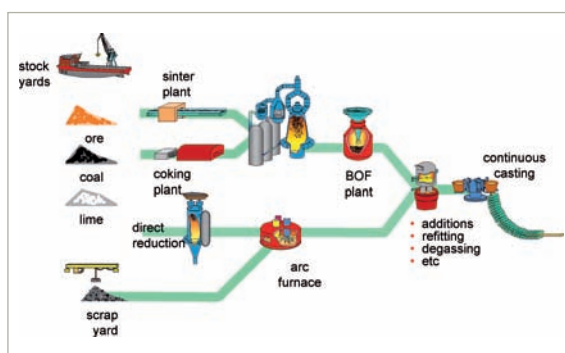
- Shorter process time
- Improved quality
- Just-in-time production
- Enhanced safety
- Less environmental pollution
- Increased flexibility
- Open system architecture

Applications

We cover all types of steelmaking facilities, such as:

- Ore yard and scrap yard
- Sintering and coke oven plants
- Blast furnace
- Oxygen steel plant
- Vacuum treatment
- Direct reduction
- Electric Arc Furnace, refining
- Network quality system
- Electrolysis
- Continuous casting

We provide single-source solutions more especially for blast furnace, electric arc furnace, static var compensation and continuous casting machine.



Powerful Solutions for Iron & Steelmaking

Experience in electric arc furnaces

The role of electric arc furnaces in advanced and cost-effective steelmaking is continuously increasing.

We have the knowledge, the experience and many references in both DC and AC furnaces.

The electrical control supply is directly related to the performance.

Converteam offers a wide range of power and current ratings (up to tens of thousands of Amps).

We propose the most advanced solution for power supply of high power DC EAF.

- It reduces the network disturbances by 40%
- It allows to install DC EAF on very low capacity networks
- It gives a very flexible operation of the furnace

Converteam expertise:

Process control

- Process models
- Optimized production
- Redundant systems
- On-line model-building from logged / analyzed data
- Integrated dynamic control...

Process management

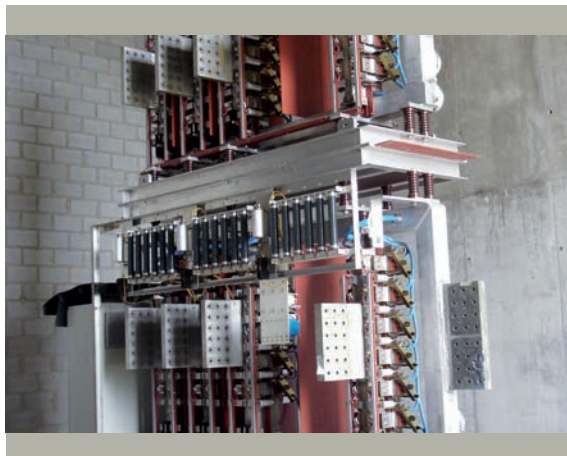
- Feedstock optimization
- Furnace loading
- Data acquisition
- Integrated furnace / caster pacing
- Product tracking
- Operational / maintenance reporting...

Process support (Blast Furnaces)

- Furnace top
- Stock house
- Hot stoves
- Gas cleaning and water treatment
- Furnace proper
- Cast house and dedusting
- Furnace cooling and temperature monitoring...

Process support (other steelmaking)

- Liquid metal level control
- Spray / speed control
- Static var compensation
- Stimulation tests / dummy strand
- Maintenance monitoring
- Fluid systems...



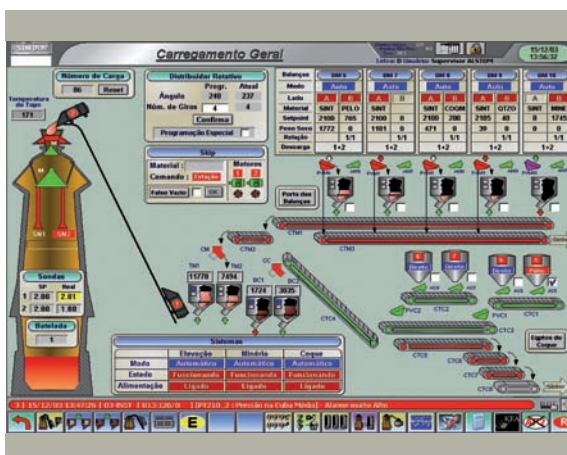
Experience in blast furnaces

Converteam has a great experience and many references in greenfield and revamp projects of blast furnace plants.

Other expertise

We have also the knowledge, the experience in turnkey projects and many references in:

Basic Oxygen Furnace (BOF), Ladle Furnace (LF), Vacuum Oxygen Degassing (VOD), Steel Treatment Station (CAS-OB) and Continuous Casting Machine (CCM).



Powerful models and control strategies

Converteam solutions are based on the combination of theory, simulation and experience, and are fully proven and tested with the comprehensive off-line support environment of Converteam.