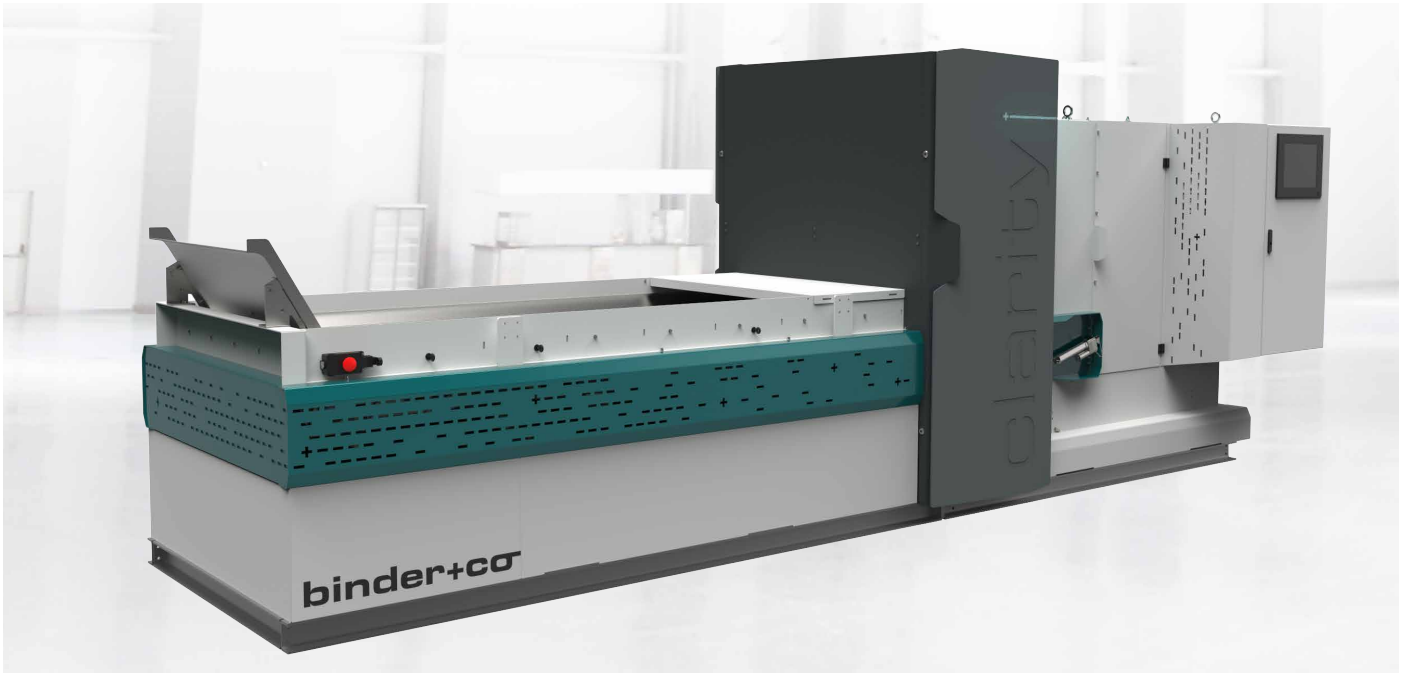


# CLARITY AI

ARTIFICIAL INTELLIGENCE FOR SENSORBASED SORTING

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we process the future



## CLARITY AI FROM BINDER+CO: HOW IT WORKS

Sensor-based sorters are used to sort bulk materials based on optical properties or differences. The machine receives information about the surface of the object via optical sensors and calculates the data to classify each passing particle into material classes. This enables the CLARITY to sort the material according to customer requirements. If classification is not possible due to

a lack of clear color differences, a sophisticated algorithm architecture must be used for the calculation. CLARITY AI technology solves this problem. This technology makes it possible to use the smallest differences in optical appearance and, if necessary, to combine different types of signals in order to derive the required sorting criteria.



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RELIABLE  
CRUSHING



EFFICIENT  
SCREENING



WET  
PROCESSING



THERMAL  
PROCESSING



SENSOR BASED  
SORTING



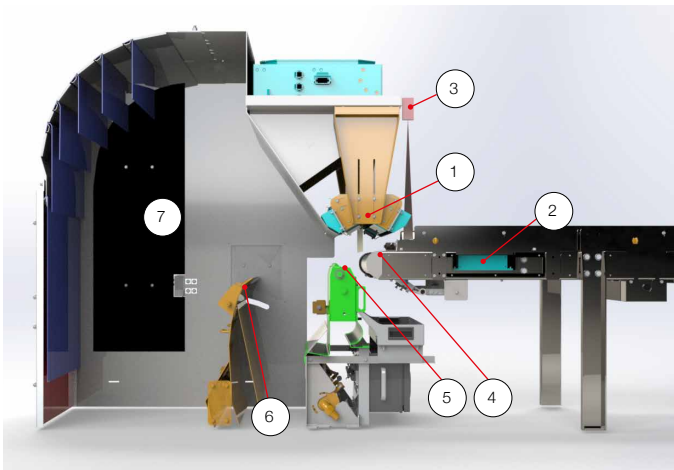
BAGGING  
PALLETIZING

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## CONCEPT (BELT SORTER)



- 1 Optical sensor unit
- 2 Metal detection sensor
- 3 3D-sensor
- 4 Acceleration belt
- 5 Ejection valve bank
- 6 Adjustable splitter
- 7 Sorting chamber

## APPLICATION EXAMPLE C&D-WASTE: ASPHALT FROM BLACK PEBBLES



## DIMENSIONS AND TECHNICAL DATA

Technical data	CLARITY chute sorter AI	CLARITY belt sorter AI
Sorting width size [mm]	700/1,000/1,400	1,000 /1,400
Length [mm] x width [mm] x height [mm]*	1,300 x 1,700 x 1,400	4,600 x 1,800 x 1,960
Weight [kg]*	1,200	2,200
Installed electrical power [kW]*	~4.5	~5.5
Specific through put rates for C&D waste [t/hm]**		~30

\* For CLARITY width 1,000 mm

\*\* The expressed throughput rates were observed for a C&D-waste fraction of a PSD between 16-48 mm. Differences of the composition and other factor may alter the result

