

# CASE STUDY

**PAPYRUS ALTPAPIERSERVICE  
HANDELSGESELLSCHAFT M.B.H.**  
SENSOR BASED SORTING TECHNOLOGY  
FOR WASTE PAPER PULPING



**REDWAVE**



**PAPER  
SORTING**

# CASE STUDY

PAPYRUS ALTPAPIERSERVICE HANDELSGESELLSCHAFT M.B.H.–  
SENSOR BASED SORTING TECHNOLOGY FOR WASTE PAPER PULPING

REDWAVE®

” *By upgrading the system, personnel costs in day-to-day operation could be slashed by 70%, while throughput was increased from 7 tonnes to 12 tonnes per hour.*

*Martin Steinwender, authorized representative at Papyrus Villach*

## KUNDE

For 40 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.



## SITUATION UND LÖSUNG

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.

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.

## MATERIALIEN

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.

## SORTIERPROZESS

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.

