



ISO 9001
COMPANY

PROJECT REPORT

PRJ 34/03

BAC FXV Closed Circuit Cooling Towers Provide Reliable, Closed-Circuit Performance to Canadian Automobile Component Supplier

Project Credits:

Owner:

Rimply Manufacturing; Newmarket, Ontario

Consulting Engineer:

Vista Engineering Corporation; Ajax, Ontario

Mechanical Contractor:

T-Fab Mechanical Services; Zephyr, Ontario



When designing their new plant chilled water system, Rimply Manufacturing decided on closed-circuit cooling towers to cool the glycol solution for the condensers and air compressor jackets in lieu of open cooling towers and plate-and-frame heat exchangers. The closed-circuit units would eliminate the contamination of cooling water by dirt and gravel from a nearby cement plant. The new chillers provide environmental control for Rimply's automotive parts painting operations, so reliable operation of the system is essential for maintaining the high quality required by their customers. In addition, "just in time" delivery requirements mean the system must be up and running at all times to support production demands, all year round. Rimply's choice for a solution to their cooling needs? Baltimore Aircoil Company and the innovative FXV Closed-Circuit Cooling Tower!

The four (4) BAC model FXV-Q641-2 closed circuit cooling towers are sized to cool 9,828 USGPM of 30% ethylene glycol solution from 105.5°F to 95°F at 76°F wet bulb temperature.

They meet the customer's reliability requirements and more!

- Their small size, light weight and single-side air entry permit them to be located on elevated steel grillage in the compact arrangement shown in the photo above.
- Most routine maintenance operations can be performed at the base of each unit, without the need to enter the unit. Internal maintenance tasks are made easier by hinged access doors and a full length platform above the basin water level.
- The ENERGY MISER[®] Fan System provides a second, low-speed fan motor on each unit for a combination of two-speed capacity control and back-up motor redundancy.

These are important considerations for an industrial customer who is looking for equipment that provides closed-circuit reliability and low energy consumption with easy service and maintenance, especially through tough Canadian winters!