

BUILT FOR BATTERY RECYCLERS

Mixed batteries in. Clean, saleable chemistry out.

The OBS Optical Battery Sorter identifies each cell by sight, using AI trained on millions of real batteries, and sorts it into the right chemistry fraction with a jet of air. No operator judgement calls. No downstream surprises.

50 million

batteries classified in commercial operation to date

Up to 99%

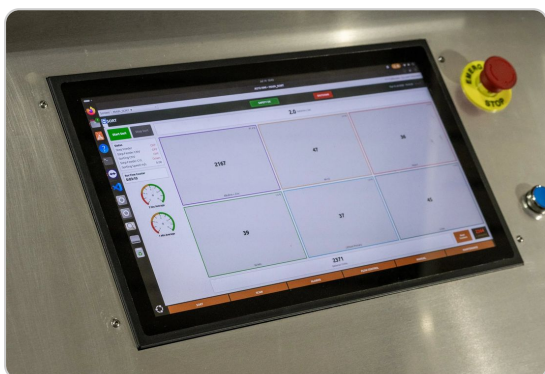
classification accuracy on mixed portable feedstock

Up to 24

cells identified and sorted every second, dual lane

6

chemistry fractions from a single pass



Every battery counted, every fraction tracked

The touchscreen shows the sort as it happens: cells per second, running totals by chemistry, and fraction purity. The same data builds an audit trail your compliance scheme can rely on.

1**Load**

Tip mixed portable batteries into the hopper. The step feeder lifts and settles them into a steady stream.

2**Singulate**

Cells are separated into single file. Stacked or doubled-up batteries are detected and returned for another pass.

3**Identify**

Each cell is imaged in flight. The AI classifier reads shape, colour and label text to determine its chemistry.

4**Sort**

A precisely timed air jet fires the cell into its chemistry chute. No contact, no mechanical grippers to wear.

5**Recover**

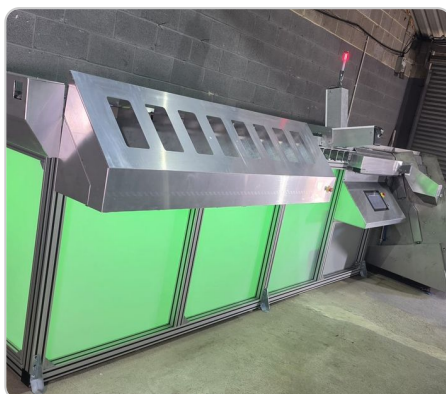
Anything the classifier is not sure about loops back for re-classification rather than contaminating a clean fraction.

6**Collect**

Clean fractions drop into your bins or drums, ready for onward sale or processing. One operator keeps the line fed.



The step feeder settles mixed cells into an even flow.



Single file past the camera, from button cells to 9V blocks.



Sorted cells cascade to their chemistry fraction.

Fraction purity is the whole game. A single lithium cell in an alkaline stream becomes your customer's problem, and then yours. The OBS holds purity at throughput your team cannot reach by hand, and its cost per tonne stays flat as your volume grows.

OBS-1

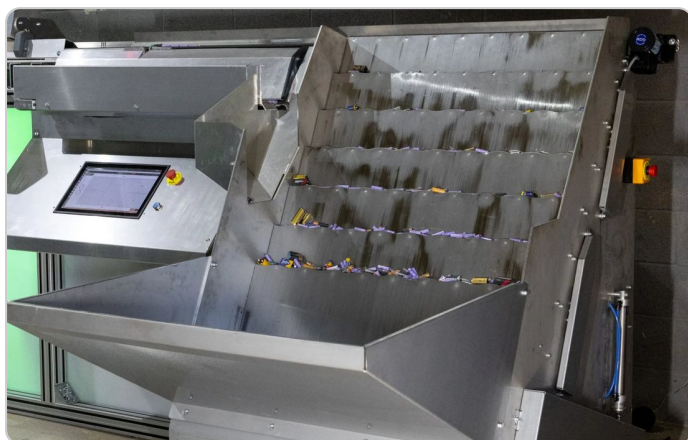
Single lane

Throughput	~750 kg/hr, indicative
Sort rate	Up to 12 cells per second
Fractions	6 chemistry streams
Net weight	~1,300 kg
Upgrade path	Field-upgradeable to OBS-2

OBS-2

Dual lane

Throughput	~1,500 kg/hr, indicative
Sort rate	Up to 24 cells per second
Fractions	6 chemistry streams
Net weight	~2,000 kg
Upgrade path	Delivered dual lane from day one



Compact footprint. The full line fits against a single wall.



Hopper and step feeder, built in stainless for a recycling yard.

Throughput depends on your feedstock mix, so we quote it as indicative and will model it against your actual intake. One operator is required to keep the machine fed and clear the occasional jam. The classifier retraines in the cloud as new battery types reach the market, so the machine you buy keeps getting better.

PROVEN KIT, NOT A PROTOTYPE

Operating today. 50 million batteries classified.

Retrainable AI

The classifier learns new cells, brands and formats through cloud retraining. Updates are pushed to your machine on your schedule.

Audit trail built in

Every battery is counted and logged by chemistry. Evidence for your compliance scheme comes out of the machine, not a spreadsheet.

Cost per tonne that holds

Hand sorting costs rise with every tonne. The OBS runs at the same rate on the first drum of the day and the last.

See it running on your feedstock

Book a call and we will walk you through video of the machine sorting live, then model throughput and payback against your intake.

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Scan to watch it run