

Your Benefits

- 100% inline inspection
- Maintain a high level of quality
- Flexible configuration for each product
- High grade optical components for perfect images
- Modular system, possibility to add inspection points at later stage
- Increased effectiveness for quality control

Demand for best tube quality

Customer quality requirements are constantly increasing. The manufacture of packaging products for the world market has become a rewarding but also very competitive business. It is therefore key to deliver only perfect quality. At the same time machine speeds have also increased which means that now more tubes have to be checked within a limited time frame. Manual quality inspection is getting difficult and expensive.



The effect of a Tube Inspection System

A Tube Inspection System has a significant impact on quality levels. Formerly hidden defects, e.g. those located under the cap or Top Seal, can be made visible to the operators and production problems causing imperfect quality can become immediately apparent. The Tube Inspection System allows parameters and tolerance settings to be stored for each type of product; with this, the output quality is being equalized. The system is integrated into the existing machine control system which allows to identify, mark and eject any defective tubes before they enter the following machine.





Types of Tube Inspection applications

| Head | Shoulder and orifice from top |
|-------------------------|---|
| Side | Tube thread area (3 cameras from side) |
| Body orientation | Angular position of tube body |
| Top Seal | Position and integrity of Top Seal |
| Cap-to-Tube orientation | Angular position of cap and tube body |
| Inside | Inside shoulder and orifice (on outfeed conveyor) |



Main inspection features

The inspection system is capable of proofing countless inspection features on a tube. However, the most common settings are kept simplified:

- Blocked orifice
- Shoulder shrinkage
- Mould defects such as holes, incomplete heads
- Black spots / dirt/ scratches
- Measurements (diameter, distances, etc.)
- Ovality check
- Double doughnut
- Shoulder angle
- Reverse body
- Bent nozzles
- Thread damage
- Thread flash
- Orientation mismatch
- Top Seal out of center
- Top Seal damage