Improving automotive vacuum systems efficiency

APPLICATION C220

Type of Company: Blower & Vacuum Systems Location: Connecticut

The Spencer Turbine Company recently introduced a new energy-efficient vacuum control system for the car care industry.

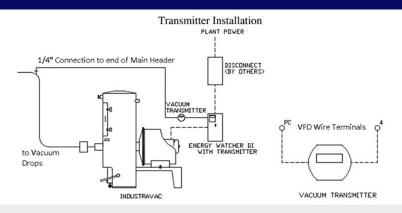
Coined the *Energy Watcher III*[®], the product monitors multi-user car wash vacuum cleaner systems and automatically reduces the vacuum motor speed during low-use periods, thus reducing power consumption overall.

Car washes, car rental companies, and similar operations will quickly benefit from reduced operational cost and improved energy efficiency, as well as increased vacuum life.



The Engineering Issue

• The Spencer engineer required a device to continually monitor the vacuum system and send a 4-20 mADC signal to a VFD (Variable Frequency Drive) to increase or decrease their motor speed accordingly.





Spencer evaluated and selected the Cecomp DPG1000L loop-powered digital vacuum gauge and found it to be accurate, quick to react to changes in vacuum pressure, and technician-friendly. It is able to produce the required 4-20 mA signal and maintains calibration. In addition, the Cecomp DPG1000L includes a LCD display that indicates real-time vacuum level, important during system startup or troubleshooting.

Problem. Solved.