RPC Series

The RPC incorporates decades of plastics inspection experience into one system representing the pinnacle of rigid plastic container inspection techniques. With pre-engineered configurations tailored to provide the best fit for individual manufacturer needs, the RPC is able to offer a precision vision inspection solution for both end-of-the-line inspection in container manufacturing plants and incoming container inspection at filling facilities.

Benefits

- Provides real-time quality control monitoring, allowing for faster responses to production errors
- Only containers meeting manufacturer specifications will leave the facility
- Product tracking puts rejects in the reject bin and not in the hands of customers
- Intuitive touch screen interface makes operation simple to learn

Manufacturers and purchasers of empty rigid plastic containers seeking to avoid angry customers, reduce rework and improve quality control require a comprehensive vision solution. The RPC is an easy-to-use turnkey vision inspection system for contamination detection and precision inspections of container formation.
Precision
Out of Spec, Off the Line

As manufacturing speeds increase, so does the risk of defective containers being produced. In an industry where the slightest molding error can result in leaky containers and closures that fit improperly, it is critical to detect even the slightest defect. The RPC is the most sophisticated vision inspection solution available for manufacturers wishing to avoid customer complaints, reduce wasted product and maintain a high standard of quality.

The RPC has been designed to provide precision vision inspection at high speeds, maintaining throughput. The RPC’s cameras can detect contamination as small as 0.1 TAPPI (mm²), and with optional telecentric lenses the RPC can produce measurements accurate to within 0.004” (0.1 mm), all at production speeds in excess of 600 parts per minute (ppm).

Every aspect of the RPC’s design is a result of METTLER TOLEDO CI-Vision’s decades of experience working with major plastics manufacturers. From its easy-to-install clamshell enclosure to its optional custom side-grips to its easy camera adjustments with auto-adjust capabilities and the comprehensive CIVCore® software tying everything together. An expandable design allows manufacturers to start small, adding additional inspections as their needs grow.
Pre-set Height Adjustment

Production lines often handle containers of varying sizes. So does the RPC. Its quick-adjust cameras can be pre-configured with height settings for each product size and shape on the production line.

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**Specifications**

<table>
<thead>
<tr>
<th>Model</th>
<th>RPC</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Length and Width (in)</td>
<td>30 x 48 – 252 x 60*</td>
</tr>
<tr>
<td>System Height (in)</td>
<td>85</td>
</tr>
<tr>
<td>Cameras Available</td>
<td>1 – 14</td>
</tr>
<tr>
<td>Line Length Requirements</td>
<td>Varies**</td>
</tr>
<tr>
<td>Vision Technology</td>
<td>PC Controlled GigE Cameras</td>
</tr>
<tr>
<td>Power Requirements</td>
<td>110-220 V VAC (single phase), 50-60 Hz</td>
</tr>
<tr>
<td>Operating Temperature °C***</td>
<td>Up to 35°C</td>
</tr>
</tbody>
</table>

* Specifications based on pre-existing models. Talk to a METTLER TOLEDO CI-Vision representative about specific needs

** Depending on Configuration Options/Line Height

*** Without optional A/C unit

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**Telecentric Lenses**

Precision measurements require precision lenses. With optional telecentric lenses the RPC can perform highly accurate measurements of container dimensions, including thread inspections with up to 0.004" accuracy.

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**Sidegrips**

Adding vision stable sidegrips makes more inspections possible. Rotate containers to get a view from a different angle, perform bottom inspections, or ensure containers are properly positioned for more precise inspections.

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**Pre-set Height Adjustment**

METTLER TOLEDO CI-Vision includes three product configurations in the base cost of the system. For additional product configurations, speak to a METTLER TOLEDO CI-Vision representative.
Specifications:

RPC Series

Inspection Capabilities
- Shoulder/Thread Formation
- Sealing Surface Defects
- Label Defects
- ID/OD/Ovality
- Thread Dimensions*
- Surface Contamination
- Wall Thickness
- Gate Inspection**
- Bottom Contamination Inspection**

Software Capabilities
- Failure String Signals: The RPC can be programmed to signal operators or shut down production after a set amount of patterned or 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
- CIVCore® interface is standard on all METTLER TOLEDO CI-Vision systems—manufacturers with other CI-Vision inspection systems on their production lines will find the same easy-to-use interface on the RPC. First time users will find the software easy to learn.***

* Telecentric lensing required for precision measurements
** Requires side-grip conveyor
*** Training courses are available. Speak with a METTLER TOLEDO CI-Vision representative for more details.

Getting the Perfect System

At METTLER TOLEDO CI-Vision, it is our goal for manufacturers to have a system that fits their needs precisely. CI-Vision’s engineers work closely with every customer, ensuring the RPC will produce the best possible results. Contact a METTLER TOLEDO CI-Vision representative to set up an appointment for a consultation that will meet your specific inspection requirements.

System dimensions will vary based upon selected inspection options.