API-Cecomp Group n'fo

Technical & Application Note C117

Application: Monitor pressure on a vacuum chamber

Type Of company: Aircraft Parts Manufacturer

Location: Washington

<u>Problem:</u> The customer uses a vacuum forming (commonly called vacuforming) process to manufacture aircraft parts using a fiberglass reinforced composite plastic. A glass-reinforced plastic component is typically of a thin "shell" construction, sometimes filled on the inside with structural foam. The component may be of nearly arbitrary shape, limited only by the complexity and tolerances of the mold used for manufacturing the shell. The process requires an accurate and easy to read visual indication of the vacuum applied to the chamber. The accuracy and repeatability of the applied vacuum in the part while in the chamber is required so that there are no air bubbles remaining in the part which could cause a "part failure" when put in service. This air bubble removal is critical for parts quality and integrity.

Note: For additional information on this process see http://en.wikipedia.org/wiki/Glass-reinforced_plastic

Solution: The customer will use a DPG1000B30 inHg (vac) to monitor the vacuum applied to the part while in the chamber.



DPG1000B

Battery Powered Digital Pressure Gauge

Benefits of API's solution:

±0.25% Test Gauge Accuracy Long Battery Life (up to 2500 Hours) 0.5" digit height on Display for ease of reading Repeatability of reading

Cecomp Unique Features



DPG 1000B features

Cecomp Battery powered Gauges have an accuracy of ±0.25% of full scale (±1 least significant digit) with 2500 hours battery life using standard alkaline batteries The front button turns gauge on, starts auto shutoff timer, and provides zero function (One Touch Zero) for gauge reference ranges. Cecomp 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

FREE FACTORY APPLICATION ASSISTANCE Contact (F) Customer Service

Where People Answer The Phone www.api-usa.com 800-942-0315



Revised 06/2009