



## Detection, recognition, handling

Colour, shape, lid type, labelling: the variety of sorting characteristics is diverse. The requirement for reliable separation in production processes is always increasing.

Bertram Elektrotechnik's SEPARATOR is a proven image processing system that quickly and reliably sorts different containers, in a mixed product flow, onto the correct tracks depending on their type.

Sorting products quickly and reliably is one of many tasks that can be efficiently carried out with image processing systems. In our SEPARATOR, we combine extensive container glass manufacturing material flow know-how with our automation and image processing expertise. These easy to integrate units use sophisticated camera technology combined with quick data processors and high performing drive and control engineering.

Using an integrated industrial computer, the SEPARA-TOR controls the connected handling systems, based on the acquired image data. All control and monitoring functions as well as image processing are also handled by the IPC. Due to the generous inspection space along with the clever arrangement of the lights and cameras, it is not necessary to make modifications for a change of product. The SEPARATOR program is operated from the robust touch panel on the machine door. This has been designed, so that the operator can see the display even when the door is open. The unit can also be operated using integrated remote access capabilities.

The communication interface has been designed in a very open and standardised way in order to make integration into existing systems as simple as possible. We have also designed the ALLOCATOR, a servo-motor driven product handling system to work in coordination with our SEPARATOR. These together offer a coherent and effective system.

Sort containers with very few/small differences

Quick and easy job-change

High speed

Compact structure







## **SEPARATOR**

## Vision solution for effective sorting

# bertram

### **FUNCTION**

The SEPARATOR's main job is to sort bottles or jars to different tracks on a conveyor belt. Our system is set up in a user friendly way, so that the products can be taught-in with very little effort, to then be separated onto as many different tracks as possible. The camera system can recognise even the smallest differences between the different products.

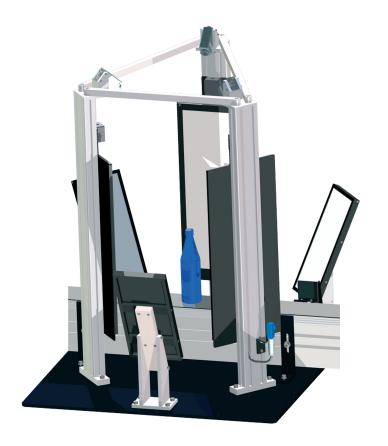
FIGURES Width: 1000 mm

Height: 2215 mm - 2500 mm

Depth: 1070 mm

Speed: max. 750 Bottles/minute

Product diameter: max. 140 mm Product height: max. 375 mm





#### COMPANY

Bertram Elektrotechnik was founded more than 60 years ago and has more than 20 years of image processing experience. Throughout these years Bertram has built up an impressive expertise in electrical engineering and image processing. Through constant research, development and innovation the company continues to evolve year on year. This family owned company, from Bevern in the south Lower Saxon district of Holzminden, works mainly in the glass, wood and packaging industries as a strong partner in automation technology and machine, system and switch cabinet manufacturing as well as industrial image processing. Bertram Elektrotechnik is known as an innovation pioneer in orientating and allocating glass containers in the material flow in glass plants, bottling plants and packaging plants. Glass has always been a tradition in the Weserbergland region. The material has shaped the region since the middle ages.

**ELEKTROTECHNIK** 

BILDVERARBEITUNG

**ANLAGENBAU** 

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