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# Your partner in:











# REDWÁVÈ A sensor based sorting technology

**REDWAVE** is a trademark of BT-Wolfgang Binder which is a sensor based sorting technology.

**REDWAVE** sorting technology enables fully automated separation of recyclable materials and is successfully worldwide for sorting a variety of materials in many fields.

Depending on the requirements the material will be identified on the basis of its colour, shape or other material characteristics.

The **REDWAVE** through excellent industrial design achieves high performance and quality recovery of materials.

#### Continuous research and development in: .

- Plastics recycling
- Paper recycling
- Glass recycling
- Mining industry
- Electronic scrap
- Automotive industry
- Wood recycling
- Separation of ferrous and non-ferrous metals







### Recovery of:

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- Bottles (PET, HDPE, PP, ...)
- Films (LDPE, PP, ...)
- Bio-degradable plastics

### Separation of:

- Chloride compounds (PVC)
- Flame retardant plastic
- Paper and wood
- Metals

#### Sorting of: -

- Household waste
- Industrial waste
- Electronic scrap
- Refuse Derived Fuel (RDF)
- Demolition waste

**REDWAVE** is a flexible operating system with applications in a variety of fields, especially for the plastics industry. No matter how complex the sorting task may be the REDWAVE range of sorting equipment can achieve the high levels of purity. **REDWAVE** guarantees high throughput of materials with maximum recovery of materials achieving maximum return on the separated commodities.

### The Systems below can be selected to achieve the optimum performance:

- Near Infrared Technology (NIR) for material recognition
- Line Scan Camera Technology for colour recognition
- Multi-Sensors a combination of Near Infrared Technology (NIR) with colour sensors for material and colour recognition
- Metal detector for recognition of ferrous and non-ferrous metals





# Desired paper:

Recovery of:

- Office paper
- News
- Magazines
- Glossy
- Catalogue

# Undesired paper:

Separation of:

- Brown and gray cardboard
- Corrugated cardboard
- Folded boxes
- Coloured printed cardboard
- Synthetic papers
- Plastic-laminated papers

### Non-paper products: I I I I

Separation of:

- Plastics
- Liquid packaging board
- Textiles
- Rubber
- Metals
- And many more ...

Paper industry has high standards for de-inked paper. REDWAVE is able to achieve these requirements with highest precision. Near Infrared Technology (NIR) with colour sensors is selected.

### Unique feature of REDWAVE - quantitative identification of: .....

- Kaolin
- Cellulose
- Lignin
- Moisture
- Flexoprint





### Sorting and recovery of:

- Flint glass
- Amber glass
- Green glass

#### Separation of: •••••••••••••

- Ceramics, stones, porcelain
- Metals
- Heat resistant glass
- Leaded glass
- Organic impurities
- Plastic
- Cork
- Paper

As your reliable partner in glass processing we can offer the most innovative sorting methods, therefore guaranteeing an unprecedented purity of sorted materials.

### The Systems below can be selected to achieve the optimum performance:

- Infrared for the sorting of ceramics, minerals, porcelain (KSP) and metals
- Colour sorting for colour improvement or the separation of mixed glass in different colours
- X-Ray Fluorescence Technique for the separation of heat resistant and leaded glass





### Base metal:

- Bauxite
- Copper
- Iron ore
- Lead
- Manganese
- Nickel
- Zinc
- Aluminium
- Uranium
- Scheelite

Precious metal:

### • Gold

- Silver
- Platinum
- Palladium

## Metal slag:

- Copper
- Nickel
- Stainless steel

## Industrial Minerals:

### • Calcite

- Feldspar
- Limestone
- Magnesite
- Quartz
- Rock salt
- Silicium
- Talc
- Phosphate

## Gemstone:

- Diamonds
- Tanzanite
- Emeralds
- Topaz
- Aquamarine
- Rubies
- Alexandrite

The processing of minerals places a high demand upon the sorting process. **REDWAVE** can offer flexible sorting systems which are highly effective in separating impurities from valuable minerals. The separation occurs on the basis of colour, lightness, size and material property. **REDWAVE** guarantees high throughput of materials with maximum recovery of materials achieving maximum return on the separated commodities.

# The Systems below can be selected to achieve the optimum performance:

- Near Infrared Technology (NIR) for material recognition
- Line Scan Camera Technology for colour recognition
- Multi-Sensors a combination of Near Infrared Technology (NIR) with colour sensors for material and colour recognition
- Metal detector for recognition of ferrous and non-ferrous metals
- X-Ray Fluorescence Technique for material recognition

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