

Hard coal power plant, Chile Energetic fit for the future

G+H installed new heat and sound insulation, covering a total area of 35,000 sqm, on ducts, pipes and further components in the Guacolda hard coal power plant in Huasco, Chile.



Insulation

Fire Protection

Noise Control

With a total output of 760 MW, the Guacolda hard coal power plant makes a significant contribution to the regional electricity supply for industry and households. The power plant was upgraded in order to meet the legal requirements for reducing its emission values. G+H Insulation insulated plant components in three of the four units of the existing power plant, with more than 500 people working on the project at its peak.

CUSTOMER

Andritz Chile Ltda / Empresa Eléctrica Guacolda; AES Gener

PROJECT

Insulation of pipes and plant components, including electrical trace heating, façade cladding and scaffolding

PERIOD OF EXECUTION

01/2015–08/2016

INSULATED SURFACE AREA

35,000 m²



The heat and sound insulation was installed on ducts, E filters, fans, pipes and reactors. The insulation of the flue gas denitrification unit presented a particular challenge due to the high temperatures. In order to meet the European standards expected by the customer, G+H had shipped 95 % of the insulation material to Chile. In combination with selected materials, G+H Engineering were able to reduce the general problem of the thermal bridges. The insulation system also

compensates the expansion of the various plant components. G+H simplified the installation on site with a high degree of prefabrication and optimised engineering; European staff carried out the construction management and supervision. With 190 to 210 and, in peak times, up to 500 employees, the team was able to retrofit the power plant on schedule in accordance with the legal requirements and make it fit for the future.



TASK

- Heat and sound insulation for reactors and component parts such as façade cladding
- Meet the legal requirements for reducing the emission values
- Prevent thermal bridges and consider expansion of plant components

SOLUTION

- Insulation system in accordance with European quality standards using highly efficient materials
- Easy installation on site thanks to high degree of prefabrication and optimised engineering
- Safe scaffolding constructions in cooperation with German manufacturer of scaffolding material

ADVANTAGES

- Significant reduction in emissions and improvement in energy efficiency
- Compensation of expansion of plant components and reduction in visible deformations
- Professional insulation installed within a short time and above market standard from both a quality and technical perspective