22nd INGEDE Symposium
13 February 2013 in Munich

INGEDE
International Association of the Deinking Industry

Update on INGEDE’s activities
Dr Ulrich Höke
Andreas Faul, Axel Fischer, Marion Klabunde

INGEDE’s Major Topics

• Collection of paper for recycling
  • No commingled collection
  • Separate graphic paper collection wherever feasible
  • Securing quantity and quality of the resource

• Recyclability
  • Deinkability (flexo, inkjet, liquid toner, UV)
  • Removability of adhesive applications
  • Priority in INGEDE’s research project funding
INGERDE is the organisation of the deinking mills.

INGERDE was founded in 1989 by 12 companies. Currently 33 paper mills are members of INGERDE, who utilised about 9 million metric tons of paper for recycling in 2012.

Who is INGERDE?

Steinbeis Papier
Stora Enso Group
- Eilenburg
- Hylte
- Langerbrugge
- Maxau

UPM Group
- Augsburg
- Chapelle Darblay
- Etringen
- Hürth
- Kaipola
- Plattling
- Schongau
- Schwedt
- Shotton
- Steyrermühl

Utzenstorf Papier
Van Houtum
Weig Karton
WEPA
- Arnsberg-Müschede

33 INGERDE Members

Cartiere Burgo
- Mantova (shut down)

Hainsberg Papier

Holmen Paper AB
- Fuenlabrada (Madrid)

International Paper
- Kwidzyn

Kübler & Niethammer

LEIPA Georg Leinfelder
- Schwedt

Lensing Papier

Norske Skog
- Bruck

Packages Ltd.

Perlen Papier

SCA Graphic Laakirchen

Schöfzfelder Papierfabrik

SCA Hygiene
- Mainz-Kostheim
- Ortmann

INGEDE Structure 2012
External Relations – Focus in 2012

INGEDE Symposium 2013

External Relations

European Recovered Paper Council

- INGEDE had the chair of the ERPC for 2011 and 2012
- Scorecard for the removability of adhesive applications was adopted in spring 2011
- Deinkability Scorecard in effect since 2008
Revision of EN 643

- Two meetings of CEN (European Committee for Standardization) – draft finalised at second meeting
- DIN Germany installed a mirror committee and elected Andreas Faul as chairman (three meetings)
- CEN issued prEN 643 in summer 2012. The period for comments expired early January 2013
- INGEDE members discussed mainly grade 1.11, Andreas Faul brought the results in as German comments
- The “final” CEN WG meeting will be in March 2013

Conference Presentations 2012

- 11 presentations at conferences
- Highlights were:
  - CTP-PTS Deinking Symposium in Munich (Germany)
  - NIP28 – 28th International Conference on Digital Printing Technologies in Québec City (Canada)
  - PrintCongress 2012 in Stuttgart (Germany)
**INGEDE's external representation 2012**

- **European Paper Week**
- **drupa**
- **WAN-IFRA Printing Summit**
- **Eco Print Show**
- **WS Nachhaltiges Publizieren**
- **RWM**
- **ERP C**
- **CEPI Committees & Groups**
- **Liquid toner deinking**
- **Zellcheming**
- **CTP-PTS Deinking Symposium**
- **Digital Printing Week**
- **IMI**

**Conference Presentations 2012 (1)**

**March 2012**
Media Mundo, Düsseldorf (DE)
Bedrucktes Papier muss rezyklierbar sein
Axel Fischer

**April 2012**
CTP-PTS Deinking Symposium, Munich (DE)
How the European Declaration on Paper Recycling supports the deinking industry
Ulrich Höke, Andreas Faul
Deinking in laboratory scale – the bumpy road towards a two-loop simulation
Andreas Faul, Elisabeth Hanecker

**May 2012**
Booth of Media Mundo at drupa (DE)
Bedrucktes Papier muss rezyklierbar sein
Axel Fischer

**June 2012**
Zellcheming Conference, Wiesbaden (DE)
Nachhaltige Papiererzeugung basiert auf vorausschauender Zusammenarbeit der gesamten Papierkette
(contribution of the Zellcheming TC RECO; Andreas Faul one of the co-authors)
Conference Presentations 2012 (2)

September 2012
NIP28 International Conference on Digital Printing Technologies, Québec City, Canada
New deinkable water based inkjet inks
Axel Fischer
RWM (Resource Efficiency & Waste Management Expo) Birmingham, UK
Comingled paper collection in the UK, can we recover?
Ilpo Ervasti, Andreas Faul
Paper, paper products & recycling
Barry Read, Andreas Faul
EcoPrint Show, Berlin (DE)
Paper recycling and deinking
Axel Fischer

October 2012
PrintCongress 2012, Stuttgart (DE)
Wie ökologisch ist der Digitaldruck?
Andreas Faul
NAPIM/NPIRI 2012, Itasca IL, USA
How to get the ink off the paper – A Deinking Technology Update
Axel Fischer

Zellcheming Expo 2012
Booth 321
Recyclability testing and certification

• New ecolabels for print products request deinkability and removability of adhesive applications
• Deinkability testing is based on INGEDE Method 11 and calculation of Deinkability Scores
• Removability testing is based on INGEDE Method 12 and calculation of Removability Scores
• A new method to assess recycling behaviour of redispersible adhesive applications is in preparation (INFOR 166)

Opposition against German “Kreislaufwirtschaftsgesetz” (act on closed-loop materials management)

• Initiative of German industry associations to EU Commission
• Help requested to act against monopoly of public authorities
Project work

- **INGEDE Projects** – afternoon session today
- **Third-party funded projects** – more details tomorrow
- **EcoPaperLoop** – a Central European project working hand in hand with INGEDE’s external activities, e.g. recyclability, collection of paper for recycling, – a comprehensive overview right after this

Involvement in events 2012 –
**INGEDE Office and Public Relations**

- **Conferences, symposia, trade shows**
  - Attendance at 16 events, 11 presentations, 4 times with booth
- **Technical Committees of the paper value chain**
  - 28 physical attendances and 2 telephone conferences
- **Project work**
  - Attendance at 7 physical and 2 telephone INGEDE project meetings
  - 16 meetings of third-party funded projects
  - 4 physical events of EcoPaperLoop and 1 Skype conference
- **INGEDE member activities**
  - 2 visits at potential members
  - 2 Regional Forums and 3 further visits at members
  - 8 physical working group (and related) meetings plus 13 telephone conferences
• **Press Release @drupa**
  Better deinkable digital prints

• **INGEDE Website**
  Updated design, high response

• **Mill visit** with Ricoh UK
  at Steinbeis Paper

• **Deinkability tests** with digital printer manufacturers and printers

• **Cooperation** to develop deinkable Inkjet inks
  with Sepiavax (Austria)
Inge addresses problems in deinking liquid toner and inkjet print products

In the context of the current hype around new printing technologies, and given rising envi-
momental concerns, developers of printing technologies have been quick to point out that their
innovations are green. For example, some companies claim their liquid toner system is greener be-
cause it uses less energy, while others say their inkjet printing system is more environmentally
friendly because it does not require the use of harmful solvents.

According to the association, liquid toner also constitutes a major challenge for paper recy-
cling. HP's inkjet printer use, for instance, was one of the first digital print products that caused
new damage in a paper mill. Damage of more than 100,000 tonnes when photo book overprints rendered
an almost eight-hour production of high-quality recycled paper unusable. Since then, it has been fol-
ed to mix indigo overprint with other white-re-
toned paper. Instead, it has to be collected and
processed separately, i.e., into corrugated board. Inge reports that new liquid toner technol-
ogy, which was presented at the drupa fair and
uses a different polymer system, seems to work
much better for deinking tests using cleaners.
Quantum technology have shown results as
good as if any toner had been used. As soon as
commercial print products using this technology
are available, Inge will perform its own tests to
determine whether the initial results can be confirmed.
INGEDE Member Activities 2012

21st INGEDE Symposium in Munich (Feb 2012)

INGEDE Member Activities 2012 / 2013

• Working group Paper for Recycling
  (Manfred Geistbeck)
  17–18 Apr 2012 in Perlen (Perlen Papier)
  27–28 Nov 2012 in Grand-Couronne
  (UPM Chapelle Darblay)
  16–17 Apr 2013 (Berlin or Dachau/Plattling)

• Working group Deinking Process
  (Anne-Katrin Klar)
  18–19 April 2012 in Perlen (Perlen Papier)
  28–29 Nov 2012 in Grand-Couronne
  (UPM Chapelle Darblay)
  21–22 May 2013 (Eilenburg)
INGEDE Member Activities 2012

• INGEDE Regional Forums
  • Austria (May 2012)
  • Eastern Germany (June 2012)

• Objective
  • Discussion with members in German language

• Agenda items
  • INGEDE’s tools
  • Digital printing / news from drupa
  • INGEDE working groups
  • Projects

INGEDE Symposium 2013

INGEDE Member Activities 2012 – LinkedIn

• INGEDE runs a closed group “INGEDE Members & Officials”

• Group members are INGEDE members, staff at the INGEDE Office, Public Relations and Country Representatives
Outlook 2013

• Finalisation of EN 643
• Acquisition of members in “newer” fields – white layers of board and corrugating base paper
• Seminar in Poland (organised by EcoPaperLoop)
• On-going activities for collection of paper for recycling recyclability assessment digital print deinkability …
• Catalogue to identify critical print products in entry inspection

Thank you for your attention!