

## E.ON Benelux Support for outstanding energy efficiency

G+H has used a patented mounting system for vertical pipes to insulate more than 62,000 m<sup>2</sup> of pipe surfaces and vessels at the Maasvlakte Power Plant in Rotterdam.



Insulation

Fire Protection

Noise Control

The state-of-the-art coal-fired Maasvlakte Power Plant 3 in Rotterdam generates around 7% of the electricity used in the Netherlands. Incorporating the latest technologies and burning up to 30% biomass as fuel, it is exceptionally environmentally friendly and energy efficient. It was vital to find a thermal insulation and soundproofing solution for the long vertical pipes, which would be capable of withstanding the high temperatures of up to 620 °C.

### CUSTOMER

E.ON Benelux, NL

### PROJECT

Insulation of pipes and vessels for the Maasvlakte Power Plant MPP3 incl. electrical trace heating and scaffolding, Rotterdam, Netherlands

### PERIOD OF EXECUTION

03/2012–02/2014

### INSULATED SURFACE AREA

62,500 m<sup>2</sup>



G+H installed thermal insulation and soundproofing on all the vessels in the boiler and power house as well as on the plant's outdoor pipes. The vertical high pressure pipes were up to 80 m tall and had to be insulated with multi-layered materials containing special components such as CMS fibers. This was a challenge. Insulation materials are often mounted using double clamping rings. However, in this case, the extremely high temperatures and

thickness of the insulation made double clamping rings unsuitable. In the long term, they would have failed and allowed the insulation to sag. G+H found a solution. The company developed a self-supporting mounting system which was able to withstand the expansion caused by such high temperatures. Using this innovative plant technology, the G+H team ensured that the installation process ran like clockwork and was completed on schedule.



## TASK

- Install thermal insulation and soundproofing materials on pipes with a total area of 62,500 m<sup>2</sup>
- Insulate vertical downpipes with average temperatures of up to 620 °C and build a new supporting structure
- Complete the insulation work on schedule

## SOLUTION

- Insulation using multi-layer materials incorporating CMS fibers
- Development and patenting of a new mounting system for easy insulation of vertical high pressure pipes
- Electrical trace heating work during the construction phase

## ADVANTAGES

- The self-supporting insulation is capable of withstanding the temperature expansion and offers excellent flexibility and strength
- The patented mounting prevents insulation materials from sagging and therefore ensures optimum insulation performance
- Unique patented solution