

ACTIS – Russia

Glass sorting plant

CUSTOMER

The headquarters of the company ACTIS, which produces new bottles for the drinks industry from waste glass collected, is located in Novocherkassk, only 30 kilometres from Rostov in Southern Russia.

ACTIS emerged as a pioneer in the glass recycling industry 10 years ago. Even then, a new plant with conveyor belts, feed hopper and product bunker, washing unit and manual sorting was built. The total output was around 12 tons / hr.

The main reason for this investment was the energy savings as clean cullet can replace the raw material.

REQUIREMENTS

A facility should be planned delivered and installed, which represents the customer an economical combination of old and new.

The existing equipment should be usefully implemented in the new plant to win high qualities in clear glass, brown glass and mixed glass without any contaminations.

The performance should be increased to 33 tons / hour.

SOLUTION

The total additional equipment has been integrated into the existing building. This consists of the REDWAVE glass-sorting machines, metal separators, screening machines, crushers, extraction system and the conveyor systems.

The first screening stage form parallel arranged REDWAVE 1300 C machines which sort white and brown glass and separate impurities.

In the second sorting stage REDWAVE CS 1500 machines are used to improve the color and to separate impurities.



PROJECT DESCRIPTION

The interest in fully automatic, optical sorting was inspired by Actis in 2008. After a careful planning phase, in 2011 Actis decided for the Austrian plant construction company BT-Wolfgang Binder with their REDWAVE sorting technology, who carried out the conception and realization of the automatic sorting plant for raw material recycling of waste glass. In addition to the REDWAVE glass sorting machines, the scope of delivery also included metal separators, screening machines, crusher, an extraction system, as well as the associated conveying technology. The complete equipment was integrated in the existing building.

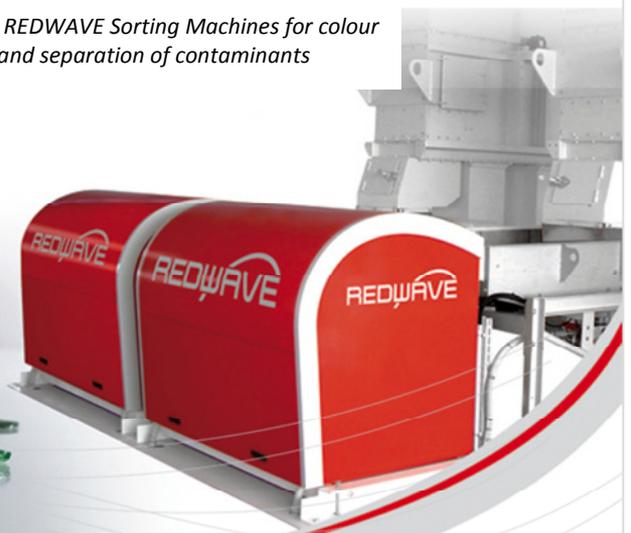
The integrated REDWAVE sorting machines play a significant part in the recycling of high-quality white glass, brown glass or mixed glass with no impurities (KSP separation). The first sorting stage is formed by REDWAVE 1300 C machines arranged in parallel for recovery of white glass or brown glass, as well for the separation of impurities. These sorting machines, in the 3-way design, can realize both functions in a single sorting stage. In the second sorting stage, REDWAVE CS 1500 machines are utilized for the improvement in colour and separation of impurities. These REDWAVE CS sorting machines can be utilized very flexibly primarily due to the modular construction, therefore are very reasonably priced and provide high-quality sorting.



Picture: Company Actis – Glass processing plant



Picture: REDWAVE Sorting Machines for colour sorting and separation of contaminants





Picture: Input material



Picture: End product: mixed glass free of impurities and pure white glass

Due to the implementation of the new sorting plant, the discharge rate could be increased to 33 to/ hr. That not only contributes to saving energy and raw materials in the production of glass: the daily requirement 600 to of waste glass has created new jobs in the region and reduced the quantity of waste, which would have ended at the disposal site.





The manager of the plant planning at BT-Wolfgang Binder, E. Schaller, says: „To realize an economic combination of old and new for the customer and to include the existing equipment usefully in the new plant, was the challenge with the planning of this plant. We are very proud that the plant could be transferred immediately after commissioning, with all the conditions contractually agreed.“

TESTIMONIAL

Mr. V. Baziyan, General Director of Actis: "The work that BT-Wolfgang Binder has made for us was very complicated. The entire new equipment had to be integrated into the existing system. I am very satisfied with the result and highly recommend to all interested parties and specialists from the industry to visit our facility where you can personally see the quality of the supplied equipment and its benefits."

TECHNICAL DATAS

Type of machine	3 x 1300 C 3-way 3 x 1500 CS 2-way (incl. a metal detector)
Infeed material	Mixed waste glass
Capacity	33 to / hr
Working width	3 x 1300 mm 3 x 1500 mm
Size	6 – 50 mm

