

**AEE February 2017 Event
Register today:**

Chilled Water Energy Savings Study - Maximizing Pumping and Chiller Efficiency

Location and Agenda:
Gaetano's
1617 Banksville Road
Pittsburgh, PA 15216
412-343-6640

Thursday February 23rd, 2017 11:30am to 1:30pm

****Lunch buffet included in price****

Evening Event - Student \$25.00 - Member \$35.00 - Non-Member \$45.00

Overview:

Our industry has proven that chiller water low Delta T causes chiller plant inefficiency and a dramatic increased pumping cost. This presentation will analyze how correcting low Delta T will eliminate over pumping and costly chiller plant inefficiency. By replacing manual balancing with dynamic pressure independent balancing, low delta T can be dramatically improved. The Delta T Manager will then balance the coil to its designed delta T and maximize efficiency. Balancing using water delta T allows systems to run as they were designed to run. Low delta T is proven to be costly and ineffective. We will review the MIT low delta T chiller plant study and how one building reduced its pumping 50% by correcting low delta T. We will also share the savings the end user can realize by correcting low delta T and show how savings can be calculated.

Energy Valve/ Delta T Manager technology controls coil flow first by water temperature (correcting Delta T) then by typical Building Management System/Thermostat controller. The water coils can then function at the designed BTU output, eliminating overflow waste. Belimo smart technology allows the user to data log energy usage, confirm coil performance and therefore the Energy Valve is quantifiable. This can all be accomplished without adding additional points to your BMS.

Manual, dynamic and delta T balancing
An Independent DT Study
Chilled Water System Design
MIT Beta Site Study-Correcting Low delta T
Data Analysis and Optimization and Functionality
Calculate Savings
Additional Applications

Presenters:

Robert J. Rybka

Summary of Qualifications

- 42 years experience in installation, service, development, sales and technical training for process HVAC, hydronic systems and controls
- * Provided technical training for the installation of process systems and the selection, sizing and application of control valves and airside / fire and smoke actuators.
- *

Work Experience

- Current – Regional Application Consultant, Northeast, Belimo Americas
 - o development of training programs for control engineers throughout the northeast,
 - o developing and expanding market share of Belimo products and technology
 - o providing technical training and assistance in the sizing and selection of control end devices installed in commercial facilities and controlled through 'direct digital' and 'practical logic controllers'
 - o product and application development