

High Temp Air Flow Measurement System

This instrument measures air flow in large curing ovens with hazardous environments. Up to now it was impossible to measure air flow in large ovens used to manufacture carbon composite honeycomb materials. The reason for this was the gases given off at high temperature could be ignited causing fires. But now Wind Probe LLC's **Model 100 eight channel High Temp Air Flow Monitor** measures air speed and temperature meeting IEC 60079-11 intrinsically safe requirements. The instrument and its sensors have just been certified by FM Approvals for use in hazardous locations such as these types of ovens.

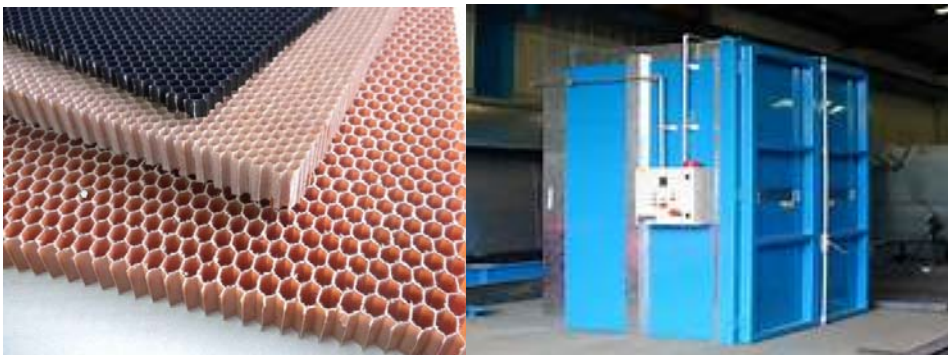


Figure 1



Figure 2

The instrument monitors the air flow and temperature of eight independent sensor probes positioned in an oven. User defined limits can be set for the air flow to enable an alarm when the limits are breached. A microprocessor linearizes the output signals and reports all the critical parameters. Tables are loaded during the calibration process to ensure accurate temperatures and speeds. This provides a great deal of flexibility in units of measurement and updating new tables. The initial target for its application is carbon composite honeycomb curing ovens where the air flow through the honeycombs is critical to the curing process. Figure 1 shows the actual sensor that is installed in the oven and Figure 2 shows the electronic console that houses the power supply, eight control boards, protection circuits and the acquisition system.



Wind Probe LLC
8 Standish Circle
Andover, MA 01810
978-470-3309
wind-probe.com