



Papyrus Altpapierservice Handelsgesellschaft m.b.H. Austria, Villach

Sensor based sorting technology for waste paper pulping



CUSTOMER

For 30 years, Papyrus Altpapier Service has been active in the disposal and secondary raw material industry in Austria. The Papyrus Group has 180 employees at 5 locations.

REQUEST

Conversion and automation of an existing manual sorting system, combined with a throughput increase of 12 tonnes per hour, as well as compliance with the purity guidelines of the extracted de-inking fraction.

SOLUTION

BT-Wolfgang Binder GmbH implemented the entire upgrading of the site in Villach. Two high-performance REDWAVE near-infrared paper sorters with combined colour sensors were integrated in 2009.



The entire conversion of the system, originally set up in early 2000, was completed in a short period of time (August to November 2009) so sorting operations at the Villach location could be resumed promptly.

MATERIALS

In the paper recycling industry, sensor-assisted sorting technologies play an essential role for the extraction of valuable office paper, newspapers, magazines, catalogues and magazines. The material obtained is fed into the recycling process as valuable raw material.

On the other hand, brown and grey cardboard, corrugated paper, cardboard boxes, printed corrugated cartons, synthetic paper and plastic coated paper are eliminated.

Non-paper substances, such as plastic, beverage cartons, textiles, metals, etc., are also eliminated with sensor-assisted sorting machines.

SORTING PROCESS

The material is fed in through a dosing bunker, which separates the material and ensures even charging of the system. The material then passes to a coarse screen where cardboard larger than A3 is removed, and then to the two REDWAVES 2400 NIR/C switched in series, where cardboard and non-paper substances are eliminated. This is followed by a manual quality control performed by 2 - 3 persons, before the de-inking material enters into the transport storage.

TESTEMONIAL

Martin Steinwender, authorized representative at *Papyrus Villach*: "By upgrading the system, personnel costs in day-to-day operation could be slashed by 70%, while throughput was increased from 7 tons to 12 tonnes per hour."