

# COLOUR SORTING MACHINE FOR COFFEE BEANS AND OTHER PRODUCTS



## COLOUR SORTING MACHINE

The highly efficient colour sorter is equipped with an extremely powerful, high-precision imaging system of the Fraunhofer Institute IOSB, which is used for detection and separation of broken, foreign particles, and rejects from numerous granulates, such as: **coffee & cocoa, rice & nuts, grains & seeds, beans & pulses**

### Maximum Speed

The line scan camera scans 10,000 lines per second. Depending on product size and density, throughput quantities of up to 5 t/h are possible on a width of 700 mm.

### Broad Colour Analysis Spectrum

The line length of the image is 2,096 pixels with three colour sensors per pixel. Each pixel can be assigned to one of 16 million colours.

### Precise and Fast

The automatic colour calibration ensures consistent measurement of each individual pixel. Signal differences are detected over the entire line width and compensated. Optimum sorting is achieved by actuators which are arranged without gaps and are switched by high-precision fast-switching valves. By means of an optional reject return system the sorting result can even be further improved at high performance.

### Versatile

The integrated system for contour detection ensures a reliable recognition of broken. By examining colour and shape, foreign particles are clearly recognised and sorted out. The simultaneous detection of shape, colour, and contour as well as the comparison with colour classes permit optimum sorting results despite product-specific colour variations, such as grooves in coffee beans.

### Simple

The complete system is highly user-friendly. Operation is very quickly understood. Camera and valve block are synchronized by a simple-to-use software.

Also available for infrared range (up to 1700 nm) with germanium technology.

### Technical Features

- 16 million colours (256x256x256 RGB)
- Any number of products easily teachable
- Automatic colour-calibrating sensors
- Recognition of broken by contour detection
- Recognition of foreign particles by shape and colour detection

