## **PROJECT OVERVIEW #112**



## VSM Vibration Sensing Monitor

LOCATION: Red Deer, Alberta, CAN.

APPLICATION: Cogeneration

**ENGINE/COMPRESSOR:** Waukesha 5790GSI

**DISTRIBUTOR/REP:** Enerflex Ignitions and Controls, Dave Popovitch

ALTRONIC PRODUCTS: VSM Vibration Sensing Monitor

## **OVERVIEW:**

Vibrational harmonics always change prior to an engine/compressor failure. The challenge is to detect this change early, as catastrophic failure can occur in mere minutes.

The Altronic VSM is unique in that it is designed primarily to monitor vibrational parameters and provide life cycle wear trends which can aid users well in advance of mechanical damage.

The first function of the VSM is to display an alarm triggered by an increase in normal operating levels. If the vibration worsens, the VSM will then shut down the monitored machine at a pre-determined vibration level.

The VSM notifies the operator of a problem before it escalates to cause an engine failure.



Damage to valve, cylinder, and piston occured prior to VSM installation.



Prior to installation of the VSM, a major failure had occured on the subject engine when a valve broke, fell into the cylinder, and punched a hole in the piston. A Murphy vibration switch had been installed, but it failed to shut the engine down.

Since installing the VSM, the subject engine has been saved from numerous catastrophic failures.





