

Sorting Graphic Paper for Deinking Presentations at the INGEDE Symposium



How online monitoring of sorting performance can increase the sorting yield: Manuela Suttnig of REDWAVE presenting at the INGEDE Symposium last February (overleaf)

“Sorted graphic paper for deinking”, the paper for recycling (PfR) grade 1.11.00, is the main raw material used by the members of INGEDE operating a deinking line for graphic papers. Therefore, its quality has a big impact on the final deinked pulp and the process costs. Also in times of limited availability, it must be worthwhile for the waste management companies to run their sorting plants and to get enough PfR collected from households.

The main issues for INGEDE are quality and availability of 1.11.00. In order to be a respected partner in discussions with manufacturers of sorting devices, operators of sorting plants and those responsible for collection schemes, we have to know more about these processes.

The quality of the material coming into the sorting plant is essential. There are many factors having an impact. Collection scheme and recycling awareness, population and reading behaviour, pre-sorting of commingled material and the impact of the weather. All those can be only influenced by the collector and/or the local authority that defines the collection conditions.

Now with a given input quality it is up the sorter to configure his process efficiently. In order to make any changes and developments visible you have to follow some

common rules and definitions. INGEDE here has made some proposals in accordance with the proven rules of paper machine efficiency calculations. Mainly we are talking about recording of times and quantities to calculate e.g. time efficiency, capacity efficiency, operating rate, production rate, yield, and removal efficiency. An almost uncharted territory is the automation of the process. Only very few plants tried to implement controlling systems, but we believe that there is a big potential to optimise the sorting plants. That would pay off in throughput, yield, and quality.

The design of a modern sorting plant looks different from that of a plant built 10 or 20 years ago. The quality and composition of the input material has to be considered; new desirable and unwanted products, fibre based or not, are in the recycling stream; the size distribution has changed, and recovery units are needed to optimise the yield. The planning of a new line, or to rebuild one, needs a lot of knowledge about the material and its behaviour in the sorting process.

INGEDE will not consult in planning and operation of sorting plants. However, with the knowledge of its members we can contribute to develop a benchmark, to share best practice, and to be a respected partner in discussions with waste management companies and machine suppliers and to make our influence valid at institutions and associations.

Manfred Geistbeck



INGEDE Members, join the Working Group Paper for Recycling! Manfred Geistbeck of UPM sees a clear demand for more intense cooperation

CALENDAR OF EVENTS

5–6 June 2017

World Circular Economy Forum
Helsinki, Finland

6–8 June 2017

WASTETECH
Moskau, Russia

19–21 June 2017

DOXNET
Baden-Baden, Germany

5 July 2017

AGRAPA – Arbeitsgemeinschaft Graphische Papiere
Berlin, Germany

4–6 July 2017

Zellcheming Expo
Frankfurt, Germany

9 July 2017

Print Matters for the Future
Copenhagen, Denmark

INGEDE News

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“SORTING PLANT DESIGN 4.0” in Langerbrugge

At the INGEDE Symposium, Manuela Suttnig of REDWAVE had introduced an automated Process Monitoring and Control System (PMCS). This system combines information of several measuring devices in order to optimize the sorting process. It supports a more constant quality of output material to optimised capacity

The key elements are

- Feedrate control by simultaneous metering of mass flow and volumetric flow
- Online Monitoring of sorting performance by REDWAVE NIR
- Optional: Recovery unit to increase process yield
- Optional: Constant monitoring of final product via REDWAVE Quality Sample Analyzer.

One of these systems had been implemented in the new Stora Enso Langerbrugge sorting facility that started operation in October 2014, to be followed with an upgrade of the previous sorting plant with NIR units by REDWAVE in 2017.

IST METZ UV Days



Do you think this is deinkable? Just a matter of time, claims Scheufelen sales representative Roland Bethmann. UV-

curable inks are a problem in the deinking process, he admits; but he says he's confident, that this problem will be solved by the paper industry by either modifying the chemistry or the process itself. Asked later about how he justifies his confidence, he admits not to know much about the deinking process.

“UV LED – The future for individual processes?” was the title of a panel discussion at the “UV Days” organised by the IST Metz group in Nürtingen, known worldwide for its UV equipment. With 45 exhibitors the UV Days attracted 920 visitors,

but just a few of them were interested in the discussion – no questions asked, even after host Frank Lohmann of Deutscher Drucker pointed at the current problems regarding the poor deinkability of UV prints.



Axel Fischer

Paper Recycling News from Brussels



Ladies first: **Lisa Kretschmann**, Managing Director of the European Federation of Envelope Manufacturers (FEPE), is the new chairperson of the **European Paper Recycling Council** EPRC. Kretschmann follows **Henri Vermeulen** of Smurfit Kappa, who had chaired the committee previously on behalf of CEPI and stepped back due to the two-year rotation principle.

One of the first visible news and also a call to you, our readers, is the invitation

to name applicants for the biannual **European Paper Recycling Award by 3 July 2017**. The awards ceremony, where the winners will be announced will take place on 18 October 2017 at the European Parliament. Host and one of the jury members of the 6th edition of the Award will be europarlamentarian **Ms. Simona Bonafè**, rapporteur of the Circular Economy package and champion of the importance of recycling. As usual, the Award will be granted in two categories – Information & Education as well as Innovative technologies and R&D. The Awards provide an occasion to shed the spotlight on the innovative projects changing the way we think and do paper recycling and help Europe achieve its goal of a 74% paper recycling rate by 2020.



This goal is one of the main commitments in the new **“Declaration on Paper Recycling”**, which was issued three weeks ago and is valid for the period from 2016 to 2020. Other important elements are key conditions which politicians have to provide in order to enable the paper value chain to achieve this ambitious quantitative target.

If you call the EPRC website at <http://www.paperforrecycling.eu> to get some more details of these news, you will also notice a facelift and more user-friendly design of the pages.

Did you notice that the name changed? What was known as European Recovered Paper Council (ERPC) for years is now the EPRC, the **European Paper Recycling Council**. The name change takes into account that the term "recovered paper" has disappeared from the grade list EN 643 and from the political discussion, and was replaced by "paper for recycling" and "paper and board for recycling".

Andreas Faul