

# API-Cecom Group *n'fo*

## Technical & Application Note C170

Application: Pressure test leak detection for explosion protection

Type Of company: Manufacturer

Location: Massachusetts

**Problem:** The customer manufactures explosion protection systems. The technology of explosion protection would typically be from least to most expensive solutions: explosion doors and vents; inerting; explosion suppression; isolation – or combinations of same. To focus on the most cost effective, doors typically have lower release pressure capabilities; are not susceptible to fatigue failures or subject to changing release pressures with changes in temperature; capable of leak tight service; service temperatures of up to 2,000°F; and can be more cost effective in small quantities. Rupture membrane type vents can provide a leak tight seal more readily in most cases; have a relatively broad tolerance on their release pressure and are more readily incorporated into systems with discharge ducts. The customer needs to perform a pressure leakage detection on their system. They required a intrinsically safe digital gauge to accurately visually monitor the pressure during the leak test.

*Note: for additional information on this process see [http://en.wikipedia.org/wiki/Explosion\\_protection](http://en.wikipedia.org/wiki/Explosion_protection)*

**Solution:** The customer purchased a Intrinsically Safe FM approved 0-400 inH2O(vac) Battery powered backlit gauge (DPG2000BBL400inH2Ovac-5) which gave the operator an accurate visual readout of the pressure.



DPG2000BBL

Intrinsically Safe Battery Powered Digital Pressure Gauge



### **Benefits of API's solution:**

±0.25% Test Gauge Accuracy  
FM Approved Class I, Div. 1, Groups A, B, C, D, Zone 0  
0.5" digit height on Display for ease of reading

### **Cecom Unique Feature**



Cecom Intrinsically Safe Battery powered Gauges have an accuracy of ±0.25% of full scale (±1 least significant digit) with 1000 hours battery life using Panasonic LR03 alkaline batteries. The unit comes standard with an epoxy powder coated extruded aluminum case and bezel. The front button turns gauge on, starts auto shutoff timer and comes with top-mounted zero and span potentiometers. These gauges come with non-interactive zero and span controls for accurate calibration.

To find your local representative:  
[www.api-usa.com/api\\_rep\\_map.php](http://www.api-usa.com/api_rep_map.php)

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Where People Answer The Phone  
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800-942-0315



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