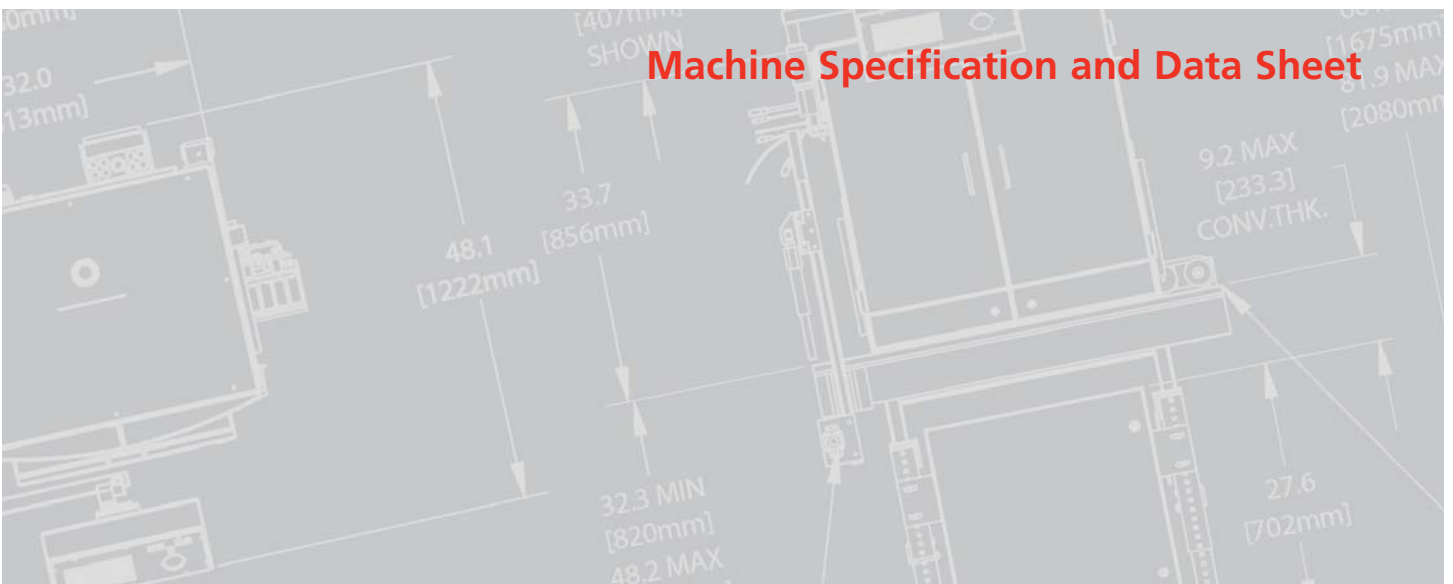




## SAFI Digital

The SAFI Digital is a compact two-camera finish inspection system for detecting surface and sub-surface defects. This compact, modular, turnkey solution provides fast, reliable 100% container inspection at speeds up to 700 cpm. Ideal for difficult finish-only inspection tasks, this system consistently rejects chipped finish, overpress, lineovers, and out-of-rounds in a variety of finish diameters including wide mouth containers.

### Machine Specification and Data Sheet



a business unit of Emhart Glass, a Bueher company



## The finish inspection solution

- Inspects narrow, mid-range, and wide mouth containers
- Detects surface and sub-surface defects
- Compact, stand-alone unit with small footprint for easy installation



SAFI Digital shown with two-camera configuration

### System Operation

The SAFI Digital offers a modular design with single and dual camera configurations, application-specific lighting and intuitive operator user interface. This system provides real-time inspection of critical defects associated with surface and sub-surface finish profiles and consistently rejects common manufacturing imperfections. The SAFI Digital is designed to install over an existing conveyor.

### Inspections

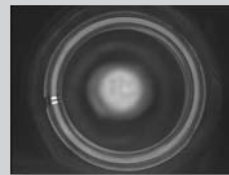
Finish defects detected:

- Finish chip
- Offset finish
- Small inclusion
- Finish lineover
- Overpress
- Finish inner chip
- Finish blister
- Finish sub-surface

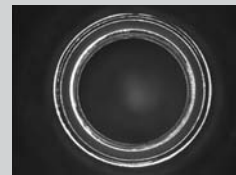
### Features

- Stand-alone unit
- Scalable, modular one- or two-camera operation
- Digital electronics for increased sensitivity
- Small footprint, easy to install
- Improved data connectivity
- Setup and programming during operation
- Data acquisition, statistical analysis and plant integration
- 16 inspection zones with multiple tests
- Task-specific, configurable illumination

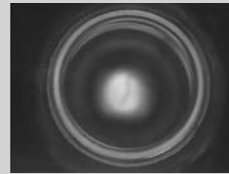
### Typical Finish Defects Detected



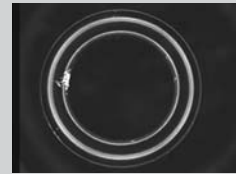
Finish chip



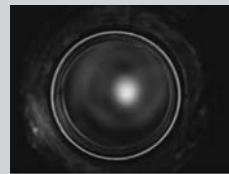
Overpress



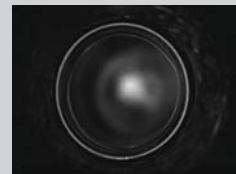
Offset finish



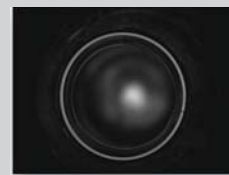
Finish inner chip



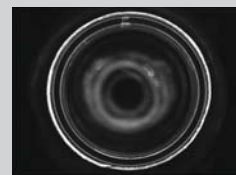
Small inclusion



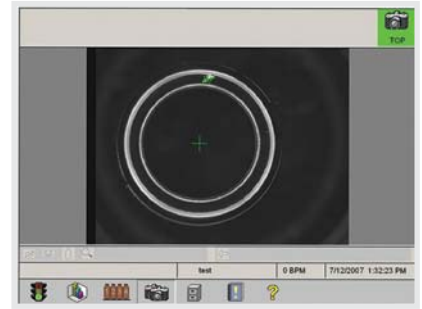
Finish blister



Finish lineover

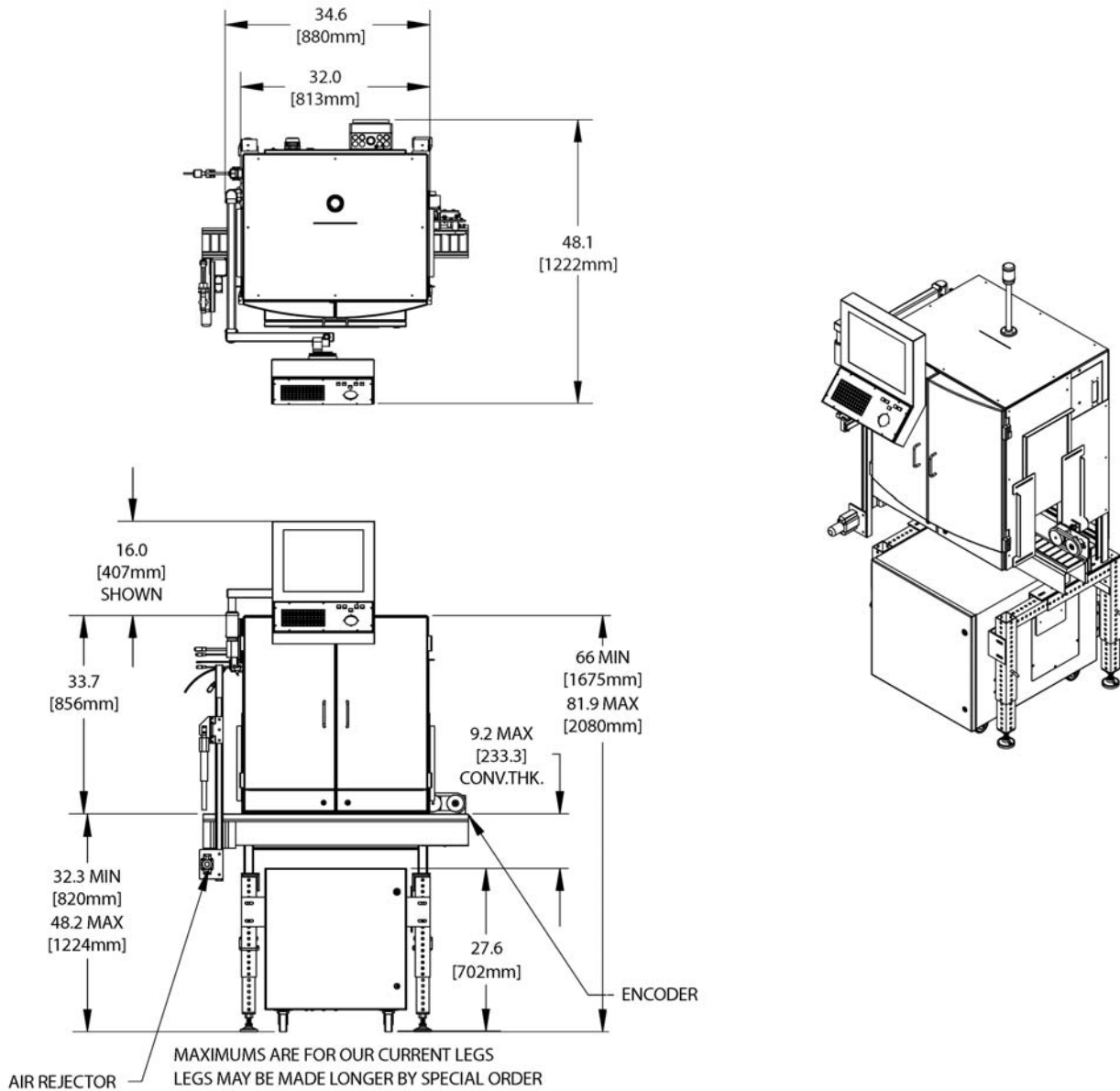


Finish sub-surface



The operator console features a graphical user interface that simplifies setup and operation

## Layout Drawings



Specifications		Ware Characteristics		
<b>Overall Ware Range</b>		<b>Height</b>	<b>Diameter</b>	<b>Min. Detectable Size</b>
	<b>Diameter</b>	51 to 343 mm [2 to 13.5 in.]	25 to 38 mm [1 to 1.5 in.]	0.3 x 0.3 mm
	<b>Height</b>	30 to 374 mm [1.2 to 14.75 in.]		
<b>Cameras</b>				
<b>Number</b>	1 or 2			
<b>Resolution</b>	1024 x 1024			
<b>Lighting</b>	Stroboscopic, LED or diffused LED lighting			
<b>Physical Specifications</b>				
<b>Power Requirements</b> (dedicated line recommended)	208-240 VAC, single phase 50/60 Hz, 30 amps			
<b>Air Requirements</b>	<b>Pressure</b> 4-10 bar [60-150 psi]	<b>Flow</b> 70.8 lpm [2.5 cfm] average		
		<b>Height</b>	<b>Diameter</b>	<b>Min. Detectable Size</b>
		51 to 343 mm [2 to 13.5 in.]	25 to 38 mm [1 to 1.5 in.]	0.3 x 0.3 mm
		<b>Narrow Neck</b>		
		<b>Mid Range (Baby Food)</b>		
		<b>Height</b>	<b>Diameter</b>	<b>Min. Detectable Size</b>
		51 to 343 mm [2 to 13.5 in.]	38 to 95 mm [1.5 to 3.75 in.]	0.3 x 0.3 mm
		<b>Wide Mouth</b>		
		<b>Height</b>	<b>Diameter</b>	<b>Min. Detectable Size</b>
		51 to 254 mm [2 to 10 in.]	38 to 95 mm [1.5 to 3.75 in.]	1.0 x 1.0 mm
Specifications are subject to change. Actual performance depends on specific application, container size, and line speed. Dimensions represent nominal machine size and are not for installation purposes.				

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a business unit of Emhart Glass, a Bucher company