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.

<table>
<thead>
<tr>
<th>CONTAINERS</th>
<th>PRODUCT</th>
<th>VISUAL DEFECTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Glass and Plastic</td>
<td>✓ Liquid: water based,</td>
<td>✓ Foreign matters as particles (reflecting / non</td>
</tr>
<tr>
<td>Vials</td>
<td>based, oil based,</td>
<td>reflecting and fibers</td>
</tr>
<tr>
<td>✓ Glass ampoules</td>
<td>suspensions</td>
<td>✓ Heavy particles</td>
</tr>
<tr>
<td>✓ Glass cartridges</td>
<td>✓ Freeze-dried</td>
<td>✓ Cosmetic defects and Fill level</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Ampoule: tip shape and height, ring and OPC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>absence</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Vial: alucap and flip off defects</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Cartridge: Plunger position and insertion, product</td>
</tr>
<tr>
<td></td>
<td></td>
<td>or foreign particles between ribs, number of ribs</td>
</tr>
</tbody>
</table>

**+ automated visual inspection**
C3

+ 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.

+ 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

+ 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.