

Technical News Bulletin

December 15, 2008

Pressure Curve Analysis ensures valid data to the process

The MLP Pressure Measurement System for glass bottles has a unique feature to ensure the output data is valid to the user. Before the Emhart Inex MLP, other pressure testers just output the pressure values without any type of status.

For example: If the actual pressure within the bottle being tested was not at a predetermined and expected value, the machine stops and reports pressure data at that moment. In most cases this means the bottle has broken at that pressure. But what if it did not? What if there was a leak in the pressure circuit or the bottle seal.

That's the problem! If the pressure data reported was due to a leak then the pressure data reported for that bottle would be incorrect and misleading. In fact a machine without this feature can cause unnecessary ware loss due to cavities being placed on the reject and retest lists.

During the design phase of the MLP we anticipated this problem and determined that a status indicator, pass, fail or leak, should be provided with each pressure test reported. Operators or control system can now only respond to real pressure problems and not false information.

How's it done? The MLP builds water pressure in the test bottle at a predetermined linear rate. The software monitors and knows what the pressure in the bottle should be at any given time. If the pressure in the bottle drops-off rapidly then this indicates that the bottle has broken and the test data is good. If the pressure drop-off is slow, this indicates that a leak is present and the pressure value is not good.

The Pressure Curve Analysis feature is available in every MLP and MLP Plus.