

Furnace and offgas cooling for three ferroalloy sub-merged arc furnaces

Energy Recovery Project in Norway 2012



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Reining Heißkühlung GmbH & Co. KG was awarded with an EPC-contract for the offgas and furnace cooling system for three ferroalloy submerged arc furnaces. The whole contract was handled by Reining using the fabrication back-up from company Oschatz GmbH.

Only eight months after contract award the high pressure parts left the fabrication facility in China and arrived middle of February 2012 at site. After two months of pre-assembly

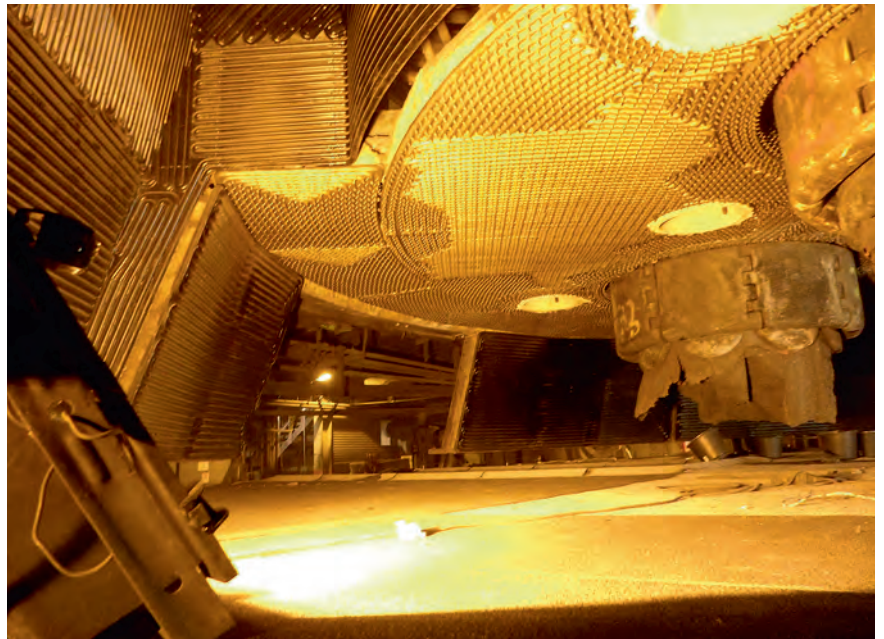
covering the installation of the complete high pressure system incl. steam drums two of three furnaces were shutdown. The shutdown work covered the dismantling of the old offgas duct system and installation of the new high pressure steam sections. In parallel the furnace pot was equipped with new refractory lining. Since May 2012 these furnaces are successfully in operation.

In August 2012 the shutdown for the third furnace started. Within only 24 days the complete revamping was certified by the Authority TÜV by verifying the successful pressure test.

With this installation Reining Heißkühlung again demonstrated



their capability to comply with the client requirements regarding re-vamping activities with minimized operation downtime. Due to optimized pre-fabrication and precise shut-down planning during installation Reining Heisskühlung contributed an essential portion of the whole energy recovery project at this plant.



Furnace roof with outlet hood installed

Furnace in operation



Intelligent solutions for furnace cooling



Reining Heisskuehlung GmbH & Co. KG

- REINING know-how from tradition and experience
- Specialist in innovative cooling systems for industrial furnaces for more than 70 years
- More than 300 references world wide
- Specialist for evaporating cooling systems (ECS) since more than 70 years for
 - Walking beam furnaces
 - Pusher type furnaces
 - Electric arc furnaces
 - Other waste heat boiler systems
- Between 1994 and 2017 a member of the Oschatz group
- Since April 2017 under new ownership "Reining Holding GmbH"

