CLARITY MULTIWAY
REVOLUTIONARY
RECYCLING AND
SORTING SYSTEM
CLARITY multiway is a revolutionary recycling sorting system that produces up to six different pure fractions. The machine is extremely flexible with respect to controlling and choosing sorting recipes. The individual design of CLARITY multiway is adapted to the respective customer requirements. In this way, up to six final products can be recovered in only one processing step.

### ONE SENSOR FOR UP TO 6 FRACTIONS

CLARITY multiway sorts packaging waste from household and commercial waste, 3D fractions such as bottles, beverage packaging, canisters and plastic containers and 2D fractions such as film, paper and cardboard.

### COMPACT

CLARITY multiway is designed so compact that the integration into existing systems does not cause any problems and only minor investments in the substructure and materials handling are required.

### VERSATILE

CLARITY multiway sorts packaging waste from household and commercial waste, 3D fractions such as bottles, beverage packaging, canisters and plastic containers and 2D fractions such as film, paper and cardboard.

### ACCESSIBLE

The state-of-the-art machine concept is designed for maximum user-friendliness. Special attention was given to rapid accessibility for maintenance and service assignments.

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**CLARITY MULTIWAY**

**A UNIQUE SORTING CONCEPT FOR LIGHT PACKAGING**
FULLY AUTOMATIC

CLARITY multiway has been designed for fully automated sorting operation. Thus it does not need its own operating personnel. The user-friendly touch screen considerably simplifies manual operation and checking the machine. Moreover, breakdowns and errors are displayed on the monitor.

CUSTOMIZED

The direction of the discharge ways can be adapted to the individual situation. Depending on customer requirements, the system will be equipped with the appropriate number of sorting ways.

EXTENDIBLE

Additional equipment, such as suction and dedusting systems and a perforator for stabilizing the feed material, can be arranged according to requirement.
The industrialized nations are facing an enormous increase in plastic and paper waste due to the import ban from China. The industry is sceptical about reuse, because the required product quality of the secondary raw material is mostly not ensured. Use of plastic waste as alternative fuel in incineration plants does not by far exhaust the potential of packaging waste as a secondary raw material.

The processing of light fractions is a major challenge for the recycling industry. In addition to the sorting of mixed recyclable materials, such as paper, coated and uncoated cardboard in various combinations, the accurate separation of plastics is of central importance.

Binder+Co’s sensor-based sorting system CLARITY multiway is an extraordinary solution for sorting packaging waste such as PET, HDPE, PP, beverage cartons, paper and cardboard. With just one sensor unit, up to six product fractions can be sorted in outstanding quality.

Light waste packaging materials like PET, PE, PP, PVC or liquid packaging boards as well as paper and paperboard containers differ in their molecular composition and can be identified by spectral information. This effect is used by the specially developed NIR-sensors for analyzing the reflected light.

CLARITY multiway is fed with the singulated material. The material flow passes on a patented perforated conveyor belt to the lighting and detection unit. The reflected light from the feed material is absorbed by highly sensitive cameras and analyzed by the computing system.

The sorting valves are arranged under the upper run of the conveyor belt. These separate the respective materials at the right time and place with a precisely guided compressed air jet into the respective ejection hood. The high-capacity computer system recognizes different types of plastics as well as paper and cardboard or composites, such as beverage packaging.
CLARITY MULTIWAY SAVES TIME AND SPACE AND TURNS YOUR LIGHT PACKAGING WASTE INTO PURE MONEY.

CLARITY multiway sorts up to six fractions with only one sensor.

3D fractions: bottles, beverage packaging, canisters and plastic containers

2D fractions: films, paper and cardboard

PET, PP, PE, HDPE, LDPE, PVC, paper, cardboard
TECHNICAL DATA CLARITY multiway

<table>
<thead>
<tr>
<th></th>
<th>4-ways</th>
<th>5-ways</th>
<th>6-ways</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit</strong></td>
<td>Perforator</td>
<td>Screening vibratory feeder</td>
<td>CLARITY multiway sorting system</td>
</tr>
<tr>
<td></td>
<td>Commissioning</td>
<td>Training</td>
<td>Spare parts package</td>
</tr>
<tr>
<td><strong>Capacity</strong></td>
<td>2.4 t/h</td>
<td>3.5 t/h</td>
<td></td>
</tr>
<tr>
<td><strong>Sorting width</strong></td>
<td>1400 mm</td>
<td>2000 mm</td>
<td></td>
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<tr>
<td><strong>Grain sizes</strong></td>
<td></td>
<td>50 – 300 mm</td>
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<tr>
<td><strong>Air consumption</strong></td>
<td></td>
<td>70 Nm³/t per ejected material</td>
<td></td>
</tr>
<tr>
<td><strong>Space requirements</strong></td>
<td>12 x 3.5 x 3 m</td>
<td>13.5 x 3.5 x 3 m</td>
<td>15 x 3.5 x 3 m</td>
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<tr>
<td><strong>Installed power</strong></td>
<td>29 kW</td>
<td>31 kW</td>
<td>33 kW</td>
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</table>

**High product quality:** CLARITY multiway ensures excellent product qualities. Light packaging becomes valuable secondary raw material that no longer has to land in landfill sites or be disposed off in incinerators, but rather can be sent for recycling.

**Space-saving:** The system is fully automatic and compact, which means that only minor investments are required in the substructure and conveyor system.

**Versatile:** Sorting solutions for packaging waste from household and commercial waste, 3D fractions such as bottles, beverage packaging, canisters and plastic containers and 2D fractions such as film, paper and cardboard.