

# REDWAVE XRF fine

MAXIMISING THE PROFITABILITY OF  
FINE NON-FERROUS METALS THROUGH  
MODERN XRF SORTING SYSTEM

REDWAVE®



XRF fine





## STATE-OF-THE-ART SORTING TECHNOLOGY

for Non-ferrous  
metals



**NEW STANDARDS IN PERFORMANCE AND PRECISION**



The cutting-edge REDWAVE XRF fine sorting machine sets new benchmarks for sorting fine materials in the metal recycling industry. It can accurately detect and sort a blend of non-ferrous metals starting from a size of 4 mm, to produce high-quality products such as pure copper, brass, zinc and precious metal fractions.

### INNOVATIVE BELT SYSTEM DESIGNED SPECIFICALLY FOR FINE MATERIALS

Developed specifically for materials measuring from 4 mm, the machine employs a unique belt system instead of a chute system, drawing on the company's extensive experience and cross-application know-how. Compared to conventional chute systems, the belt system boasts maximum precision. This is particularly advantageous when sorting fine metals, as they can be precisely identified and accurately ejected. The belt system offers significant benefits over the chute system when handling fine, small, and round materials.

#### REDWAVE BELT SYSTEM

Optimal for small and rolling parts (from 4 to 25 mm)

Uniform conveyance prevents changes in speed or position of the parts, allowing for accurate sorting.

The new and innovative REDWAVE belt prevents material from snagging.

The trajectory is controllable and remains constant, which ensures accurate sorting.

**VS**

#### CHUTE SYSTEM

Optimal for large parts (from (10) 15 to 180 mm)

Controlling the slippage of small parts is challenging. Frequent changes in speed and position can reduce the quality of the final product or output rate.

Due to humidity and dirt fine materials may stick to the chute.

The trajectory of small materials changes and is unpredictable making precise sorting difficult.

- Highest precision and performance for sorting fine, small, and round parts

- Highest precision and performance for sorting coarse material.



From  
Pioneer to  
World Market  
Leader

### SERVICE-OPTIMISED AND EASY TO MAINTAIN

- Easy-to-maintain design, optimised for easy access and quick service calls
- Belt exchange can be carried out very quickly

WATCH  
THE VIDEO

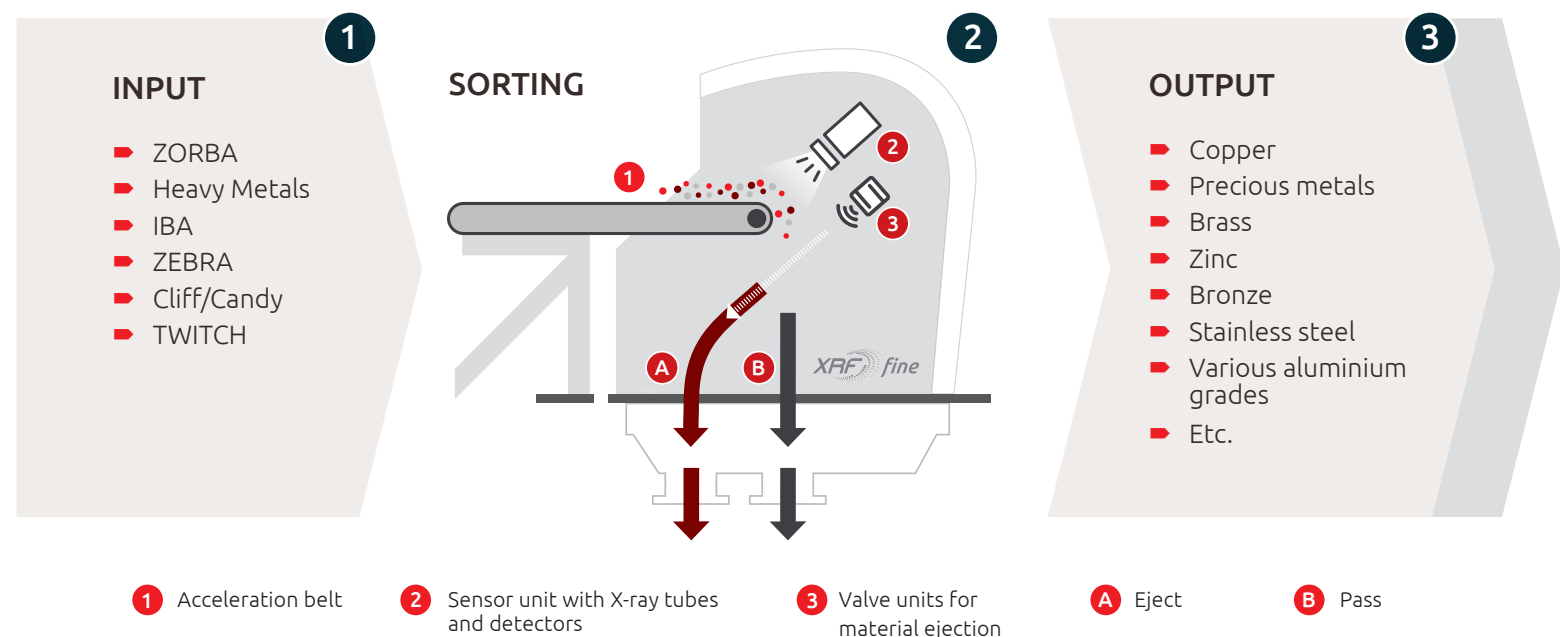


### TECHNOLOGICAL HIGHLIGHTS OF THE REDWAVE XRF FINE SORTING MACHINE

- **Innovative in-house REDWAVE sensor-technology**
  - enables higher purity and efficiency for fine material sorting
  - Incorporates the most advanced sensor technology with a significantly larger number of sensors, resulting in higher scan rates, resolution and precise detection of fine materials
  - Utilises an increased number of energy-saving, high-speed valves for the most efficient metal sorting
  - Delivers a higher recovery rate for precious metals
- State-of-the-art belt system specifically designed for fine, small and round materials (from 4 mm)
- XRF sensors with simplified object recognition via laser support



### APPLICATIONS




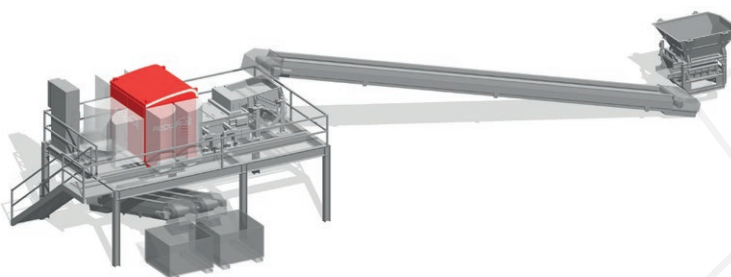


## PLANT SOLUTIONS FOR METAL



With more than 25 years of experience in plant building, REDWAVE has the know-how to supply not only the key equipment necessary for the sorting plant, i.e. the sorting machinery, but can also supply and install the whole plant. Turn-key design, manufacturing and installation – all provided with the same level of quality - from one supplier.

INPUT MATERIAL	ZORBA, ZEBRA, TWITCH, ZURIK, BIRCH/CLIFF, IBA etc.				
PREPARATION	<b>Material handling equipment</b> <ul style="list-style-type: none"> <li>Bunkers</li> <li>Conveyors</li> <li>Feeders</li> </ul>	<b>Magnet</b> <ul style="list-style-type: none"> <li>Barroferrit</li> <li>Neodymium</li> </ul>	<b>Screening</b> <ul style="list-style-type: none"> <li>Flip-flow</li> <li>Linear</li> <li>Drum screen</li> </ul>	<b>Eddy current separator</b> <ul style="list-style-type: none"> <li>centric</li> <li>eccentric system</li> </ul>	<b>Windshifting</b> <ul style="list-style-type: none"> <li>Zig-zag separator</li> <li>Cross-flow sifter</li> </ul>
SORTING STEPS REDWAVE XRF/C	<b>ZORBA IBA (Incinerator Bottom Ash)</b> <ul style="list-style-type: none"> <li>Lights vs. Heavies (ZEBRA vs. TWITCH)</li> </ul>	<b>Heavy metal Mix</b> <ul style="list-style-type: none"> <li>Free Zinc, Copper</li> <li>Stainless Steel</li> <li>Brass/Bronze</li> <li>Precious Metals (Au, Ag, ...)</li> <li>Lead, etc.</li> </ul>	<b>ZURIK</b> <ul style="list-style-type: none"> <li>Free Stainless Steel</li> </ul>	<b>STAINLESS STEEL</b> <ul style="list-style-type: none"> <li>304 Series</li> <li>316/317 Series</li> <li>2XX, 4XX, etc.</li> </ul>	<b>Aluminium (TWITCH)</b> <ul style="list-style-type: none"> <li>High Cu/Zn Alloys</li> <li>Medium Cu/Zn Alloys</li> <li>Low Cu/Zn Alloys</li> </ul>
QUALITY CONTROL	REDWAVE mate - process monitoring and plant control system. Continuously generating statistical data from material.				
FINAL PRODUCT	 <p>Free Zinc, Copper, Stainless Steel, Brass/Bronze, Precious Metals (Au, Ag, ...), Lead, etc., Stainless Steel Series, 316/317 Series, 2XX, 4XX, etc., Aluminium (TWITCH), High Cu/Zn Alloys, Medium Cu/Zn Alloys, Low Cu/Zn Alloys</p>				



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I've never had a quicker return on any piece of equipment than a REDWAVE XRF

Grant Frasier, President, Mid-State Recycling

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### TURN-KEY PLANT BUILDER AND SOLUTION PROVIDER

- Plant Consulting, Design and Installation
- 25 Years Experience
- REDWAVE Reliability

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