Technical News Bulletin

May 5, 2008

MLP Clamp Tracking cuts troubleshooting time

The MLP uses four separate bottle finish clamps to hold bottles in the machine when testing for internal pressure or capacity measurements. Through normal use and routine testing of bottles, the bottle clamps are subjected to the most damaging conditions of broken glass and high pressure forces.

Although strongly designed, occasionally a clamp component may fail or just wear out causing one clamp to not hold the bottle properly for testing. The problem can cause high pressure leaks, incomplete testing and in some cases complete loss of the bottle. If the Capacity Gauge is installed, inaccurate results from tipped bottles may be realized.

The MLP is designed to Set-it and Leave-it, meaning a human is not required to be near the machine when measuring a setout of bottles, so occasional clamping problems may not be noticed until after the setout was completed. The operator now would be required to get more bottles for re-measurement that previously was not tested due to the errors. This slows down the measurement operation and efficiency of the operator.

The MLP software accommodates the occasional dropped or leaking bottle and will only alarm after three tests in succession have failed for leaks. An alarm like this indicates a more obvious problem. However, if only one clamp out of four is defective then the machine will continue testing the setout of bottles.

Troubleshooting a situation like this can be time consuming. That is why we developed the Clamp Tracking Feature. Upon startup the MLP identifies each clamp position. Every bottle entering the MLP will have the clamp number assigned to it as it moves through the measurement process. The pressure data, test status and the clamp number are remembered and transferred to the Host Computer system. Any leak errors are reported in the error log including the clamp number.

The mechanic only needs to view the log to determine which clamp is causing the problems.

This feature is in all MLP and MLP Plus machines.