

Bayernoil Raffineriegesellschaft Insulation increases energy efficiency

Since October 2008 the G+H Team, made up of seven construction managers and up to 150 installation technicians, insulated the pipes and equipment of Bayernoil's new plant.



Insulation

Fire Protection

Noise Control

Bayernoil Raffineriegesellschaft, one of the largest crude oil refining operations in Germany, launched the ISAR initiative ("Initiative for Site Securing, Plant Optimization and Profitability Enhancement") in order to achieve higher energy efficiency, conserve resources and protect the environment. As part of the project, the refinery in Neustadt an der Donau, Germany, was expanded and modernized with the help of G+H Insulation.

CUSTOMER

Bayernoil Raffineriegesellschaft
mbH / Fluor / WWV

PROJECT

Insulation and fire safety work at a
crude oil refinery

PERIOD OF EXECUTION

06/2008 – 11/2009

SURFACE INSULATED

130,000 m²

SURFACE FIREPROOFED

3,500 m²



G+H Insulation technicians laid mineral wool mats with the RAL quality mark around the components to be insulated, which must withstand temperatures of up to 600 degrees. Afterwards, the installers completely covered them with aluminum-zinc sheeting. The metal components needed were customized on-site. Furthermore, G+H applied its fire prevention solutions to all steel structures in the refinery's fire hazard zones. To ensure that the bear-

ring structures would not lose its statics in case of a fire, the installers fitted the steel beams and tank support skirts with water- and flame-resistant rock wool fire protection plates clad in aluminum-zinc. This fire prevention insulation is capable of safely withstanding a hydrocarbon fire for 90 minutes. A special fire protection coating protects the bearing structures from open shooting flames.

TASK

- Insulation work on 130,000 m² of the refinery plants
- Preventive fire protection on 3,500 m²
- Increase energy efficiency and work safety

SOLUTION

- Mineral wool mats with the RAL quality mark
- Cladding the components in aluminum-zinc sheeting
- Fitting the steel beams with rock wool fire protection plates and aluminum-zinc
- Fire protection coating for the bearing structures

ADVANTAGES

- Energy losses reduced by approx. 90%
- Up to 30% less sulfur and carbon dioxide and nitric oxides
- Fire protection in accordance with DIN 4102 Part 4 for fire resistance classes F90 and HJ60