

City of Las Vegas Water Pollution Control

LOCATION:

Las Vegas, NV

APPLICATION:

Engine and Blower Control

ENGINE/COMPRESSOR:

(2) Waukesha 5790

DISTRIBUTOR/REP:

Coastal Ignition & Controls (CIC)
Scott Robinson

ALTRONIC PRODUCTS:

DE-3000 Safety Shutdown CPU-95 Digital Ignition DET-1600 Detonation and Misfire Sensor EZRail Modular Rail System EPC-150 Engine Performance Controller VSM Vibration Sensing Monitor

OVERVIEW:

In 2010, CIC replaced two outdated engine control panels and blower control panels for the City of Las Vegas Water Pollution Control Facility. The Altronic DE 3000 and Altronic VSM (Vibration Monitor) system have already shut down the engine and saved the city \$300,000—the cost of replacing a blower—when a bearing race walked off one of the drive shafts to the blower.

The dual-fuel Waukesha 5790 lean-burn engines drive enormous Hoffman-type blowers that provide air to the treatment process. The









Altronic Controls panels that CIC installed automatically control the blower valves, as well as fuel switching for the engines. The main Altronic components are a DE-3000 Safety Shutdown System with CPU-95 Ignition, DET-1600 Detonation and Misfire Sensor, EZRail, EPC-150 with dual-fuel stepper valves, and VSM Vibration Sensing Monitoring System. Woodward 2301D and DCL catalyst were also installed. The next planned

upgrade to the panels is likely to be a replacement door with a 10-inch Altronic MIDAS touch screen (HMI). All communication is back to plant SCADA thru ethernet cable. Vibration is also monitored on the Lufkin gear boxes and the blower bearings.

