

WE,
GLASS,
& YOU

BUCHER
emhart glass



Inspection Machine Portfolio



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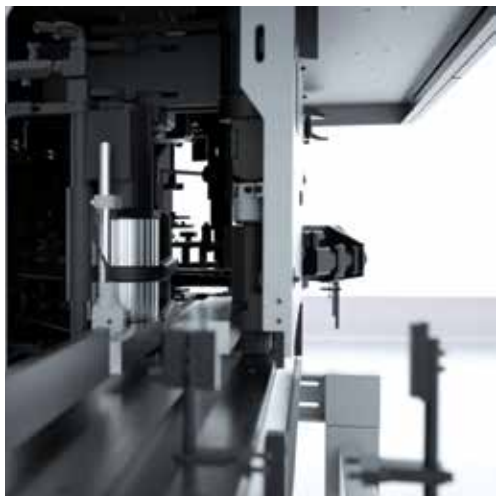


Inspection Technology

Glass is truly a perfect package representing quality and value in the eyes of the consumer. To uphold its premium image, the glass container must achieve and be held to the highest standards of excellence. A company's reputation therefore relies heavily on the effectiveness of the container inspection systems. Bucher Emhart Glass inspection solutions verify container quality and integrity at the highest levels, combining vision inspection, software, lighting, and reject systems for optimum system performance at production line speeds.

Bucher Emhart Glass delivers the industry's most comprehensive selection of empty glass inspection solutions. From base, sidewall, finish and stress inspection to mold correlation and check detection for glass containers in all sizes, shapes, colors, and configurations, Bucher Emhart Glass inspection systems perform all of these critical inspection tasks at production line speeds. Our systems offer exceptional flexibility with quick product changeover, ease of operation and maintenance, while providing concise real-time data generation for production analysis and trending.

FleXinspect is the tool that increases production efficiency and reduces costs by allowing glassmakers to configure only those functions they require on a modular platform. To reduce capital expenditures while maintaining flexibility, the manufacturer can add additional inspections on the existing platform as the need arises. With a large 21.5" touchscreen, the user interface has been enhanced to utilize icon-based command sequences for simplified setup and operation. Container inspection parameters are preprogrammed for easy recall, reducing downtime for job changes.



FlexInspect M Overview

The FlexInspect M is a servo-indexing, rotary inspection system designed to be a drop in replacement for many of the well know mechanical machines of the past.



Machine Features

- Active cooling of main electronics, with thermal protection
- 30° Infeed entry angle
- Integrated inspection conveyor
- 680mm Ø star wheel
- Traceability of changes
- Cavity correlation of all defects
- Servo-driven rotate devices
- Servo-driven infeed screw
- Servo starwheel

Machine Configuration

- 9 / 18 pocket star wheel with 3 servo driven rotate stations*
- 12 / 24 pocket star wheel with 5 servo driven rotate stations*

Machine Speed

Production Speeds

Pockets	Max. Dia.	Stations	Max. Speed
18*	79mm	5	265 BPM
9*	120mm	5	185 BPM
24	66mm	7	300 BPM
12	120mm	7	215 BPM
Beers	Wine	Baby food	Non round
180-240	140-180	200-260	100-180

Burst Speeds

280	230	300	N/A
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* In this configuration can reuse Veritas IM tooling

Ware Range

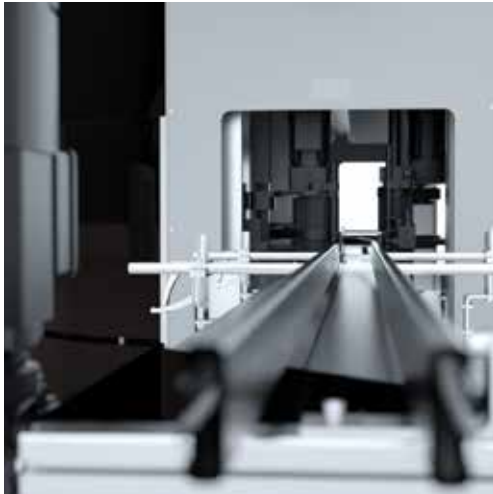
- Height: 38mm – 350mm
- Body Diameter: 16mm – 120mm

Standard Inspections

- Modulated Check Detection
- Mold Number Reader – Heel code
- Mechanical Plug / Ring
- Mechanical Dip / Saddle / Height

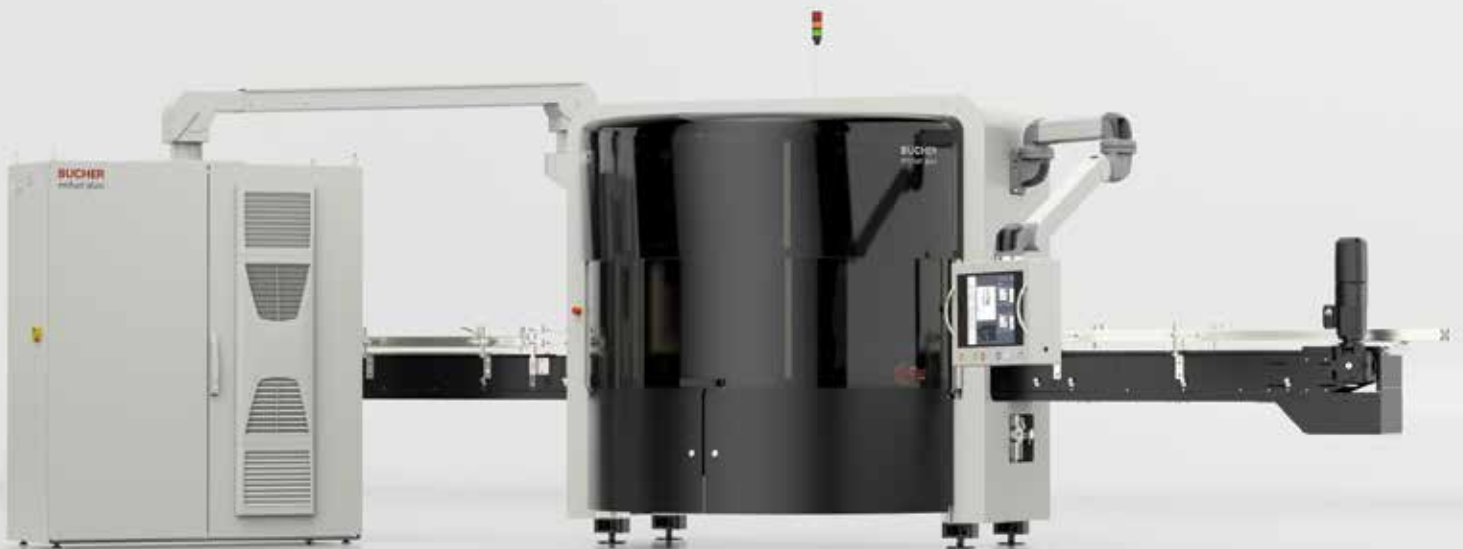
Additional Inspections

- Wall Thickness - 4 elevation
- Vision Mold Number Reader - Alpha numeric / Bottom dot
- Sealing surface / Wire edge
- Base / Base stress
- Vision check



Flexinspect T Overview

The Flexinspect T gives glass manufacturers a total inspection solution, as the fully equipped system is capable of providing all necessary cold end inspections. The unique design of the servo-driven handling devices allows inspections that in the past were not possible with rotary inspection machines.



Features

- All inspections in one machine
- Modular / Expandable inspection systems
- Cavity correlation of all defects
- Non-contact gauging for the finish
- Integrated inspection conveyors
- Brushless non-round container handling
- Traceability of change (who, what, when)
- 840mm servo driven starwheel
- 5 modular servo driven rotation devices
- Servo-driven infeed screws
- Servo-driven starwheel
- Live belt outfeed handling system

Ware Range

- Height: 35mm-381mm
- Body Diameter: 16mm - 170mm

Standard Inspections

- Modulated Check Detection
- Mold Number Reader – Heel codes
- Vision Plug / Ring / Dip / Saddle / Height

Additional Inspections

- Wall Thickness – 4 elevation
- 2 point Out of Round (2 positions)
- Mechanical Plug / Ring
- Mechanical Dip / Saddle / Height
- Vision Mold Number Reader – Alpha Numeric / Bottom Dots
- Sidewall / Sidewall Stress
- Base / Base Stress
- Sealing Surface / Wire Edge
- Dimensional (height, diameter, lean)
- Tramp Glass
- Vision Check

Machine Speed

Pockets	Max. Dia.	Stations	Max. Speed
36	53mm	19	400 BPM
30	66mm	16	400 BPM
24	79mm	13	370 BPM
18	107mm	10	320 BPM
12	152mm	7	270 BPM
9	170mm	5	140 BPM
Production Speed Guidelines 24x7x365			
Beer	Wine	Baby Food	Non round
260-330	210-250	270-340	120-220
Burst Speeds			
350	270	350	N/A



FlexInspect B Overview

The FlexInspect B is designed to control the finish and the base of the glass container. Capable of running all shapes at high speed the FlexInspect B can provide mold-correlated results from all installed inspections.



Features

- Integrated belt spacing device
- Cavity correlation of all defects
- Traceability of change (who, what, when)
- Independent belt position for tapered ware
- 4 Servo-driven carry belts
- Nema12 electronics with thermal monitoring
- 21.5" multi-touch display
- SCOUT technology

Ware Range

- Height: 35mm-381mm
- Body Diameter: 16mm - 170mm

Speed Guidelines

Production Speeds

Beers	Wine	Baby food	Non round
300-500	250-400	300-500	100-300
Burst Speeds			
600	450	600	N/A

Standard Inspections

- Sealing Surface
- Base

Additional Inspections

- Base stress
- Mold reader (heel codes / bottom codes)
- Vision plug / Vision plug with wire edge
- Vision dip / saddle



FleXinspect C Overview

The design of the FleXinspect C includes 360-degree wraparound lighting and patterned lighting for 100% sidewall inspection of containers to precisely pinpoint both opaque and transparent defects. Polarized lighting is utilized for stress inspection to ensure detection of defects that may be missed by conventional methods.



Features

- Traceability of change (who, what, when)
- Wrap around LED sidewall lighting
- Nema12 electronics with thermal monitoring
- 21.5" multi-touch display
- SCOUT technology

Ware Range

- Height: 35mm-381mm
- Body Diameter: 16mm - 170mm

Standard Inspections

- Sidewall 6 Views
- Dimensional 6 Views

Additional Inspections

- Sidewall transparent (cosmetic) 6 Views
- Sidewall stress 6 Views
- Shoulder or Shoulder stress 6 Views

Speed Guidelines

Production Speeds			
Beers	Wine	Baby food	Non round
300-500	250-400	300-500	100-300
Burst Speeds			
600	450	600	N/A



FleXinspect BC Overview

The design of the FleXinspect BC includes 360-degree wraparound lighting and patterned lighting for 100% sidewall inspection of containers to precisely pinpoint both opaque and transparent defects. Polarized lighting is utilized for stress inspection to ensure detection of defects that may be missed by conventional methods. When equipped with a mold reading option, the FleXinspect BC mold-correlates results from all installed inspections.



Features

- Integrated belt spacing device
- Cavity correlation of all defects
- Integrated inspection conveyors
- Traceability of change (who, what, when)
- Wrap around LED sidewall lighting
- Independent belt position for tapered ware
- 4 Servo-driven carry belts
- Consolidated electronics
- Nema12 electronics with thermal monitoring
- Single or dual 21.5" multi-touch display
- SCOUT technology

Ware Range

- Height: 35mm-381mm
- Body Diameter: 16mm - 170mm

Standard Inspections

- Sealing Surface
- Base
- Sidewall 6 Views
- Dimensional 6 Views

Additional Inspections

B-side

- Base stress
- Mold reader (heel codes / bottom codes)
- Vision plug / Vision plug with wire edge
- Vision dip / saddle

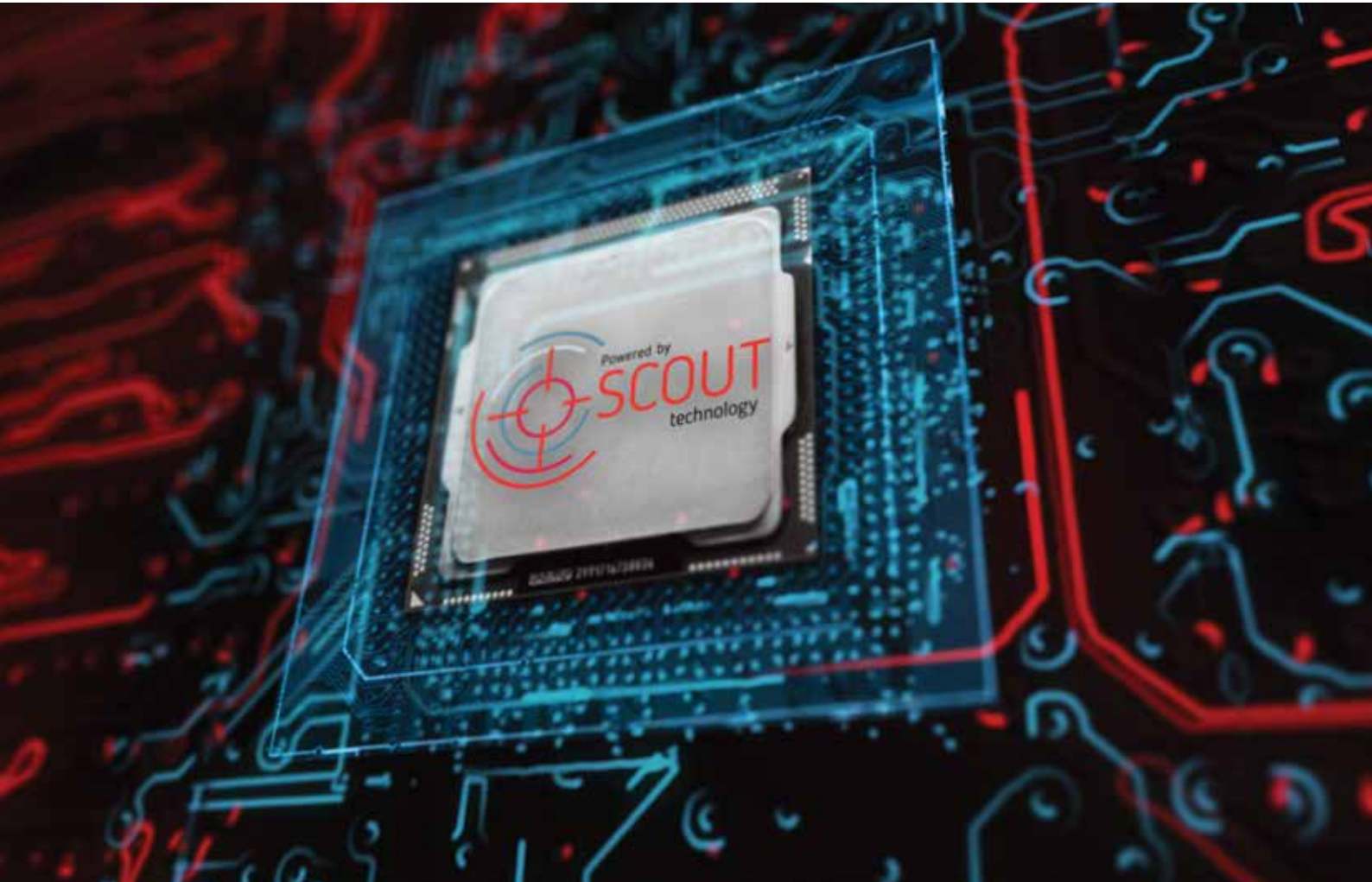
C-side

- Sidewall transparent (cosmetic) 6 Views
- Sidewall stress 6 Views
- Shoulder / Shoulder stress 6 Views

Speed Guidelines

Production Speeds			
Beers	Wine	Baby food	Non round
300-500	250-400	300-500	100-300
Burst Speeds			
600	450	600	N/A

SCOUT Overview



SCOUT Technology

SCOUT is the new hardware and software technology that now powers the inspection equipment produced by Bucher Emhart Glass. Developed to take the FlexInspect products to new levels of automation, performance and simplicity, the SCOUT technology platform has proven itself to be the foundation that will support all of the new features and advancements in the hollow glass inspection processes.

Revolutionary, innovative and practical

SCOUT provides users with a new method of navigation and operation by harnessing the power of multi-touch technologies. The gesture-based interface coupled with advanced automation and intelligent learning algorithms completes the system and creates the most usable, reliable and efficient inspection technology in the market.

SCOUT saves you money

- Advanced defect classification allows factories to pack more commercially acceptable ware.
- Advanced defect classification informs factories what defects are being produced for better feedback and correction.
- Advanced defect classification allows all machines to operate with the same sensitivities and limits.

SCOUT saves you time

- Intelligent automation in the inspection setups reduce the time required for job changes and fine tuning.
- Predefined defect classes and size limits reduce the time required for job changes and fine tuning.
- Simplified multi touch user interface and logical layout reduce the time required for job changes and fine tuning.

SCOUT provides you security

- With accurate defect classification, factories can now react faster and reduce the potential for held and returned ware.
- Using the automated setups and predefined defect classifications means all machines are set the same, reducing the potential for held and returned ware.
- Providing the correct information to the forming department ensures that the process is maintained reducing the potential for held and returned ware.

FlexInspect machine upgrades

- All FlexInspect products can be equipped with the SCOUT technology.
- Upgrades are performed in place and are completed within a few hours.
- All features and benefits including new developments for the End to End will be available as they are released.

Veritas machine upgrades

- Veritas iB and Veritas iC machines can be upgraded to SCOUT technology.
- All inspection features and benefits from the FlexInspect machine family are included in the upgrade.
- All features and benefits including new developments for the End to End will be available as they are released.

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