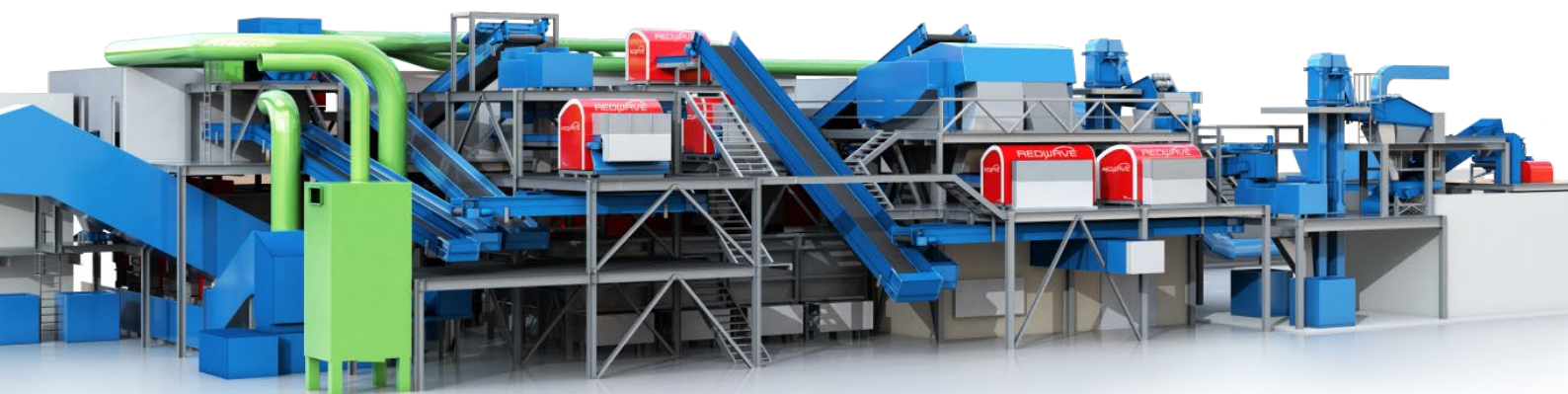


CASE STUDY

GRUNDON WASTE MANAGEMENT LTD.

Single stream waste sorting plant for MRF



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REDWAVE®

CUSTOMER

Grundon Waste Management Ltd. is the largest privately owned waste management company in the UK. The company was founded in 1929 and has moved into landfill operation, waste collection, and most recently into harnessing energy from waste. The company offers a wide range of waste collection services spanning mixed recyclables, general (non-recyclable) waste, clinical and hazardous waste.



SITUATION

Following fire damage two years ago, the company undertook the process of rebuilding the facility to the very latest standards. The requirements of Grundon were: a new sorting facility, an increased level of automation, application of the latest technology, a flexible operational design which would suit the existing building, and the incorporation of the existing baler and feed conveyor with a process capability of up to 25 t/hr.



SOLUTION

The new plant has the capacity to sort over 150,000 tonnes of material per year and has been built as a complete turnkey solution by BT Wolfgang Binder GmbH. The new plant includes seven REDWAVE sorting machines for recycling a wide range of material into 12 categories.

The requirements of Grundon were completely met.

INVESTMENT

Grundon Waste Management Ltd. invested about 7 Million British Pounds in Slough. Now they are operating one of the most modern waste sorting plants in Europe.



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SORTING PROCESS

The infeed material at up to 25 t/hr is fed to the bag opener. What follows is the pre-picking station where non-conforming material like oversized films etc. is taken out. The material is then carried to the OCC screen where large cardboard is separated.

The undersize of the OCC screen is fed to a ballistic separator to segregate the 2D-fraction from the 3D-fraction. REDWAVE sorters then separate impurities in the 2D-stream like cardboard and plastics from News and Pams. The 3D-fraction moves on to the glass breaking screen, to sort out the glass from the other materials. The over-belt magnetic separator sorts ferrous metal, while aluminum is separated by a non-ferrous separator.

In subsequent steps the REDWAVE optical sorters separate PET clear/blue and PET coloured, HDPE and mixed plastics from the 3D-stream.

At an integrated glass clean up plant, mixed glass at sizes up to 60 mm is processed and separated from contaminants like stones, porcelain, ceramics, metals and organics.



Infeed material is sorted in 12 different fractions

“ Grundon Waste Management placed some large constraints on their chosen contractor BT-Wolfgang Binder to design a plant with a high processing capacity, within an existing building, on one of our busiest operational sites, which had to be operational in under a year. BT-Wolfgang Binder worked together with our Material Recycling Facility team to provide a design which increased our tonnage capacity while providing a higher degree of material sorting capacity. Construction of the facility was completed on time in less than 5 months without stopping on-going site operations for even a day. As Project Manager for this project I am happy to say that it has been a pleasure to work with BTW Binder on this installation.

Vanessa England, Project Manager with Grundon

