Mosaic Compact

Unlike other 360° inspection methods which are cumbersome to set up, unable to adapt to different product sizes and require slower production speeds, the Mosaic Compact offers a more straightforward solution. A small footprint allows the Mosaic Compact to fit along crowded production lines, while flexible design allows for easy adjustments to variations in product position and packaging material.

The METTLER TOLEDO Mosaic Compact is a turnkey inspection solution for round, un-oriented containers which utilizes a simpler, more accurate vision processing method than traditional 360° inspection solutions. The system is designed for easy operation by everyday users, reducing operator error.

Benefits
- Drastically reduced footprint and IP65 construction allows for flexibility in system placement at any point in the production process.
- Mosaic’s unique paneling technology reduces the number of false rejects caused by faulty calibration and poor image quality.
- Globally deployable inspection solution means no matter where the production plant is, METTLER TOLEDO provides installation, training, service and support.
Product labels are the critical line of communication between manufacturers and consumers, displaying everything from instructions for use to allergy warnings. Vision inspection is the only method of product inspection capable of performing fast, accurate inspections on 100% of products on the production line, but performing these inspections on round, un-oriented containers has long been a point of pain for the industry.

The traditional method of vision inspection on round, un-oriented containers involves inspecting a composite stitched image made up of four separate images. This requires meticulous set-up and calibration requiring over fifty steps to accomplish. Each new product requires the same extensive calibration process, and product changeovers require a similar recalibration of the system. The Mosaic Compact utilizes a series of paneled images to perform inspections, requiring fewer steps to calibrate and capabilities for various product sizes and a much faster product changeover process. In addition, paneling technology is able to run at higher speeds, increasing the capabilities of the system.

The small footprint of the Mosaic Compact gives flexibility to manufacturers with limited space along the production line, and its IP65 construction allows the system to be placed early in the process, even in plants with washdown requirements.

**Compact Design**
Space can be a premium on production lines, which is why the Mosaic Compact features a slim profile that fits into small spaces. An over-the-line design allows the system to be installed easily without any breakage or replacement of existing production lines.

**Inventive Camera Configuration**
The Mosaic Compact’s minimal footprint is in part thanks to its unique camera configuration. Six cameras capture multiple angles of the complete product surface, reducing image distortion and allowing the system to obtain the best possible views for its inspections.

**IP65 Standard**
The Mosaic Compact is built to IP65 standards to protect cameras and lights from high-pressure washdown, allowing the system to function in harsh production environments. This makes the Mosaic Compact an ideal inspection solution for the food industry.
Worldwide Service and Support
Manufacturers with global reach require a vision solution that can be deployed to any location in the world. METTLER TOLEDO has a worldwide presence and expert technicians can be sent to every corner of the globe. No matter the plant location, METTLER TOLEDO can reach it.

Optional Top Down Inspections
Rather than requiring a separate station for cap inspections, the Mosaic Compact supports the addition of a top down camera built into the system, saving space on the production line while allowing manufacturers to verify each product’s cap matches the label.

Cutting-edge Interface
The Mosaic Compact utilizes an intuitive touchscreen interface running CIVCore® 11. A completely redesigned GUI makes navigation and operation easier than ever before. Multi-level user controls and anti-vision circumvention technology ensure inspection accuracy.

Technical Data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Footprint (l x w)</td>
<td>710 x 660 (mm)</td>
</tr>
<tr>
<td>Maximum Field of View (h x w)</td>
<td>160 x 125 (mm)</td>
</tr>
<tr>
<td>Maximum Product Height</td>
<td>200 (mm)</td>
</tr>
<tr>
<td>Maximum Product Diameter</td>
<td>125 (mm)</td>
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<tr>
<td>Product Diameter Range</td>
<td>+/- 75 (mm)</td>
</tr>
<tr>
<td>Product Height Range</td>
<td>+/- 29 (mm)</td>
</tr>
<tr>
<td>Open Line Length*</td>
<td>660** (mm)</td>
</tr>
<tr>
<td>Maximum Inspection Speed</td>
<td>Up to 1000 ppm</td>
</tr>
<tr>
<td>Operating Temperature (°C)</td>
<td>Up to 26.7</td>
</tr>
<tr>
<td>Relative Humidity</td>
<td>Up to 80%</td>
</tr>
</tbody>
</table>

* Systems with attached rejection components will require additional line space. Talk to a METTLER TOLEDO CI-Vision representative for further details.
** 580 mm for separate terminal, which can be positioned up to 3 m away
Specifications:
Mosaic Compact

Inspection Capabilities
- 1D and 2D barcode presence, reading and verification
- Alpha-numeric text presence, reading and verification
- Presence and quality of graphics
- Label position (Y position)
- Label quality (flags, holes, tears)
- Label verification
- Cap print and label inspections possible with top-down camera

Software Capabilities
- Failure string signals: The Mosaic can be programmed to signal operators or shut down production based on production trends or a set of consecutive failures, allowing for early detection of weak points in the production process.
- Anti-circumvention capabilities provide a safeguard against bypassing inspection to speed up production—making sure that every product gets inspected.
- CIVCore interface is standard on all METTLER TOLEDO CI-Vision turnkey systems—companies with other CI-Vision turnkey inspection systems on their line will find the same easy-to-use interface on the Mosaic Compact. First time users will find the software easy to learn.*

Choosing the Right System
Every manufacturer has their own specific needs and their own quality assurance processes to follow. METTLER TOLEDO CI-Vision has a system configuration to meet the needs of manufacturers regardless of container size. Speak to a METTLER TOLEDO CI-Vision sales representative to find the right system for your needs.

*METTLER TOLEDO offers training classes for beginners and advanced users alike. Contact a METTLER TOLEDO representative for more details.