



## Municipal Company of Waste Management Ltd

Recycling MRF with RDF production – Katowice, Poland



### CUSTOMER

The Municipal Company of Waste Management Ltd in Katowice provides a framework of service activities such as:

- The collection and transport of waste
- Selective collection and utilization of waste
- Composting organic waste
- All year round road maintenance
- Automotive diagnostics

### REQUIREMENTS

The requirements were to build a waste sorting plant on the basis of the existing composting and sorting plant located in Katowice.

The input material is mixed dry household waste and selectively collected packaging material, i.e. plastics, metals, paper and cardboard.

### SOLUTION

The plant is designed according to the tender specification and has a maximum design capacity to sort 65,000 tonnes of mixed waste per year (on one 7 hours shift).

The plant includes five REDWAVE machines in three sorting steps.

# REDWAVE®

## PROCESS

The sorting starts with manually separating elements which can interrupt the process (i.e. rubble, tyres, large materials, glass, large cardboard, foil and dangerous waste). After that the remaining waste stream is sieved and divided into the following fractions: 0-80mm, 80-160mm, 160-300mm and <300mm. Material of 0-80mm will be sent for composting and the <300mm fraction will be shredded into smaller parts and returned to the start of the sorting process.

The two remaining fractions will then be sorted with 2 REDWAVE NIR machines. The first NIR sorter is used for the 80-160mm fraction and the second NIR machine for the 160-300mm fraction. Both REDWAVE machines are arranged in parallel and are used for sorting material to be used as an RDF (refuse derived fuel).

Thereafter the remaining material will be scanned by another 2 REDWAVE sorting machines, which will separate paper and cardboard. All sorted materials will be further checked and cleaned manually to ensure quality control. Residual material after these REDWAVE sorters will be shredded and sent to the RDF storage warehouse. The last REDWAVE NIR machine is used for sorting PET bottles from both fractions.



## TESTIMONIAL

The statement from the Katowice facility Mr. Arkadiusz Teodorowski: "REDWAVE's sorting machines supplied by BT-Wolfgang Binder GmbH are hi-tech equipment, which fulfil our company needs. We were more than satisfied with both delivery arrangements and service. In our opinion BT-Wolfgang Binder GmbH is a reliable and experienced business partner, who we would recommend to others."

## TECHNICAL DATAS

Type of machine	2x REDWAVE 2800 NIR/C - separator of RDF fraction / Plastics (PE/PP/PS)
Infeed material	Fraction from 80-160mm, 160-300mm
Capacity	2x up to 7 t/h each sorting machine
Sensor system	NIR/C 64RB 2W
Working width	2800mm
Sorting system	Multi-Sensor NIR/C acc. to material and colour

Type of machine	2x REDWAVE 2000 NIR/C - separator of paper
Infeed material	Fraction from 80-160mm, 160-300mm
Capacity	2x up to 7t/h each sorting machine
Sensor system	NIR/C 64RB 2W
Working width	2000mm
Sorting system	Multi-Sensor NIR/C acc. to material and colour

Type of machine	Separator REDWAVE 2000 NIR/C - separator of PET
Infeed material	Fraction from 80-300mm
Capacity	Up to 8t/h
Sensor system	NIR/C 64RB 2W
Working width	2000mm
Sorting system	Multi-Sensor NIR/C acc. to material and colour

