

E 3 Asia Company Limited

Absorption Chiller capacity trouble? NOT ANY MORE. Kangwal Absorption Chiller Case Study worth studying, below.

BACKGROUND:

Kangwal Textile Co., Ltd. facility is located at Ratchburi, 120kms from Bangkok, has two major operations:

- 1. Spinning of various types of fibers using different systems and technology. E.G. RING, Open End and Jet Spinning. Total Production Capacity / Month 5.5 Million Pounds
- 2. Weaving of various types of grey fabrics suitable for shirting, suiting, uniform, women's dress material and extra wide bedsheets. Total Production Capacity / Month 2.5 Million Yards.

Kangwal had installed *1000TR Steam fired Thermax Vapor Absorption Chiller* in 2004 operating on steam from waste heat from heat recovery unit had been producing only 800TR. E3 Asia team receiving the challenge worked on the chiller and result is self-explanatory in the below email.

From: Pornchai -- KTC <<u>pornchai w@kangwalmail.com</u>> Sent: Tuesday, June 1, 2021 1:35 PM To: Shailesh Teli <<u>sales@e3asia.net</u>> Cc: KTC-- Trigen <<u>trigen kt@kangwalmail.com</u>>; KTC-- Mr.Nageswara Rao Telkar <<u>rao@kangwalmail.com</u>>; KTC-- Bala <<u>bala@kangwalmail.com</u>>; Subject: Mill-F abs chiller (1000RT) operation parameter after overhaul

To. kh.Shailesh (CC :- kh.Bala , kh.Rao and kh.Banjerd) ,

Result after overhaul and de-scaling

> We can get more CHW diff temp from 5.1 to 5.5 degC

- > Cooling load of chiller increase from 843RT to 914 RT -
- Note :- Ref. present CHW circulation flow 500m3/h
- > Result of leaked inside HTHE , this chiller will use more steam consumption

Chiller cooling capacity increased by 12%, saving of 61KW/hr i.e 61 * THB 3.5 = THB 215 = THB 215 * 8000hrs = THB 1,720,000/ year

E3 Asia team at work:



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