CERAMIC WELDING
Extending the lifetime of glass furnaces and coke batteries.

One of the most important points of interest for the operation plant managers, is the shutdown time. Any furnace should keep under operation and should last as much as possible, technical solutions come to the table: Ceramic welding on hot repairs.

This technology applies mainly to glass industry and coke ovens. The purpose is working to extend the lifetime of glass furnaces and coke batteries through the best technical approach and considering the optimum cost-benefit solution, therefore Dominion is focusing on technology, quality and reliability, flexibility, innovative thinking and acting, providing with service’s contract that provide our customers the whole coverage and reliability.

We provide our customers with instant benefits: Wide range of applications with a minimum downtime and production losses and providing with a extended furnace life.

Our philosophy is to work close to our customers identifying the optimal furnace operation and create the tailored procedure to execute the works. As additional services, we will provide long term solution relationship that guarantees all customers, about the perfect and continuous and sustainable operation.

To achieve reductions in downtime of 35%-50%, together with significant cost savings and superior quality.
CERAMIC WELDING TECHNOLOGY
A mixture of ceramic and metallic particles is projected with oxygen onto a hot refractory substrate. The exothermic reaction at the point of impact melts the projected powder and the refractory surface creating a ceramic bond. The resulting weld has characteristics similar to the original refractory brickwork, a close approximation of the physical, chemical and mineralogical aspects is achieved.

OUR SERVICE-PACKAGE:
• ceramic-welding
• external hot-repair, sealing by ceramic-welding
• inspection furnace service
• refractory cutting by use of water-cooled chain-saw
• regenerator-cleaning
• cleaning with burner-lances
• placing anchors for refractory stabilisation
• bottom-drilling of operating glass-tanks

CUSTOMER BENEFIT
• Minimum of downtime and production losses
• Extended furnace life
• Optimal furnace operation
• Professional and flexible job execution
• Emergency support but also
• Long-term solution
• Competitive pricing

ADDITIONAL ADVANTAGES
• Providing most advanced technology and equipment
• Superior, long lasting quality
• Innovative, unconventional thinking in addressing problems
• Developing improvements and new features of the principal technology

EQUIPMENT AND MATERIALS
• All equipment is manufactured to our proprietary design in-house
• Powder is manufactured to our proprietary formulae and specifications
• Full traceability by control of dedicated
• Laboratory situated at the production plant

REFERENCE
CUSTOMER - ARCELOR MITTAL
LOCATION - DUNKIRK
PROJECT - Turnkey maintenance of a coke battery including refractory, mechanic and ceramic welding.
INSTALLATION - Coke plant.
COMPLETION - Ongoing.