The material without alternative

Coking plants, blast furnaces, steelshops, direct reduction plants, pelletising and sintering plants – these all testify to the international experience and the sound know-how of our engineers. Our solutions use exclusively high-quality, tried and tested refractory materials. The refractory installation work is performed with the maximum precision. Only in this manner can Dominion meet the extreme challenges posed by the iron and steel industries and create installations that comply with high safety standards over the long term as well.

Based on state-of-the-art lining technologies, the refractory units are ready for production within the shortest amounts of time. This is the case both for new linings or for inspections and maintenance. With our own programme for pre-cutting of bevelled bricks for bustle pipes, we have for example managed to enhance fitting precision and at the same time reduce the lining time by up to 25%.

When servicing steelshops, Beroa undertakes the whole range of refractory activities. In order to safeguard the production processes, we are also integrated into the customer’s process flows. Other tried and tested hot repair methods are ceramic welding and gunning with fused silica for coke plants and robot gunning or shotcreting for blast furnaces.

No matter which of the above plants are affected, whether e.g. hot blast stoves, heat treatment installations, cupolas or electric furnaces, we always focus on the installation’s sustainability and efficiency, environmental protection and safety. Significant energy reduction cost based on waste heat recovery technologies such ORC (Organic Rankine Cycle), Wet Steam Turbine (WST) from flue gas and cooling liquids.
SOME CUSTOMERS

- ARCELOR MITTAL
- BECK + KALTHEUNER
- CALDERYS
- CHINA STEEL
- DANIELI CORUS
- HÜTTENWERKE
- KRUPP MANNESMANN
- PAUL WURTH
- REFRATECHNIK
- ROGESE
- SSAB
- SALZGITTER
- SIMEC
- TENARIS
- TERNIUM
- THYSSEN KRUPP
- ILVA
- US STEEL
- JINDAL
- HADEED
- BLUE SCOPE STEEL
- ONE STEEL
- VALLOUREC

REFERENCE

CUSTOMER - ThyssenKrupp/Carbonaria
LOCATION - Germany, Duisburg Schwelgern
PROJECT - Coke Oven, 2 Batteries each
70 Chambers with 8.35m height
TEAM - 450 refractory specialists
INSTALLATION - Approx. 86,000 t refractory materials
EXECUTION - 14 months per Battery

TECHNOLOGIES:

BLAST FURNACE
New construction, Revamping, Demolition and Salamander Blasting, Intermediate Hearth Repair, Hot Repair
Taphole, Shotcrete, Robot Gunning, Carbon Bottom robotic Grinding. Own lightweight hanging platform sys-
tem.

HOT BLAST SYSTEM
New construction, revamping, demolition, cold and hot repair for hot blast stoves, hot blast main, bustle pipe
and mixing pot. Precutting of bevel-bricks for bustle pipe.

COKE OVEN BATTERY
New construction, Revamping, Demolition, hot repair, Steel installation, ceramic welding and others
Chimney construction and maintenance.

STEELSHOPS
Permanent maintenance, including full line service if requested for steelshops (pig Iron Mixers, Torpedo Leadles,
Converter, electric arc furnace, Runner Systems, Tundish (Continous Casting).
Turnkey refractory: Engineering, Material delivery, new building, revamping, demolition for reheating furnaces
(rotary hearth, pusher type, walking beam). Suspended roofs KARRENA and DEWESİT technology.

DIRECT REDUCTION, SINTER- AND PELLET PLANTS
Turnkey refractory: Engineering, Material delivery, new building, revamping, demolition. Chimney construction
and maintenance.

ENERGY EFFICIENCY
Energy efficiency technologies including energy monitoring, electrical control, heat use optimization and waste
heat recovery, furnace optimization service, steam pressure recovery project, compressed air network global
optimization and retrofit, air and flue gas quality monitoring system, water treatment plante.