

www.redwave.com

## Your partner in:











# REDŲÁVÈ 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







### **Applications**

#### Recovery of:

. . . . . . . . . . . . . . . . . .

- 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





### **Applications**

### 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:

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





### **Applications**

#### 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



# **Mineral sorting**

## **REDWAVE** for mining

## **Applications**

#### 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

# REDWÁVÈ







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