

CASE STUDY

UTILITY LTD - UKRAINE
GLASS SORTING PLANT



CASE STUDY

UTILITY LTD – UKRAINE GLASS SORTING PLANT

REDWAVE®

“ Our Company has been doing with glass recycling for more than 10 years and thanks to the cooperation with BT-Wolfgang Binder GmbH we could achieve new quality and quantity levels in our business during the last 4 years. Professional solutions as for plant building and its operation provide important competitive advantages. We are very pleased with 101% fulfilment of its obligations by the supplier, in some cases even exceeding its contractual obligations. We are pretty sure we made the right decision in selecting BT-Wolfgang Binder GmbH as turn-key supplier for our operating plant in Novomoskovsk, Ukraine and would be happy for further cooperation.

CUSTOMER

Utility Ltd is the leading glass recycling company in Ukraine, with more than 70% of recycled glass production countrywide. The company is producing high quality glass cullet for its partners in Ukraine, Russia, Moldova and Belarus.

REQUIREMENTS

The sorting task is to separate three main colours of cullet – flint, green and amber – and clean them up by means of rejecting non-glass particles. The equipment delivered by BT-Wolfgang Binder includes not only optical sorters, but also a dedusting plant, various metal separation stages, screening, material transport etc.



SOLUTION

In 2008 a turn-key plant with REDWAVE optical sorters was installed in location of Novomoskovsk, with an input capacity of 15 tonnes per hour.

TECHNICAL DATA

TYPE OF MACHINE	REDWAVE IR, REDWAVE C
INFEED MATERIAL	Glass cullet
INFEED CAPACITY	15 t/h
SENSOR SYSTEM	IR and camera
INFEED GRAIN SIZE	0-200 mm
WORKING WIDTH	900 mm for IR, 1.300 mm for camera
SORTING SYSTEM	Vibratory feeder

SORTING PROCESS

The infeed material is being loaded in the infeed bunker outside the sorting plant and transported on a belt conveyor into the plant. A first stage of metal separation is installed above the transporting conveyor. Inside the plant the material is being sieved, the coarse fraction broken, and the whole material stream passes the second stage of metal separation. The ferrous metals and non-ferrous metals are separated from each other and can be sold on the metal market. Free-of-metal cullet is then screened into different size fractions and sorted on REDWAVE optical sorters. The impurities such as stones, ceramics, porcelain, are being separated on REDWAVE IR machines. Colour sorting takes place on REDWAVE C machines, which are equipped with a high-resolution camera system together with unique image processing software. At the outcome the final cullet has high purity and can be delivered to the glass production plants.

