

API-Cecom Group *n'fo*

Technical & Application Note C163

Application: Monitor regulated air flow leak tests

Type Of company: Manufacturer

Location: Texas

Problem: The company manufactures CO2 regulators for the soda dispensing industry. They must check the leak rate and accuracy of each and every regulator prior to shipping. The testing procedure requires that they pressurize the regulator manifold and check to see if any of the regulators are leaking and at what rate. They had to check the analog gauges attached to the regulator manifold every hour and manually record the pressure. The engineer had two major requirements. The first was to increase the accuracy of the gauge monitoring the test by eliminating analog gauge reading errors which would result in time savings and better manufacturing procedures. The second was to enhance the leak test by using a PLC to record the results and document the test.

Note: for additional information on this process see http://en.wikipedia.org/wiki/Soda_fountain



Solution: The customer purchased a DPG1000DR15PSIG-V-HA . This gave them an analog voltage output to send to their PLC and the HA "High Accuracy" 0.1% option to increase the accuracy of the test.



DPG1000DR

Digital Pressure Transmitter



Benefits of API's solution:

±0.1% Test Gauge Accuracy

Accurate re-Transmission

0.5" digit height on Display for ease of reading

Cecom Unique Feature



Functional Test Pushbutton

Holding the front panel TEST button sets both the display and the retransmission output to a test calibration level, independent of pressure input to allow testing of system operation. The Retransmission test level is set by a multi-turn potentiometer to any value from 0 to 100% of full scale. This signal can be used to check loop status, downstream display operation, downstream alarm operation, etc.

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800-942-0315



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Revised 07/2012