



Typical Applications

- **Car shredder zorba:** Separation of heavy metals (copper, brass, zinc, lead) from aluminum and magnesium.
- **Car shredder fluff:** Removal of chlorinated and brominated plastics to achieve over 70% of total fluff residue with less than 1% of PVC.
- **WEEE:** Separation of PVS from lighter plastics (PP, PE, PS, HIPS, ABS).
- **Aluminum scrap:** Upgrade of aluminum scrap by reducing Zn, Cu, and Fe achieving premium scrap price.



X Ray Sorter

Model XRS



Technical Specifications

The SGM X-RAY Sorter is based on the latest X-Ray through beam technology using high dual energy for metal separation and single low energy for plastic separation. The dual energy sensors allow for the identification of different metal pieces regardless of their thickness.

The material to be inspected and sorted is evenly distributed onto the sorter conveyor belt and transported between X-Ray emitter (source) and receiver (LDA). The energy emitted by the X-Ray source passes through the material under inspection and the receiver measures the residual level of energy, which is characteristic of the atomic composition of the material crossed.

The information read by the receiver is processed by a computer that decides whether or not to trigger the pneumatic sorting device.

The software allows the user to choose from a variety of algorithms and an interactive interface allows simple intuitive setups.

The synchronization between the pneumatic rejection system setting and the belt speed setting is automatic. Operating in temperatures from 5°C to 35°C with working pressure of 8 bar.

MODEL	VALVES	SOURCES	BELT WIDTH	BELT SPEED	CAPACITY (*)
XRS 24-R	64	1	610 mm	2 - 2.8 m/s	5 t/h
XRS 48-R	128	1	1320 mm	2 - 2.8 m/s	10 t/h
XRS 72-R	192	1	2000 mm	2 - 2.8 m/s	15 t/h
XRS 96-R	256	2	2286 mm	2 - 2.8 m/s	20 t/h

- Operating conditions: Indoor installations
- Temperature 5°C - 35°C
- X-Ray radiation level: <1 µGy/h at 5cm
- Capacity (*): Based on application and specifications of material to separate, percentage of infeed material, average size and weight.
- Air compressor: Specifications based on quantity and characteristics of material to be separated.

Product Highlights

- Self-learning device
- Extremely robust to suit industrial use
- Dedicated software according to customer specific application fully designed by SGM.

Optional Features

- Air Compressor

MODEL	LENGTH	WIDTH	HEIGHT	WEIGHT
XRS 24-R	6460 mm	1690 mm	2555 mm	5,380 Kg
XRS 48-R	6460 mm	2305 mm	2555 mm	6,640 Kg
XRS 72-R	6460 mm	2920 mm	2703 mm	9,500 Kg
XRS 96-R	6460 mm	3540 mm	2703 mm	14,000 Kg

