

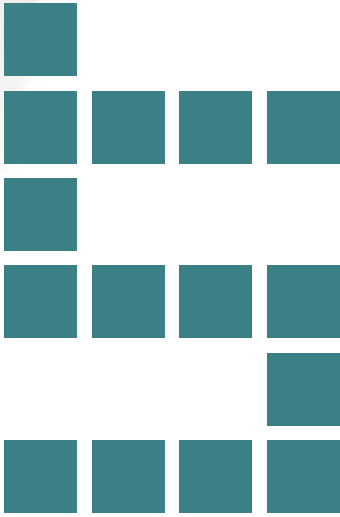
binder+cö

compact

The Future of Glass Processing



we process the future



Environmental Technology

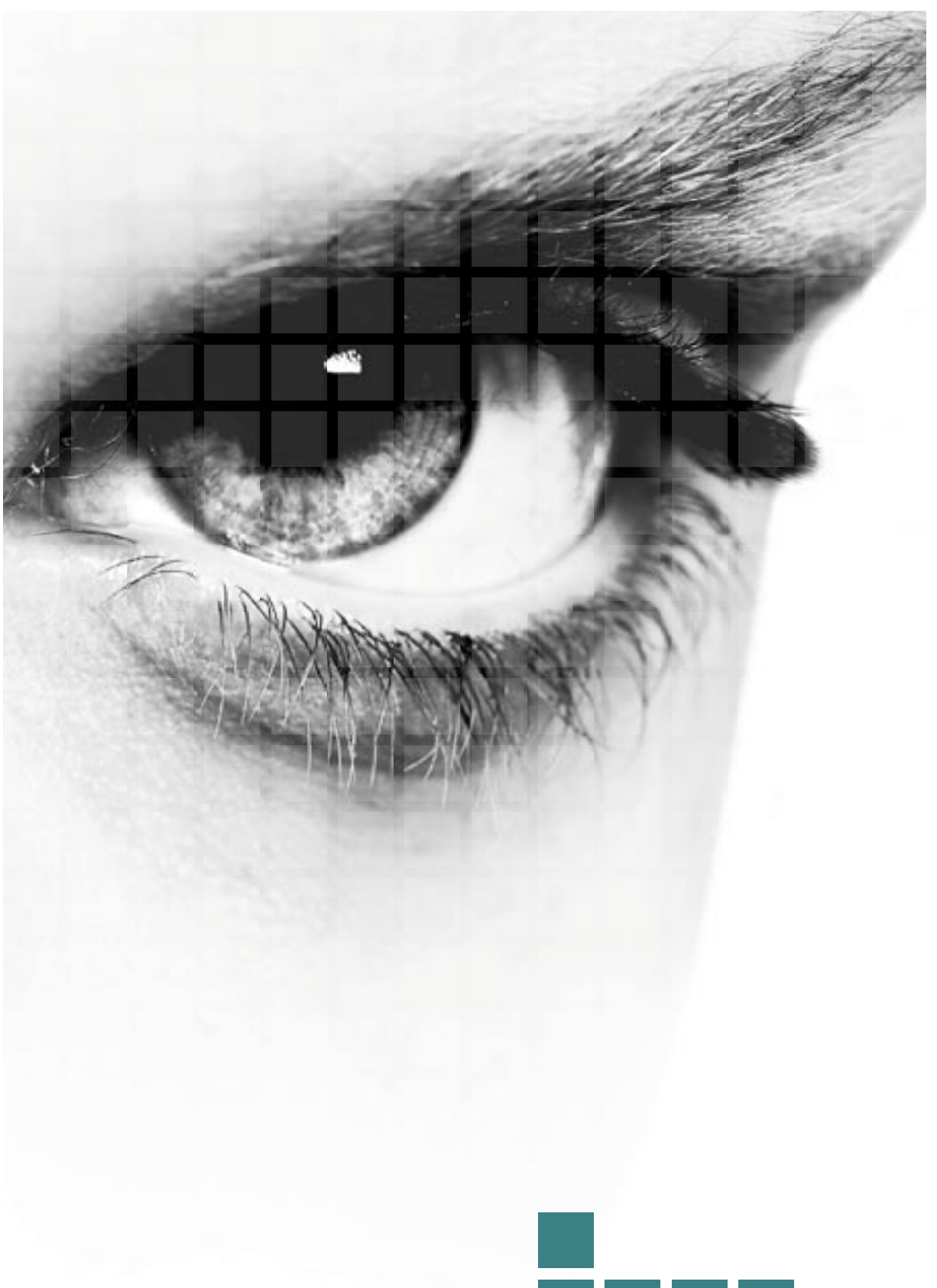


TASK



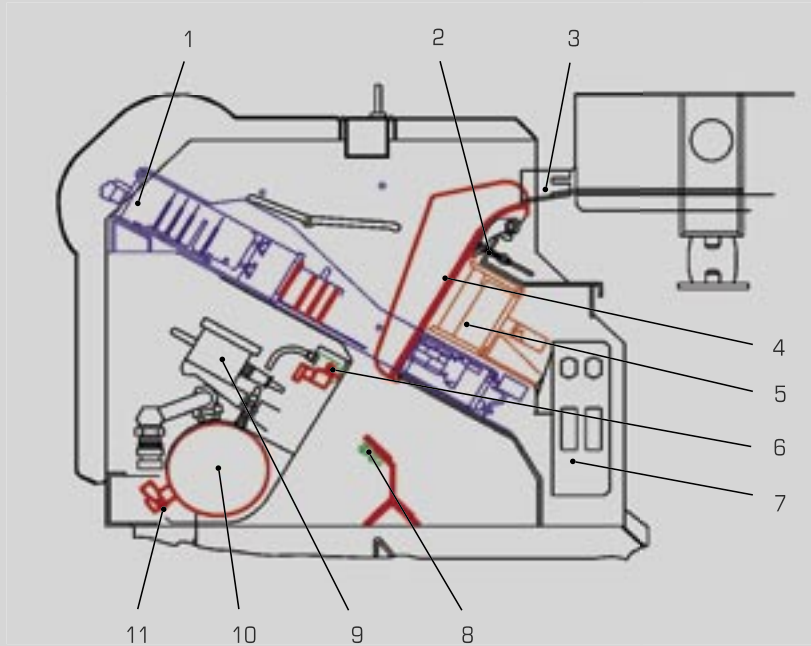
Higher and higher demands are being made on the sorting precision of increasingly finer fractions in the field of waste glass. The removal of contaminants such as ceramic, stones and porcelain (CSP) from the material flow is crucially important for feeding the valuable secondary-glass raw material back into the production process. Even material which up to now could not be sorted can be subjected to appropriate recycling when free of contamination and is of pure colour. Since large quantities of glass are sent for processing in the form of cullet, a special machine is required for fully automatic sorting of the finest fractions. The goal ranges from producing a product free of impurities with improved colour purity to guaranteeing high-quality mixed glass processing.







SOLUTION



- | | |
|-----------------------------|-------------------------------|
| 1 - Sensor | 7 - Serial Valve control |
| 2 - Chute clambering device | 8 - Separation plate |
| 3 - Vibration feeder | 9 - Valve control distributor |
| 4 - Glass pane | 10 - Compressed air |
| 5 - Non-ferrous sensor | 11 - Drain-tap |
| 6 - Valve | |

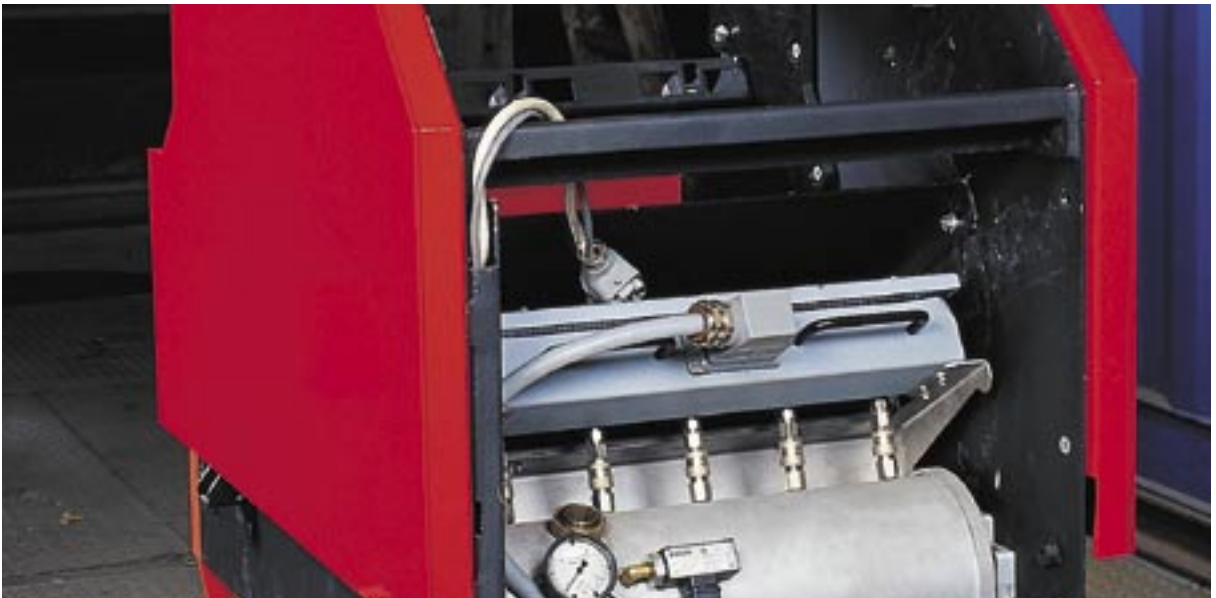
With many years of experience in waste-glass processing, sorting contaminants such as ceramic, stone and porcelain, and sorting on the basis of colour, Binder+Co initiated development of a flexible and compact system of glass separators – the COMPACT.

In the pioneering COMPACT concept, state-of-the-art camera technology is brought to bear on CSP recognition. The light source is also revolutionary with LED diodes bringing about a trouble-free, evenly distributed light supply to the plant thus supplementing its well-proven modular design.

COMPACT offers not only CSP recognition but also improvement in colour recognition in previously unparalleled quality, and is thus a "compact" core unit of modern mixed glass processing.



TECHNOLOGY

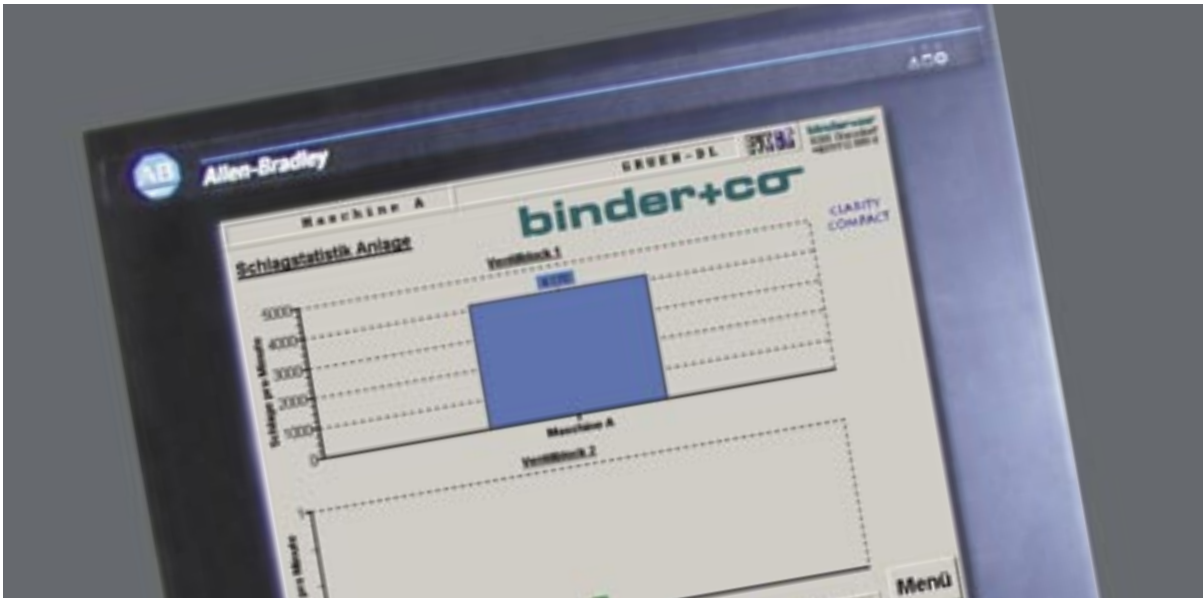


COMPACT is built in a modular construction and each module has a sorting width of 500 mm. Cullet with a diameter of 5mm or more is introduced onto a specially designed slide with an exactly defined inclination and marshalled into single pieces. In the lower areas of the slide the broken glass is illuminated with white light. Two cameras independent of each other, each with the capability of recognising up to 16 m colours, analyse the information received and control the timing of the valves which are distributed along a blow-off panel. These valves blow off pieces whose colour or contaminant is defined in the menu. Due to the high resolution of the recognition units from 0.7 mm – 180 x 3 pixels to 125 mm – and the large number of valves with valve-opening times of less than 5 ms, an extremely high sorting quality even with fine fractions is guaranteed independent of the colour composition of the glass. In this way, the glass is efficiently and reliably sorted without unnecessary detour over a computer separate from the recognition units. Depending on the actual requirements, several COMPACT modules can be linked together. The swing-out valve panel can be easily accessed without special tools.





TECHNOLOGY



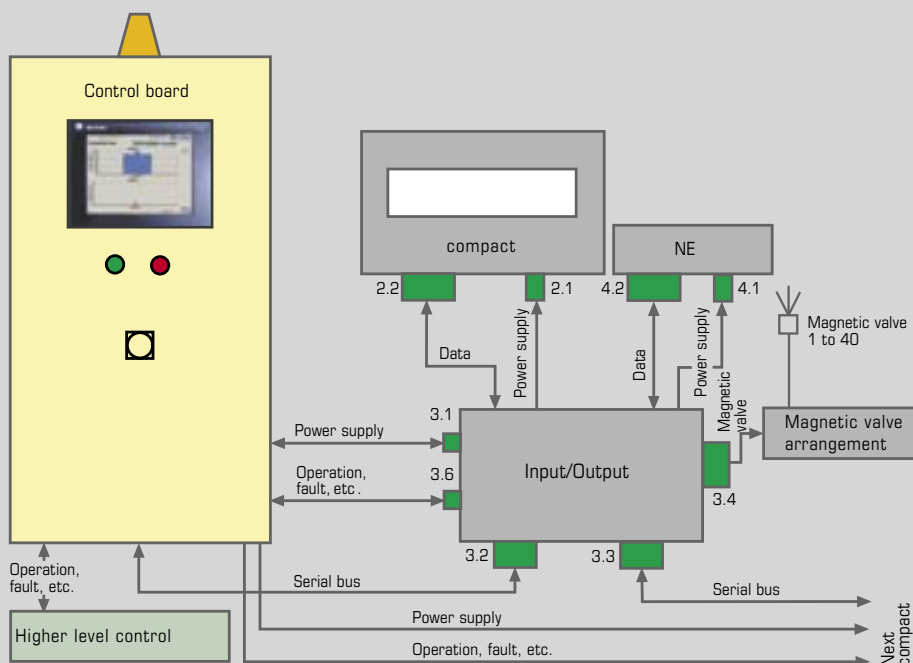
2-way system: selectable sorting ways.

The sorting parameters and evaluations are carried out by means of a PC with touch screen.

A total of up to sixteen COMPACT units can be controlled by the computer. By means of the touch screen, various pre-programmed combinations of sorting parameters can be activated. Remote maintenance can be carried out over a modem and data line, something which has bonus effects on sorting quality.

Control station capability.

COMPACT is designed in such a way that it can be integrated into the central control system.





OPERATION



Binder+Co AG's know-how in glass processing is demonstrated in its intelligent choice of materials and the technically perfected concept of COMPACT.

COMPACT is built in the well-proven modular construction, which means that integrating it into existing glass recycling plants poses no problems. Because the valve panel can be swung out, the device is easily accessible for maintenance work and operational checks.

Due to the cleverly devised labyrinth system in front of the camera units, no self-cleaning device of the machine is necessary. The low demand on operating material and the long service life of the devices are further advantages of this efficient glass processing technology from Binder+Co AG.

Apart from easy operation, the modern design of COMPACT catches the eye. Binder+Co AG sets new standards also in the aesthetics and appearances of modern industrial products.

- Processing Technology
- Environmental Technology
- Packaging Technology

Binder+Co AG, Grazer Strasse 19-25, A-8200 Gleisdorf, Austria
Tel.: +43-3112-800-0*, Fax: +43-3112-800-398
e-mail: ut@binder-co.at
www.binder-co.com

Binder+Co AG's know-how in the processing of bulk materials and recycling materials is demonstrated in its broad range of special machines which find global application in the raw-material and recycling industries. The enterprise supplies turnkey complete systems from project management and design to production, assembly and start-up. Highly skilled employees process metal into intelligent products.

COMPACT is the name of this flexible and compact system for high-quality glass processing by Binder+Co. Compact modules together with their modern camera systems sort CSP contamination from the material flow and improve the colour quality of the product. Efficient technology packaged in an exciting design. COMPACT – the new standard in glass processing.



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