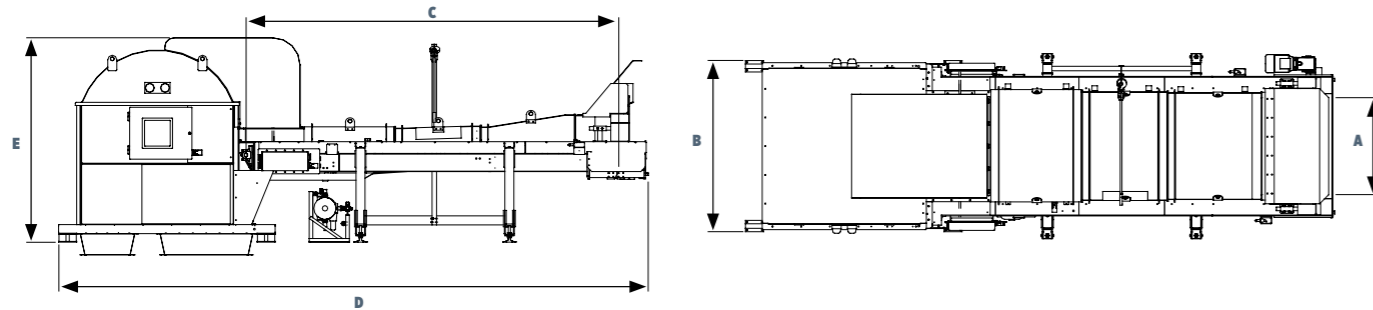


Installation example of X-TRACT Standard or Extended [XRT]



	XRT 600	XRT 1200	XRT 2400	XRF 1200	XRF 1800	XRF 2400
A	600 mm	1,200 mm	2,400 mm	1,080 mm	1,680 mm	2,280 mm
B	1,300 mm	1,900 mm	3,560 mm	2,060 mm	2,660 mm	3,260 mm
C	4,162 mm	4,162 mm	5,170 mm	4,000 mm	4,000 mm	4,000 mm
D	6,535 mm	6,535 mm	7,770 mm	6,560 mm	6,560 mm	6,560 mm
E	2,264 mm	2,264 mm	2,580 mm	2,100 mm	2,100 mm	2,100 mm

Exact dimensions on request

PRODUCT SPECIFICATIONS

VALVE BLOCK MODEL, NOZZLE DISTANCE	XRT X-TRACT* 600	XRT X-TRACT 1200	XRT X-TRACT 2400	XRF X-TRACT 1200	XRF X-TRACT 1800	XRF X-TRACT 2400
Economic, 12.5 mm	24 valves	48 valves	-	-	-	-
Power, 6.25 mm	48 valves	96 valves	192 valves	192 valves	288 valves	384 valves
Speed, 6.25 mm	96 valves	192 valves	-	-	-	-
Weight	4,800 kg	5,800 kg	14,000 kg	4,700 kg	7,000 kg	9,200 kg
Power Consumption	9.1 kW	9.1 kW	18 kW	17 kW	17 kW	17 kW

*not available in configuration A // XRT basic

OPTIONS

EM SENSOR

Uses conductivity information for metal recognition (for [XRF] already included)

WEAR AND TEAR PACKAGE

Heavy duty version for higher robustness and a longer life

REMOTE ACCESS

Safe network connection for easy and fast service reaction

PRODUCT RANGE

AUTOSORT

Mixed packaging waste, RDF, Sorting paper, PET/PE recycling

FINDER

Metal recovery and metal contaminant removal

COMBISENSE

E-scrap recycling, nonferrous metal processing, cable recycling

X-TRACT

Automobile recycling, CRT glass, industrial/domestic waste, RDF production

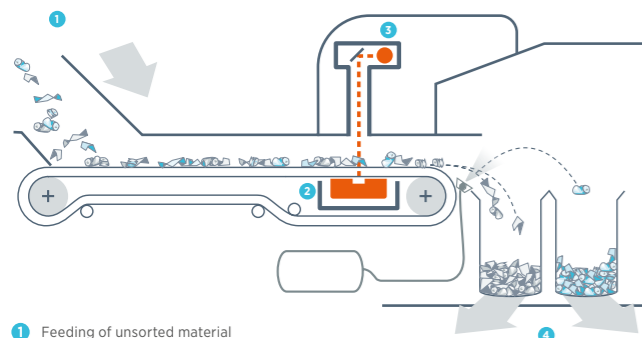
X-TRACT

WITH DUOLINE® AND SUPPIXX® TECHNOLOGY

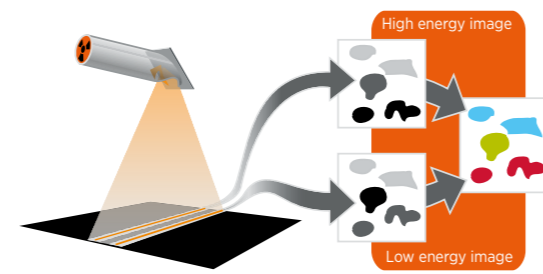


X-TRACT

Cutting-edge X-ray sensors empower the X-TRACT for special sorting tasks. [XRT]: Measures the atomic density irrespective of surfaces, e. g. in mixed municipal solid waste sorting. [XRF]: Analyzes the elemental composition of metals, e. g. in copper sorting from ferrous line.



- 1 Feeding of unsorted material
- 2 X-ray camera
- 3 X-ray source
- 4 Separation chamber



X-ray camera TOMRA Sorting's highspeed XRT processing

TECHNOLOGY XRT

X-TRACT uses an electric X-ray source which creates a broad-band radiation. This radiation penetrates the segregation material and hits an X-ray camera with DUOLINE® sensor using two independent sensor lines with different spectral sensitivity. The data supplied by this camera is classified using TOMRA Sorting's high speed X-ray processing. So the atomic density of the materials can be identified – regardless of the material thickness.

TECHNOLOGY XRF

X-ray fluorescence allows for the first time the detection of existing elements in particles. The material will be excited by low-energy X-ray radiation and element specific fluorescence will be released. With an energy dispersive X-ray sensor this fluorescence can be measured. The data will be processed and information about presence of elements and their concentration are the result. These information combined with additional data from an EM sensor using SUPPIX® identify the position and size of the object – and a set of valves eject it precisely.

BENEFITS

- + Extremely fast payoff
- + Highest selectivity
- + Identification irrespective of the surface*
- + Very robust and proven design
- + Highest safety standard
- + Good adaptability to customer requirements
- + Emergency service hotline

*just relevant for [XRT]

EXAMPLE// ALUMINUM SORTING FROM ZORBA/NFE METAL MIX

Producing new material like aluminum from scrap uses up to 95 percent less energy than producing the same product from its natural resources. To be usable, non-ferrous metal fractions, such as aluminum, must be treated to a high degree of purity. TOMRA's efficient non-ferrous metals sorting and recycling technology provides benefits for operators of automobile shredders, heavy media plants, aluminum re-melters and refiners alike. The high-speed X-TRACT [XRT] uses the principle of detection by different atomic densities and ejects, for example, heavy metals like copper, brass, zinc, etc. from a stream of Zorba (mixed NFe metals including aluminum) or Taint Tabor (sheet aluminum scrap), increasing the market value of the metal and minimizing material loss. An additional benefit: costly and risky manual sorting can be reduced to a minimum.



SENSOR CONFIGURATIONS

- A //** Economy model for separation of materials of lower thickness and lower atomic density, 90 KeV X-ray energy – **XRT basic**
- B //** Flexible and high efficiency model for separation of materials of greater thickness and higher atomic density, 160 KeV X-ray energy and 500 W power – **XRT standard**
- C //** More powerful X-ray source for highest penetration of materials. This improves the range of thickness and the separation quality for special applications. 160 KeV X-ray energy and 1000 W power – **XRT extended**
- D //** Energy dispersive X-ray sensor combined with an EM sensor using SUPPIX® to separate material by their elemental composition – **XRF**

STANDARD APPLICATION PACKAGES		MODELS			
		A	B	C	D
ALUMINUM CLEANING	Producing a more valuable clean aluminum fraction by sorting out heavy metals like copper, brass, zinc, lead, ...		●	●	
CRT SORTING	Producing clean mono fractions of panel glass (lead free) and funnel glass (high lead content)		●	●	
RDF PRODUCTION	Producing refused derived fuel by sorting out PVC, glass, stones, metals	●	●	●	
ORGANIC SORTING	Producing a clean organic fraction and a clean non-organic fraction for landfill	●	●	●	
PVC REMOVAL	Removing flame retardants like chlorine and bromine out of a mixed plastic stream	●	●	●	
METAL	Additional removal or suppress of metals				Option: electromagnetic (EM) sensor
SPECIAL APPLICATION	On request	●	●	●	●

TOMRA Sorting offers a variety of configurations for different tasks and conditions. You are welcome to check your individual material in one of our test centers. E-mail: recycling-sorting@tomra.com