# A CONTROL SYSTEM FOR A MOTORCYCLE WIND TUNNEL

## USING BACNET/IP GATEWAY FOR BUILDING AUTOMATION SYSTEM INTEGRATION

## SITUATION

Automation Solutions was approached by a leading motorcycle manufacturer to implement a control system for the wind tunnels used to test the bikes. Beyond implementing the PLC, or programmable logic control for the wind tunnel, the motorcycle manufacturer also needed the system to access its building automation control system via BACnet/IP.

## CHALLENGE

Based on our extensive industrial automation control experience, we knew we could implement a cost-effective control solution built around Allen-Bradley's MicroLogix PLC. However, we required a mechanism to enable the machine with BACnet/IP communications.

## SOLUTION

The 460ETCBS gateway from Real Time Automation (RTA) provided the perfect solution. The small, din rail module uses BACnet/IP Analog and Binary Properties to access the registers or tags in an Allen Bradley PLC.

Automation Solutions is always committed to find the latest and best technology that will help our customers innovate and optimize.

Real Time Automation not only provided the needed gateway, but also assisted with training and configuration support for our client's motorcycle wind tunnel project. By using the 460ETCBS gateway, we implemented the BACnet/IP communications without dramatically altering the control program.

"One of the coolest things about the gateway is that you don't have to implement any special messaging in the PLC. The gateway independently reads a defined block of register locations in the MicroLogix and writes another block," says Drew Baryenbruch, Product Manager, at RTA. "All the data transfer is controlled by the gateway."

This feature means integrators can implement alternative communication protocols with limited changes, or even no changes, in their established control programs – saving them time and limiting the risk associated with program changes.

## RESULTS

The 460ETCBS gateway helped Automation Solutions LLC deliver a wind tunnel control solution based around a proven controller and also satisfy the applications requirement for BACnet/IP communications.

## FINDING THE LATEST TECHNOLOGY TO HELP CUSTOMERS

*"We thoroughly research and vet new components on projects for our customers, and Real Time Automation (RTA) helped us through that process... RTA's commitment to the project's success was clear from day one."*

*Steve Nordness,*
*President of Automation Solutions LLC.*

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