Anan Fonglamun 2006: The Design of Induced Draft Counterflow Cooling Tower for Industry. Master of Engineering (Mechanical Engineering), Major Field: Mechanical Engineering, Department of Mechanical Engineering. Thesis Advisor: Associate Professor Montri Piroonkaset, M.Eng. 198 pages.
ISBN 974-16-2854-4

Currently , The design of cooling tower is not standard and the designers has known how to the original manufacturing design , which follows up the user program softwares or dealers of cooling tower without the understanding of concepts and principles.

Therefore, the main objective of this thesis was to study and developed the design of counter flow cooling tower by following principles of heat and mass transfer and CTI standards mutually, in order to determine the size of fill, inlet louver, drift eliminator, tower casing, fan stack, blades and number of blades and including fan motor horsepower for industrial cooling tower and compare with original design of manufacturers.

The comparison of the design in this thesis and the original design of dealers, it can be seen that the results of design in this thesis are approximately equal to the results of original design and considered acceptable. Finally, this thesis could be the basic for design and enhances the understanding of the basical principles of counter-flow cooling tower design and also gives the designer confidence in the procedure of calculations and applications.

Anan Fonglamun
Student's signature

Montri Piroonkaset 18 / October 2006
Thesis Advisor's signature