

# Innovations abound at Emhart Glass

## ISIS Wall Thickness Gauge unveiled

This new gauge option for the ISIS Dimensional Gauge, is an integral part of its MiniLab Glass Container Measurement System. This new option provides the ability for automated mold-correlated wall thickness measurement of glass containers on a sampling basis.

The Wall Thickness Gauge uses a single non-contact chromatic sensor with a 10µm spot size to measure the wall thickness of glass containers from 1 to 10mm with a repeatability of ±0.15mm. A servo-controlled linear slide automatically keeps the chromatic sensor at optimal distance from the surface of round and non-round containers during the entire measurement sequence.

Once installed and calibrated the Wall Thickness Gauge does not require any mechanical adjustment. When creating a job, the operator simply specifies the distance from the top or base of the container the different wall thickness measurements should be performed. Up to nine locations can be specified, each with different diameter and min/max limit values. The ISIS elevator automatically positions the container in front of the sensor at the specified locations. The wall thickness is measured 360 degrees around the container at each location. The Wall Thickness Gauge is available as option on new ISIS machines and as a field upgrade for any machine already in operation.

## New Generation Neck Ring Mechanism

Emhart Glass is also pleased to announce a new generation of Neck Ring Mechanisms.

The new Neck Ring Mechanisms feature closing forces increased by 20%, optimised airflow for improved synchronisation motion and a fine-thread screw for greater T-nut clamping force. The tapered pin assembly has been replaced with a strong, standardised retaining ring assembly.

The new design offers higher clamping force for the Neck Ring Holder Arm, and opens up the possibility of higher revert speeds. It allows for balanced opening of right and left Neck Ring Cylinders, leading to fewer finish checks. The increased stiffness also enables improved precision, and the unit as a whole is far easier to service.

The Neck Ring Mechanism is fully interchangeable with existing mechanisms. Old and new versions of the mechanism can be operated side by side on the same machine. However, many of the individual parts within the new mechanism are not compatible with earlier versions.

The new mechanism has the part number 191-5149-11. It is fully compatible with the existing Neck Ring numbered 19-5149-9, the production of which will be discontinued when the new mechanism launches in Q2 2012.

A Quick Change version has also been developed, offering the same feature set. It will bear the part number 191-5149-12 (replacing 191-5149-10) and launch in Q3 2012.

## FlexIS Ware Handling Supervision now available

Emhart Glass is pleased to announce the launch of a new addition to its FlexIS integrated control system: Ware Handling Supervision, or WHS. WHS is a ware-sensing system that automatically detects and rejects substandard glass containers at the hot end of the production line. WHS uses a light barrier to identify cullet (broken wares), 'stuck' and 'down' wares on the conveyor belt. A pneumatic air-reject system then removes the unwanted ware from the conveyor before it can cause jams in subsequent stages of the production line, such as the hot-end coating tunnel and transfer wheel. The light barrier consists of a transmitter and a photoelectric sensor, both protected with a heat shield. The sensor is mounted on a movable plate to allow for easy alignment. Both modules are cooled and cleaned with compressed air. The pneumatic reject unit is highly accurate and reliable, allowing it to operate at very high speeds. The FlexIS is connected to the light barrier via the hot-end distributor box. WHS is completely integrated into the FlexIS control system, with the facility

to enter a wide range of parameters including nominal bottle width, tolerance bottle width, reject duration and minimum bottle distance. The system provides data on the actual bottle width and bottle space, as well as the number of rejected bottles and the cause. WHS can be installed on any IS machine equipped with FlexIS timing with WHC Ware Handling Controller.



## About Emhart

Emhart Glass, a division of Bucher Industries AG, is headquartered in Cham, Switzerland, with offices and manufacturing facilities located throughout the world. The company is a leading supplier of machines, controls, and parts to the glass container industry.

**Emhart Glass SA, Hinterbergstrasse 22 Postfach  
2251 CH-6330 Cham 2 Switzerland  
[www.emhartglass.com](http://www.emhartglass.com)**