

HiSHIELD SmartLine



Expertise in Quality Control

Quality continues to become more and more important. Producers of consumer goods care about the quality and consistency of their brand on a global level. Product safety and purity are major issues. The HiSHIELD SmartLine has been developed as an inspection and sorting machine for the hollow glass production industry.

The ongoing integration of the newest technology combined with robust electrics and an electronic control system are characteristic of the SmartLine. Additional features include a graphic interface with touchscreen, servo drive technology and machine speed of up to 400 items per minute.

Integration into the Heye Information System

The SmartLine can be integrated into the HIS, which gives the user real-time data about the production process. Article defects can be attributed to mould numbers or IS-section numbers, giving the user detailed information on weak points and potential improvements. Of course, the HIS offers the option of remote maintenance.

Additionally, it is possible to integrate control systems from other manufacturers. There is also the option to connect line information systems, jam sensors and additional outfeeds.

Flexible inspection options

The cold end inspection line can be configured in different ways. Depending on the customers requirements, various qualities of the product can be controlled:

- Checks of the finish
- Checks of the bottom
- Checks in the body (with LED white light or laser)
- Wall thickness inspection (with contact and optical-non contact)
- External wall thickness inspection (optical-non contact)
- Defects of the finish (LOF - line over finish)
- Ovality in the body (with contact and optical-non contact)
- Mould number reading (dot code)
- Mould number reading (digital code)
- External mould number reading (dot code)
- Planity (flatness) and tightness
- Height / inside and outside gauging



Speed and Flexibility

The application of servo technology results in a high degree of flexibility. Fast and easy changes of the item number and optimal use of the servo torsional moment for up to four rotation stations are possible. Optimised motion sequences allow faster reactions to changing process parameters.

Fast article change

The infeed screw parameters are saved in a master data file and are therefore always reproducible. The changeover time is shortened as the calibrations are carried out by the software; very few additional mechanical adjustments are necessary.

The maximum article height is 400 mm; angular, oval and round containers can be processed. // The relationship between machine speed (up to 400 bottles per minute) and article diameter is shown in the following table:

Pockets in starwheel (item number)	Article diameter (mm)	Machine speed (bottles per minute)
06 *	202	max. 170
12	121	max. 250
18 *	84	max. 300
24	62	max. 315
30 *	49	max. 325
36	41	max. 350
42 *	35	max. 375
48	30	max. 400

* on request

In offering these numerous combinations SmartLine is setting the market standard.



The positioning of the infeed screw allows a precise delivery of the article into the pocket of the starwheel.

This results in significantly higher machine speeds.

Quality and Usability

Innovations have to stand the test of time. This is achieved by use of robust industrial electronics and a climate-controlled electrics and electronics compartment, together with high quality components.

Operational usability is enhanced by a 17" touchscreen monitor, easy access to all electronic components and an extricable mounting plate for frequency inverters and servo controllers. // The operator is protected by a microprocessor-controlled safety module.



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