

Bang Sue project in Thailand for flood control

Rains Cannot be Stopped, but Floods Can be!!

Kirloskar Brothers Limited builds pumping station as part of the Bang Sue drainage project for flood control in six districts of Thailand

The irreparable loss and damage caused by incessant floods every year during the monsoon season in India is a serious concern. Be it the cloud burst in Uttarakhand or the recent highest single day rainfall witnessed in Mumbai, there was no respite whatsoever.

However, incessant flooding isn't a phenomenon restricted to India, but has become one of the major challenges faced by several countries across the world. Of these, the governments in some countries have already been taking various possible measures to address this grave issue, and looking at the positive results, many of the other flood affected countries plan to follow suit.



Flooded road in Mumbai

The Government of Thailand's Bang Sue drainage project is one such ambitious project that seems to have caught everybody's attention of late. The drainage project is basically designed to prevent flooding in six frequently affected districts in Thailand, covering an overall area of 56

sq.km, except when rain is more than 100 mm (even in such a case, the water will be drained at least 50% faster than the existing flow rate). More importantly, this in turn, will also help address the recurrent flooding problem on the key main roads of Bangkok, the capital of Thailand.

The Bang Sue drainage project follows the standard design of the Drainage and Sewerage Department of Bangkok Metropolitan Administration (BMA). The function of the project is to collect flood water from the low lying populated areas and channelise it into the Chao Phraya River, thereby protecting the local community from possible floods.

In this project there are three intakes. Each intake allows the flood water to enter into a tunnel via an open shaft. The length of the tunnel from the start to the pumping station is 6.3 kilometres while its width is 5 metres. In accordance with the project design, the flood water will flow into this tunnel with the aid of gravity.

At the pumping station, there are 6 Kirloskar make Concrete Volute Pumps, each with a capacity of 10 cum/sec. The pumps will discharge the flood water into the Chao Phraya River via a delivery shaft and another tunnel which is 400 metres in length.



Bang Sue Drainage Project Course

Kirloskar Brothers (Thailand) Limited, a subsidiary of KBL, has been involved with the supply, installation and commissioning of various components at the pumping station. The scope of our work includes:

1. Supply, installation and commissioning of Concrete Volute Pumps (CVPs), 2000 KW HV motors and gearboxes
2. Design of the complete pumping system
3. Design of Siphon system
4. Computation flow dynamics for the entire system

This endeavor can be considered as a model project for us, here in India, and with our existing infrastructure and capabilities, we don't see any reason why it can't be successfully implemented in our country as well.

Eventually, even if we can't stop nature's fury, we surely can find ways to keep it under control and this inspiring project from Thailand is a perfect example of the same.

For more details related to our Concrete Volute Pump, click here:

<http://www.kirloskarpumps.com/product-pump-concrete-volute-cvp.aspx>