



+ automated visual inspection

C3 equipment is designed for the 100% fully automated visual inspection of glass and plastic containers ranging in diameter between 8 mm and 78 mm at a maximum production speed of 200 unit per minute

+ Description

C3 equipment is made up of visual inspection systems belonging to three categories:

1. Foreign contaminants inspection: the container to be inspected is spun before reaching the unit;
2. Cosmetic, cap, tip, fill level inspection: the container to be inspected is spun when passing through the unit;
3. Other inspection units: optional or custom controls.

Multiple infeed and outfeed configurations are available according specific containers and user requirements:

- Manual loading and unloading: Tray in / Tray out + rotary turntables as an option;
- Inline connection: Conveyor in / Conveyor out.

Four (4) separate exits dedicated to conforming and defective containers.



CONTAINERS	PRODUCT	VISUAL DEFECTS
<ul style="list-style-type: none"> ✓ Glass and Plastic Vials ✓ Glass ampoules ✓ Glass cartridges 	<ul style="list-style-type: none"> ✓ Liquid: water based, oil based, suspensions ✓ Freeze-dried 	<ul style="list-style-type: none"> ✓ Foreign matters as particles (reflecting / non reflecting) and fibers ✓ Heavy particles ✓ Cosmetic defects and Fill level <ul style="list-style-type: none"> ➢ Ampoule: tip shape and height, ring and OPC absence ➢ Vial: alucap and flip off defects ➢ Cartridge: Plunger position and insertion, product or foreign particles between ribs, number of ribs



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+ Visual Inspection System

Standard configuration:

- ✓ Foreign contaminants inspection: 4 cameras;
- ✓ Heavy particles detection: 1 camera;
- ✓ Cosmetic defects detection: 1 camera – alu-cap and flip-off, 1 camera – container body (cracks, scratches, black spots; ampoule ring color, OPC, black spots);
- ✓ Ampoule Tip inspection: 1 camera.

+ Key Points

Innovative recipe management: easy and quick setting of the visual inspection parameters;
Maximum flexibility in setup and configuration of illumination systems: bottom light, back light and polarized light can be used individually and / or combined;
Digital megapixel cameras via Gigabit Ethernet / USB3 standard.



+ Advanced Features

• Inspection Features

Image processing is performed by an industrial PC; Illumination systems are provided by high power long life fanless LED; Software for automatic execution of Knapp test with graphic visualization of results available; performance rate calculation software system included.

• Special features

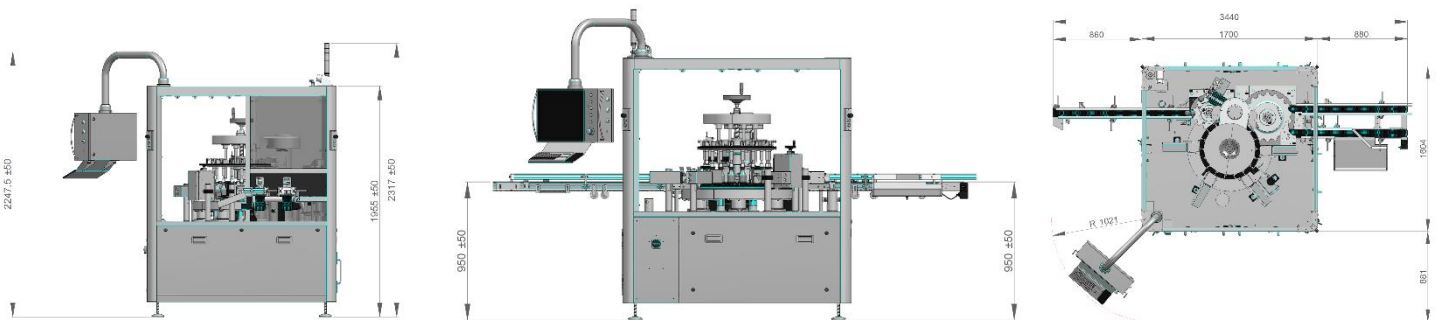
Wide range of product / package types;
Ease of access for maintenance and cleaning;
Quick format change.

• CFR21/Part11 Compliance

User friendly HMI based on 19" touchscreen PC;
Password protected access levels; Audit trail function.



+ Technical Specifications and Layout



Dimensions (LxWxH)

about 3500 x 1600 x 2300 mm

Weight

850 Kg

Electrical / Power

400V ± 10% 50/60 Hz

3Ph+N+GND 2,5 Kw

Air consumption

6 m³/hr - 5 bar

Machine Speed

Up to 200 pcs/min

Spinning Speed

300 ÷ 3000 rpm

Loading Height

950 ± 50 mm

Container types

Ampoules, vials, cartridges, bottles

Container size range

Ø8 ÷ Ø78 mm

Container minimum height

45 mm

Container maximum height

180 mm

Noise

75dB



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