

PROJECT

New construction of a waste water pipeline for the Lippendorf power station

LOCATION

Lippendorf, Germany

CUSTOMER

Umwelttechnik und Wasserbau GmbH

DESIGN PRESSURE

PN 16

DIAMETER RANGE [mm]

DN 800

PRODUCT

GFK with unsaturated polyester resin adhesive EP220

APPLICATION

Waste water pipeline

CONSTRUCTION DATE

1997/1998

END USER

VEAG / Bayernwerke / GKB



DESCRIPTION

The photos show a pipeline carrying cooling and additional water which is taken from the Witznitz storage near Borna and transported to the Lippendorf power plant for water treatment. The tender documents of the project accepted both options: either pre-stressed pressure pipes made of concrete provided with interlocking connections and abutments for turns or glassfiber reinforced pipes (GRP). Due to economic reasons the decision was made in favour of GRP, i.e., glassfiber wound pipes of pressure rating PN10 with conical bonding connections by means of which abutments can be dispensed with.

Pipes in 10 m lengths, elbows, fittings and stub-ends had been prefabricated and laminated at our premises. On site the pipes and fittings were accurately installed. 6 GRP pipes in lengths of 20 m at a time were trailed with a bulldozer to the installation place and then lifted into the pipe trench by means of a crane shovel. Short pipes which became necessary before turns or valves were manufactured according to site measuring.

ADVANTAGE: Meet high quality requirements, cost efficient, light weight