

## PROJECT SUMMARY

**Project Type:** Water Cooling using Heat Exchanger & Chiller

**Commissioning Date:** June 2021

**Company Overview:**

Sulphur Manufacturing Industry

**Location:**

Ashulia, Savar, Bangladesh

**Equipment Details:**

400TR Electrical Chiller, Cooling Tower, Plate Heat Exchanger, Cooling Pump, etc.

**Water Cooling:**

Using Plate Heat Exchanger two stage cooling of water was performed. Primary circuit of Heat exchanger is connected with chiller & secondary circuit is connected with cooling water outlet.

## TECHNICAL SUMMARY

**Brief of Implemented Project:**

One of the machines related to Sulphur production requires temperature of below 30°C. The client installed a cooling tower which could give an outlet temperature of 32°C & that 32°C is suitable for all other machines except the machine which needs to be below 30°C. KEBD designed one PHE & pump which relates to exiting electrical chiller from client with outlet temperature of 7°C in primary side. And a 32°C water outlet for cooling tower is pumped to the secondary side of PHE. At PHE transferring 5°C temperature & becoming 27°C. This outlet water of PHE is connected to the process machine directly.

**Effect of this implementation:**

Instead of going for a separate cooling system for one machine, the client was able to run the factory with a single cooling system with our modification. Furthermore, this system is running with an electrical chiller which has not been in use for a long time, and we have also supported for recommissioning it.



Yearly Savings	
Electric Chiller Power Consumption Saving (Excluding Parasitic Load), kW	280
Yearly Operating Hour (Avg.)	8000
Yearly Electric Power Saving, kW-Hr.	2240000
Electric Power Price per kW-Hr, in USD	0.090
Yearly Savings, in USD	~ 201,600

## CONTACT US

**KALTIMEX ENERGY BANGLADESH (PVT.) LTD.**

Green Orlando (8th Floor), Plot#KA 42-4, Progati Sharani, Dhaka-1229, Bangladesh.

Tel: +880 2 8418491-92, Fax: +880 2 8418493

www.kaltimexbangla.com.bd