



BATTERAY

X-RAY SYSTEM FOR SORTING OF PORTABLE WASTE BATTERIES & ACCUMULATORS



Zn-Carbon
Alkaline
Li-Ion
Li-Primary (Li-SOCl₂, Li-MnO₂, Li-FeS₂)
Nickel-Cadmium (NiCd)
Nickel-Metal hydride (NiMH)

KEY FEATURES

Battery sorting with AI-driven X-ray technology

Damaged, corroded and counterfeit batteries friendly

Conveyor speed allows to provide sorting process with a productivity of 300 kg per hour

Purity of sorting for Alkaline/ZnC-99,5%

Wide coverage standard map which includes the most popular types and sizes of batteries

BATTERAY is a unique technology with no equals at the market. The influence of the upper layer of the battery is excluded. Even if a label or marking are missing, or if the battery is counterfeit the system will correctly determine the type of battery.

BATTERAY recognizes the type of batteries by scanning with X-Ray radiation. The operator is protected from X-rays.

There is a possibility to add other batteries types to the preliminary sort map, including non-standard sizes from AAAA to 21700.

TECHNICAL SPECIFICATIONS

BATTERY

CHARACTERISTICS (PARAMETERS): VALUE

Overall dimensions:	
Length	7 940 mm (312,6")
Width	2 680 mm (105,5")
Height	2 500 mm (98,4")
Weight	2 400 kg (5291 lbs)
Capacity of the loading hopper	350 kg (772 lbs)
Size of the loading hopper	250 L (66 gal)
Speed of sorting conveyor	1,0 m/sec
Sorting capacity	up to 25000 batteries per hour
Throughput capacity	350-500 kg/h
Pneumatic	8 bar, 200-500 SLPM
X-ray protection	Full operator protection
X-ray emission	Complies with the standard: 1 µSv/h at any point at a distance of 10 cm from the device. Typical value of our system less than 0.3 µSv
Purity of sorting:	
Zinc-carbon, alkaline	99,5 %
All groups	95 %

SORT MAP (pretrained by default)

SIZE	GROUP / INJECTOR						
	Zn	ALK	NiCd/MH*	NiCd	NiMH	Li-Primary *	Li-Ion
AAAA (LR61)	+	+	+	+	+		
AAA (R03)	+	+	+	+	+	+	+
AA	+	+	+	+	+	+	+
C	+	+	+			+	
D	+	+	+	+	+	+	
6F22 (9V)	+	+	+			+	
A23		+					
A27		+					
Cr2							
16340 (R123)						+	+
1/2AA						+	
18650							+
21700							+

* Li-Primary Li-SO₂, Li-FeS₂, Li-MnO₂

SOFTWARE FUNCTIONS

- Program for adding batteries not included in preliminary trained sort map. Including non-standard sizes from AAAA to 21700
- Standard sorting (default sort map)
- Sorting with customer added batteries (default sort map + customer base) – the user can add previously unrecognized batteries to the database