Excellence Story

Ladle furnace with inverted gantry for limited space conditions but highest productivity standards

In June 2011, BSE was entrusted to develop a concept to replace the single arm ladle furnace at BSW steel plant in Kehl by a new 100 tons ladle furnace taking into consideration BSW’s special site conditions and highest productivity standards.

PROJECT TARGETS
The mutually developed solution shall contribute to today’s operational targets as well as safety and maintenance targets, yet providing flexibility for the initiated capacity increase:
- Minimised thermal stress to hydraulically moved parts and roller guides
- Increased safety (upper rim of ladle at floor level)
- Improved electrode slipping
- State-of-the-art electrode regulation

BSE SCOPE OF SUPPLY
The project was executed “turn-key” including:
- Engineering
- Entire hardware supply
- Modification of automation system
- Installation and start-up

RESULTS / BENEFITS
In February 2012, after a project time of less than six months, the ladle furnace and all components were smoothly and successfully put into operation. The project was accomplished in budget and in schedule. Also the operative results of the ladle furnace since start-up have fully come up to BSW’s expectations.

BSW CAPACITY INCREASE
Since 2008, BSW has been following an investment strategy to step-by-step increase the plant capacity from initially 2.2 million metric tons per year in 2008 to 2.4 million tons per year in the medium term and up to 2.8 million tons per year in the long term.

Beside systematic recruiting, education and training of the staff, continuous optimisation of existing equipment and processes the following capital expenditures were or will be implemented:
- New plant gate, car workshop and dispatch building (2008)
- New CCM no. 2 with now 6 strands (2011)
- Extension to four scrap transfer cars and upgraded railway layout (2012)
- New LF no. 2 (2012)
- New wire rod mill
- Extension of dedusting system

In the framework of the investment program also measures for optimisation in the field of environmental protection have to be realised parallel to the technical upgrade measures.
Since 1983, the Badische Stahl-Engineering GmbH (BSE) has been acting as a service provider for increasing the efficiency and productivity in the electric steel industry worldwide.

BSE is a sister company of the Badische Stahlwerke GmbH (BSW), one of the world’s most efficient Electric Arc Furnace steel plants.

This unique partnership between BSW and BSE ensures that all products and services provided by BSE are not just based on mere theory, but on more than 4 decades of own proven operational experience.

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BSW and BSE – a unique partnership that will help you to reach even ambitious goals.