

## APPLICATIONS

Recovery of recyclables from Waste Electrical and Electronic Equipment (WEEE)

- Metals and alloys
- Plastics (thermoplastics, plexiglass, etc.)
- Composite materials (circuit boards, etc.)
- Brominated plastics (BFR)
- Plastics with cadmium compounds
- Material tainted with precious or recoverable metals (e.g. copper, brass, silver, etc.)
- Sorting of monitor glass (CRT)
- etc.

## SORTING PLANTS FOR E-SCRAP (WEEE)

### SORTING TECHNOLOGIES

|                           | Separation of:  | Separation of:  | Separation of:  | Separation of:   | Separation of:  |
|---------------------------|---|---|---|--|---|
| <b>MATERIAL:</b>          | Different metals: <ul style="list-style-type: none"> <li>• non-ferrous (aluminium, copper)</li> <li>• ferrous (iron, ...)</li> <li>• stainless steel</li> </ul> | Different colours: <ul style="list-style-type: none"> <li>• green circuit boards</li> <li>• brown circuit boards</li> <li>• plexiglass</li> <li>• etc.</li> </ul> | Undesired materials: <ul style="list-style-type: none"> <li>• wood</li> <li>• paper</li> <li>• etc.</li> </ul> Different materials: <ul style="list-style-type: none"> <li>• plexiglass</li> <li>• ABS</li> <li>• PS</li> <li>• PC</li> <li>• etc.</li> </ul> | Different colours: <ul style="list-style-type: none"> <li>• green or brown circuit boards</li> </ul> Undesired materials: <ul style="list-style-type: none"> <li>• wood</li> <li>• paper</li> <li>• etc.</li> </ul> Different materials: <ul style="list-style-type: none"> <li>• ABS</li> <li>• PS</li> <li>• PC</li> <li>• etc.</li> </ul> | Different materials according to chemical composition: <ul style="list-style-type: none"> <li>• brominated plastics (BFR)</li> <li>• material tainted with precious or recoverable metals</li> <li>• CRT glass</li> <li>• etc.</li> </ul> |
| <b>TASK:</b>              | Separation of metals  | Detection of different colours  | Detection of different plastic materials and removal of contaminations  | Detection of different colours and different materials   | Detection of chemical composition   |
| <b>SENSOR TECHNOLOGY:</b> | Induction detector  | High-resolution RGB camera  | Near-infrared (NIR) hyperspectral imaging   | Near-infrared (NIR) hyperspectral imaging combined with a high-resolution RGB camera   | X-ray fluorescence spectrometer   |
| <b>TYPE OF MACHINE:</b>   | REDWAVE M<br><i>All Metal Sensor</i>  | REDWAVE C<br><i>Colour</i>  | REDWAVE NIR-SSI<br><i>Near Infrared</i>   | REDWAVE NIR-SSI / C<br><i>Multi-Sensor</i>   | REDWAVE XRF<br><i>X-ray fluorescence</i>  |







## COMPACT WEEE SORTING PLANT

REDWAVE has developed this compact sorting line for all electronic waste.

### Outstanding features of the line:

- REDWAVE hyperspectral imaging
- High-resolution RGB camera
- All metal detector

### Auxiliary equipment:

- Hopper
- Discharge unit
- Conveying system
- Feeding with screening option

**Outputs:** PS ABS PC+ABS ABS+TBBPA ABS+TBBPAEP PA PC PET PE PP PBT POM PVC PMMA PUR etc.

### Customer Benefits:

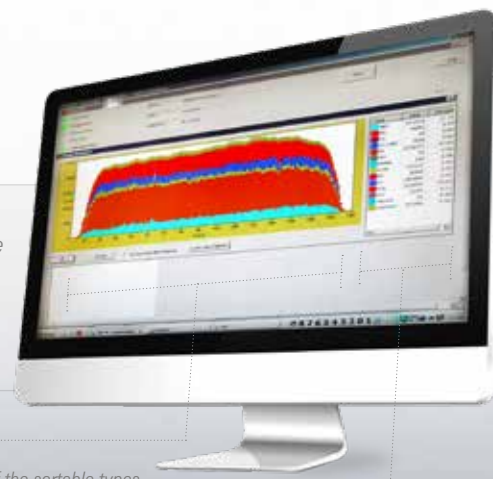
- Proven compact sorting solution
- Smart solution for low capacity
- Free programmable sorting task

### Customer Feedback:

Janek Sibbul, director at company WeeRec AS: "REDWAVE quality and price ratio is very good. The sorting machine works accurately. A big plus is that new modules can be added to this device (metal detector, sorting by colour etc.). Since installation our plastic sort has reached a new level."

Graphic representation of the material distribution across the sorting range

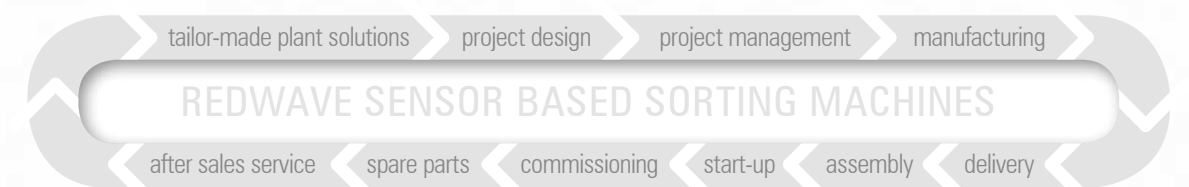
Input statistics for the machine and representation of the sortable types



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## CUSTOMIZED WEEE SORTING PLANT

REDWAVE guarantees the highest value of recycling plants based on years of experience in the recycling industry.



### Customer Benefits:

- Customized and flexible plant solutions for different WEEE material streams
- Free programmable sorting task
- Well balanced sorting plants with own developed REDWAVE sorting technology
- Continuous optimization by REDWAVE Process Monitoring and Control System (PMCS)

### Customer Feedback:

Manfred Koegl, plant manager for WEEE recycling facility at Saubermacher: "We are extremely satisfied with the design and sorting quality of the REDWAVE machines. We found REDWAVE systems to be very professional throughout the project and our requests were always immediately addressed."



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