



FUTURE PIPE INDUSTRIES B.V.

Glassfiber Reinforced Pipe Systems

Exhaust pipe Leuna, Germany

Location

Leuna, Germany

Completed date

1997

End User

Mitteldeutsche Erdöl Raffinerie
(MIDER) Leuna, Methanol Plant

Contractor

Lurgi Anlagenbau GmbH
Chemnitz

Consultant

Lurgi Anlagenbau GmbH Chemnitz

**Description**

The main exhaust pipe and supporting pipeworks for the renovation of the Leuna methanol plant have been supplied in glassfiber reinforced epoxy. The 70 meter high, main exhaust pipe of 900 mm diameter has been installed using the Rubber Seal Lock Joint system.

Scope

Our scope included:

- Engineering
- Fabrication
- Testing
- Supervision

Pipe System

An almost pressureless EST pipe system of 900 mm has been supplied. The supporting pipeworks for the exhaust pipe were approximately 400 meters long (horizontal) whereas the main exhaust pipe was 70 meters high (vertical).

Advantages

The corrosion resistance against CO₂ gasses of GRE was an important decision criteria in this project. As was the light weight which provided benefits to the installation and pipe rack design. The possibility to supply this project on the basis of single point responsibility including prefabrication and detailed drawings also was a major advantage for the customer. Furthermore the UV resistance and long service life together with X-ray testing and cathodic protection not being necessary, made GRE the best solution for this project. Specifically epoxy has been chosen for this project because of the high temperature resistance as this reaches 100 °C at the beginning of the process.