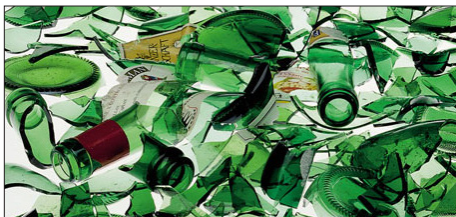


SPEKTRUM

Sorting System for the glass recycling industry

- Gravity fall detection for dry and wet material
- Colour separation and sorting
- CSP separation
- Separation of special glass
- Separation of plastic contaminants
- Separation of metals



SPEKTRUM BASIC

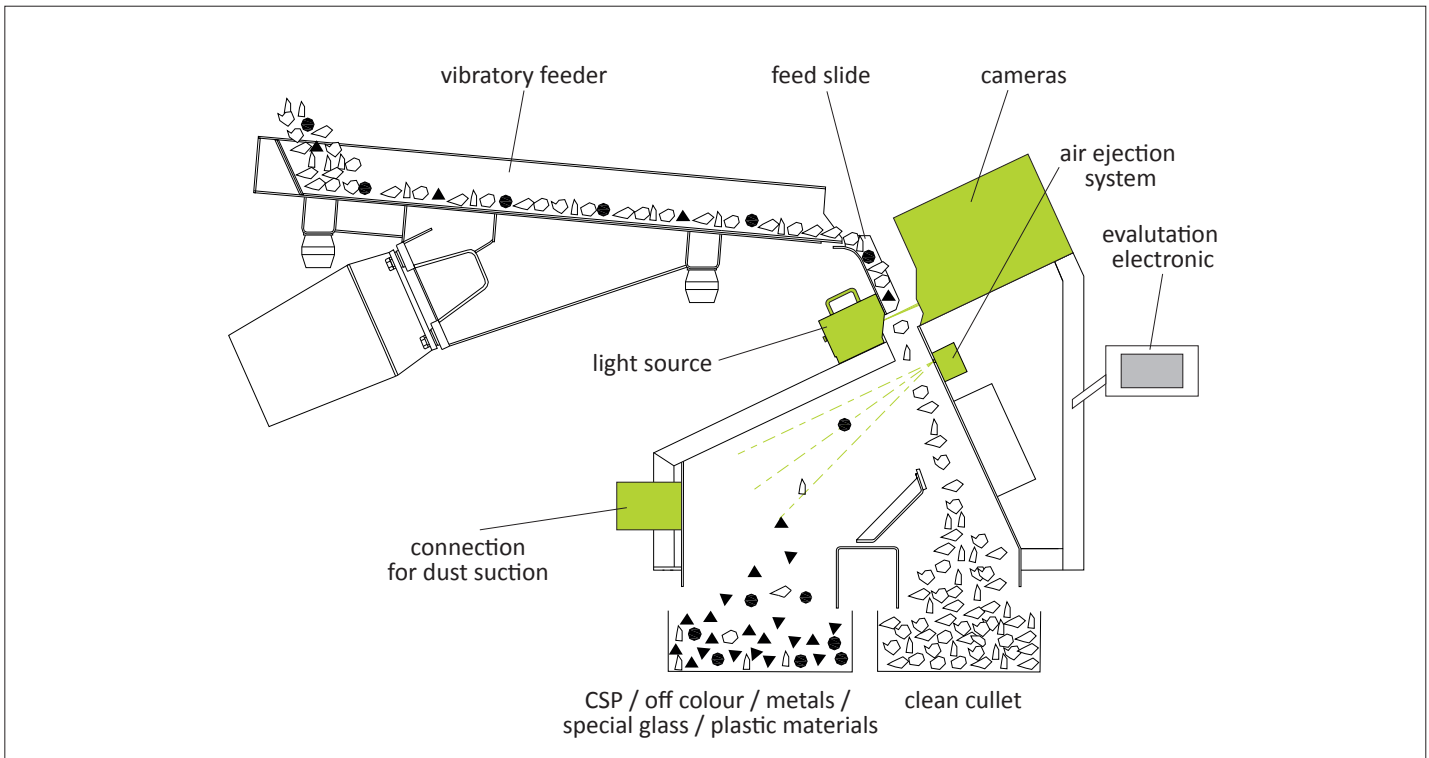
With high-performance CCD colour cameras for colour and CSP separation. Optionally with metal sensor.

SPEKTRUM FLASH

With high-performance CCD monochrome or colour cameras for colour, CSP and special glass separation. Optionally with metal sensor.

SPEKTRUM SCOPE

With Sesotec NIR technology for detection of plastics and special glasses as well as colour and CSP separation. Optionally with metal sensor.



Function description: SPEKTRUM

Function principle:

The cullet is distributed by an electromagnetic vibratory feeder and fed to the gliding plate of the SPEKTRUM. The cullet flows down the gliding plate. Therefore an optimal distribution and separation of the cullet is guaranteed. After the gliding plate a super high speed camera is installed. The camera is able to measure finest colour differences even invisible to the human eye.

Depending on the adjustment of the evaluation electronics, coloured cullet, special glass or CSP will either be ejected or pass the air ejection system.

The operating software was developed with particular emphasis on making the software as easy to use and as clearly structured as possible. SPEKTRUM systems feature the so-called "Auto-Learn Mode" that allows the user to program the system for the respective sorting task simply by feeding the material fractions that should be separated.

SPEKTRUM FLASH analyses information in different light wavelength ranges. The combination of different light types allows the identification of foreign colours, CSP, as well as heat-resistant and/or fluorescent (lead containing) special glasses, which are then reliably and efficiently separated by air-blast nozzles that respond with millisecond

accuracy. With the extension of colour analysis from the conventional three base colours to now up to nine base colours, and with the increase of the local resolution to up to 0.2 mm per pixel, SPEKTRUM FLASH sets new standards for sorting accuracy in the field of glass sorting.

SPEKTRUM SCOPE is equipped with a new NIR sensor. With this sensor unit, for example, transparent plastics of the same colour can be differentiated in a flow of white cullet. Special glass types, among others borosilicate glass, also can be reliably detected.

To allow even higher throughput capacities and more flexible plant planning, the working width of the SPEKTRUM series is extended to 1563 mm. By implementing the EcoValve function, compressed air consumption can be significantly reduced, especially for sorting tasks.

Advantages:

- High throughput rate
- High ejection reliability
- Simple operation
- Compact design
- Simple integration in production plants
- Upgrade option
- EcoValve function

Performance features:

- High performance monochrome or colour CCD camera
- SPEKTRUM SCOPE with NIR technology
- Metal detection as option
- Temperature-stable fast-switching valves with up to 500 operations/sec.
- 3,2/4 mm and 6,4/8 mm valve/nozzle grid
- Detection rate of more than 50,000 parts/sec.
- Working widths 1024 mm, 1280 mm and 1536 mm
- Modular structure (individual sensor upgrade)
- Easy to service (low service costs)
- Plug and work
- Low-maintenance lighting and camera systems
- Remote maintenance, monitoring and data management
- Individually programmable

If you require detailed information, please request our technical data sheet or make use of the experience of the Sesotec sales advisors – by telephone or on-site.