

X-RAY TRANSMISSION

X-RAY SORTER Model XRT

TECHNICAL SPECIFICATIONS

The SGM X-RAY Transmission 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.

- Operating conditions: Indoor installations - Temperatures 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	VALVES	SOURCES	BELT WIDTH	BELT SPEED	CAPACITY (*)	LENGTH	WIDTH	HEIGHT	WEIGHT
XRT 24-R	64	1	610 mm 24"	2-2.8 m/s 5-8 ft/sec	2 t/h	6460 mm 254"	1690 mm 66"	2555 mm 100"	5.380 Kg 11,860 lbs
XRT 48-R	128	1	1320 mm 52"	2-2.8 m/s 5-8 ft/sec	5 t/h	6460 mm 254"	2305 mm 90"	2555 mm 100"	6.640 Kg 14,638 lbs
XRT 72-R	192	1	2000 mm 79"	2-2.8 m/s 5-8 ft/sec	8 t/h	6460 mm 254"	2920 mm 115"	2703 mm 106"	9.500 Kg 20,943 lbs
XRT 96-R	256	2	2286 mm 90"	2-2.8 m/s 5-8 ft/sec	10 t/h	6460 mm 254"	3540 mm 136"	2703 mm 106"	14.000 Kg 30,864 lbs

(*) Depending on application, material specific weight and metal content in material

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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.

