Gypsum Slurry Line for Dewatering Plant

Taper/Taper adhesive-bonded Joint

The completion of the final unit rehabilitation (Unit 4) marks the successful completion of the more than 700 million Euros investment in the power plant modernization and upgrading. This is the first major energy sector investment project financed without state guarantees in South East Europe which has brought the 28 years old Enel Maritza East 3 TPP to become the only lignite power plant in the Balkans fully compliant with the latest EU environmental standards. Maritsa Iztok-3 is Bulgaria's third-largest power plant. The power plant has an installed capacity of 900 MW, which is produced by four units. At present, the Maritsa Iztok-3 is owned and operated by Energiina Kompaniya Maritsa Iztok 3 AD, the joint venture of Enel (73 %) and NEK (27 %).

This project is the second phase of Maritsa East 3 TPP rehabilitation and modernization. Since 2003, generating Units 1 and 2 have been rehabilitated and the first FGD for these units has been put into operation. Overall rehabilitation process includes the largest environment protection programme in Bulgaria valued at over EUR 160 million.

Scope of Supply

Apart from supplying the Bondstrand® Glassfiber Reinforced Epoxy (GRE) pipe system, NOV Fiber Glass Systems supplied:

- Stress analysis
- Field service
- Bonder training

Bondstrand was selected for this gypsum slurry line because of its resistance to corrosion and abrasion. Furthermore the light weight is considered as an advantage, since part of the pipelines is installed on elevated pipe racks.

Project

Maritsa East III Thermal Power Plant (TPP) PLC – Dimitrovgrad (near Stara Zagora), Bulgaria

Client

Enel Maritsa East III AD, a joint-venture between the Italian energy company ENEL and the National Electricity Company of Bulgaria

Pipe system

Bondstrand 3416 with Taper/Taper adhesive-bonded joints

Diameter:	4, 6 and 8 inch (100, 150 and 200 mm) and special
Diameters:	196 and 278 mm
Quantity:	2500 meter

Operating conditions

Operating pressure:	6 bar
Design pressure:	16 bar
Test pressure:	9 bar
Operating temperature:	20 - 70 °C
Design temperature:	93 °C

Installation date

Spring 2009

CH7270 supersedes FP1009 - May 2013