



Real world hydronic system technology for Green Building design.

ABB assembly facility

RETROFIT CONSTRUCTION, QATAR





Taco LoadMatch® Real world hydronic system technology for Green Building design.

ABB assembly facility

Installation marks the first LoadMatch® project in the Middle East

Project Snapshot: Swiss ABB, a global leader in power and automation technologies, recently completed a retrofit project that turned a former 20,000 sq. ft. warehouse into a new electronic components assembly facility in the Persian Gulf nation of Qatar. Taco's LoadMatch® single pipe hydronic system is in place inside the building to deliver air conditioning for the torrid summer period, which stretches from April through September each year.





The ABB facility represents the first LoadMatch® project for Taco in the booming Persian Gulf region. Taco provided a sizeable discount to ABB to get the pilot project, and its area sales representative, Mutasim Al Ghadir, presented the LoadMatch® system concept to ABB, employing Taco's Hydronic System Solutions (HSS) software to provide pipe and valve sizing in designing the HVAC system for the building.

Inside the assembly facility are 15 exposed LoadMatch circulators hooked up to fan coils

provided by Blue Star, an Indian manufacturer. Taco FI series pumps and multi-purpose valves were also specified for the mechanical room. The air conditioning system is powered by a York chiller.

The LoadMatch® single pipe system, employing small but powerful LoadMatch circulators and Twin Tee fittings, reduces the amount of pipe needed by some 40 percent and eliminates control valves and most balancing valves. Self-balancing, LoadMatch assures required flow of system water to all heating and cooling units at all times. Taco estimates that the system can reduce operating and maintenance costs by up to 30 percent of typical life cycle costs.

The ABB HVAC installation was finished six months early, and according to Mutasim Al Ghadir,

the customer is "very pleased" with the results. Mutasim says that LoadMatch's benefits in materials reduction plus its demonstrated energy efficiency make it an attractive option for other projects in the fast-developing region.

LoadMatch® has been successfully installed in over 200 buildings to date in the U.S., Canada, Puerto Rico, Curacao and now in Qatar. A LoadMatch system qualifies for Green Building LEED certification points in its "Optimize Energy Performance" and "Innovation in Design" categories.

For more information on Taco's LoadMatch® system visit www.taco-hvac.com.

You'll be more comfortable.

LoadMatch® provides superior comfort compared to all-air systems and conventional hydronic systems. LoadMatch® is a self balancing system and assures the required flow to every heating and cooling unit at all times. Your heating and air conditioning system will deliver BTU's where they're needed, and when they're needed.

You'll save energy.

With less pipe and the elimination of control valves and most balancing valves, lower pump head and less power is required to move the water.

You'll save money.

Fewer parts, about 40% less pipe and fittings, no control valves and almost no balancing valves reduce first costs. Lower pump head and operation of pumps to match the load reduce operating and maintenance costs. All this adds up to big savings on the system, typically up to 30% of life cycle costs.

Contact Us

Taco engineers are at the forefront of Green Building hydronics, designing components and systems to help you meet the challenges of environmentally sensitive – and budget conscious – design and build. Visit our web site at taco-hvac.com or e-mail greenteam@taco-hvac for more information or to talk to a Taco Green Building professional.

