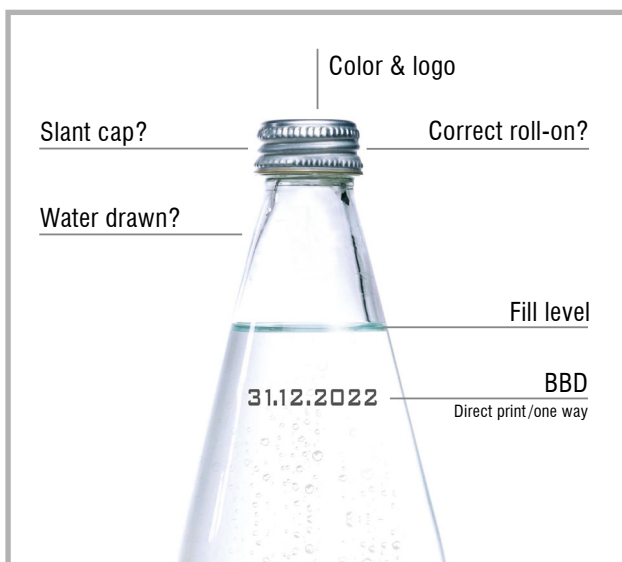


Optical fill level and cap inspection system miho Newton Optics 3



An integrated fill level and cap inspection system, along with optional modules, covers all necessary control tasks.

Advantages

- **Optical fill level control with foam compensation**
- **Cap control: color, correctness, slant cap, date code, lot-no.**
- **Roll-on check of metal screw caps**
- **Control of direct print on the bottle neck**
- **Presence detection of wrap-around labels**
- **Optical process (no ionizing radiation): suitable for organic fillers**

Funktion

- Fill level inspection: inspects the fill level for any underfilling and overfilling in transparent, cloudy/non-transparent and foaming liquids, provided that the fill level is not obscured by a label. Lighting through the reflected and/or transmitted light with optical method.
- Cap: inspection of the cap for exact fit (slanted position/ depth that it is screwed on) and bullnoses. Inspection for damage to the safety ring in metal and plastic screw caps.
- Non-roll-on check for metal screw caps with a circumferential defect of $> 90^\circ$
- Expiry date, lot-no. (on the side of the cap): checks for the presence of an expiry date on the side of the cap. Here, the expiry date must be on the side facing the camera
- Detection of nitrogen fog: directly after filler and capper
- State-of-the-art camera and lighting technology that uses multi-optical axis (offset by $90^\circ/ 270^\circ$ coverage) and variable lighting.
- Up to six images per bottle can be created and evaluated according to many different criteria by the image processing system miho VIDIOS®.
- A series fault detection is implemented.
- Not suitable for opaque containers and for bottles with labels in the fill level area.

Technologie

- Compact electronic cabinet, made of stainless steel with 15-inch multizone touch screen color display and miho VIDIOS image processing software with Microsoft Windows 10.
- Closed Electronic cabinet IP55.
- The VIDIOS-License is valid independently of the number of container and product variants, also when adding further bottle types later.
- User administration with login via transponder or password entry (including built-in reader and 5 transponders for the operators). For user identification and allocation
- Integrated cooling system
- Up to 5 independent maintenance-free SMD LED lighting units, arranged at different angles, with min. 50,000 operating hours lifespan
- Intermediate storing of the operating data in case of failure of the existing network connection. Intermediate storing of the operating data for up to 7 production days.
- Multilingual user interface
- Adjustment to different bottle heights by using hand wheel height adjustment
- Test rejection by manual request with programmable number of bottles in connection with a miho filler monitoring system, the miho FM2
- Including reject control only in combination with a miho reject system (see accessories)
- Depending on machine configuration up to 60,000 containers per hour

Basic machine: Fill level and cap control



Basic machine: roll-on check



Roll-on check for metal screw caps.

Additional module: 360° for a complete cap control



Additional camera module for a 360° inspection; Control for bullnoses, damage to the safety ring, code recognition.

Additional module: print control on PET



Additional UV-lighting module for print control on PET and special containers (reflected light setting).

Additional module: cap control from above



Additional camera module for presence checks of color, logo and print

miho product overview for the complete inspection between filler and labeler

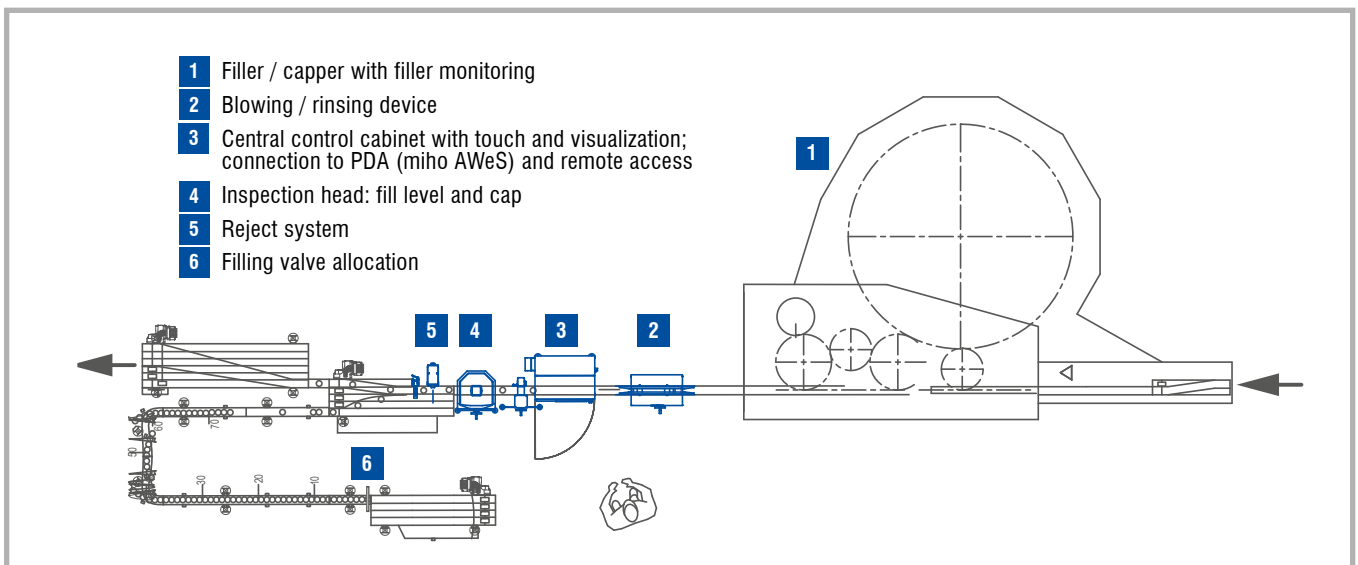
Device / module	Control task / function
miho Newton Optics 3 / basic machine	Fill level, cap
miho Newton Optics 3 / 360° accessory	Complete cap control
miho Newton Optics 3 / top camera	Cap control
miho Newton Optics 3 / code control on PET	Print control, directly on container
miho Newton IR 2 / inspection head	Fill level control (liquid with pulp)
miho Newton X2 / inspection head	Fill level control (fill level covered by a label / in cans)
miho Newton HF 2 / inspection head	Fill level control (standard)
miho FM 2	Filler monitor, bottle burst control
miho LC 2 / inspection head	Metal detection
miho MX / inspection head	Filling tube detection

Network integration

- Diagnosis and online help through separate remote maintenance module
- Production data acquisition miho AWeS via Weihenstephaner Standard
- Intermediate storing of the operating data in case of failure of the existing network connection up to 7 days

Reject systems

- High speed pusher miho HSP
- Multiway reject system miho HSPM
- Linear segment reject system miho Leonardo M



A integrated control of fill level and cap, as well as filler and capper monitoring can be carried out behind the filler and capper.

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