CASE STUDY

UUSIOAINES OY - FINLAND

PACKAGING GLASS RECYCLING PLANT







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The construction phase of the project began very well in spite of harsh Finnish weather conditions. Subsequently, after the initial start-up period, the plant has been able to function both efficiently and productively. Today Uusioaines Ltd is achieving optimal levels of efficiency, quality and purity in the specialised field of recycled glass processing.

Uusioaines

CUSTOMER

Uusioaines Ltd. has specialized in the recycling of packaging and float glass since 1995 in the Forssa area. Suppliers of packaging glass in Finland are the Finnish National Alcoholic Beverage Retailing Monopoly and other waste management companies.



SITUATION

The capacity of the glass recycling plant meets the total demand for the recycling of packaging glass for the whole of Finland. The plant produces flint, green and amber cullet of the highest quality. Glass cullet is used as a raw material for industrial use.



SOLUTION

The plant is designed to process 28 tonnes per hour input and includes all the necessary machinery to dry, crush, screen and sort the cullet by its colour. Besides that, the plant has the ability to separate leaded glass and glass ceramics using REDWAVE XRF technology. This project was a turnkey project for BT-Wolfgang Binder and included the supply of all machinery and structural steel as well as the building and facade.

SORTING PROCESS

The material is fed into an infeed hopper and carries on to the pre-cleaning that includes the screening of the material, the manual collection of bulky material and the crushing of remaining oversized glass. After pre-cleaning, a rotary drum dryer dries the material and frees it from organics followed by ferrous and non-ferrous metal separation.

Then the material enters the optical sorting line to remove leaded glass and glass ceramics by REDWAVE X-ray fluorescence machines and to separate contaminants as ceramics, stones and porcelain by REDWAVE camera machines. The ejected materials end up in waste bunkers whilst the glass cullet carries on to the REDWAVE colour sorters to turn out the products Flint, Green and Amber cullet.



