100MW HFO Operated Power Plant

Chittagong, Bangladesh

Acorn Infrastructure Services Unit 03 – 100 MW HFO Operated Power Plant is located in Jhulda, close to the port of Chittagong, Bangladesh. The Power Plant consists of 13.201 MW 8 units of ultra-efficient Caterpillar HFO Generator sets with combined capacity of 100 (± 10%) MW to supply to the national grid at Jhulda, Chittagong.

The Power Plant is located in a highly corrosive environment on the bank of Karnaphuli River close to the river mouth. The approximate aerial distance to the sea is around 3.0 km. The area is affected by harsh climatic conditions throughout the year due to its close proximity to the Bay of Bengal. Hot-dip galvanizing of almost all the steel structures was specified by the client to withstand these harsh environmental conditions.

LTL Global Engineering (Pte) Ltd, the EPC contractor of this Power Plant project has familiarity of using hot-dip galvanized structures in many projects throughout Bangladesh and also in some other countries. EPC contractor had to complete this project in a very stringent time frame and galvanizing the steel structures was the fastest method of corrosion protection while maintaining the high resistance to the coastal atmosphere.

The environment in which this Power Plant located faces not only tropical marine conditions, but also industrial pollutants; therefore, it was economical to do hot-dip galvanizing of almost all the steel structures affected. Especially, the engine hall structures are mainly comprised of huge square tube sections. If only painting was done, inside surface of these hollow sections would not be protected and the open areas exposed to the environment would be vulnerable to corrosion.

Another reason the engine hall structures were hot-dip galvanized was to withstand the high vibration impact thanks to the superior bond strength of HDG.

Acorn Infrastructure Services Unit 03 – 100 MW HFO Operated Power Plant residing East bank of the Karnaphuli River is now in operation and will operate throughout its contract period with minimal maintenance cost of corrosion thanks to the decision to use hot-dip galvanized steel. ■

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Galvanizer
LTL Galvanizers (Pvt) Limited

Specifier
LTL Global Engineering Pte Ltd. Singapore

Fabricator
LTL Galvanizers (Pvt) Ltd

Owner
Acorn Infrastructure Services

International