The **hubergroup** is an international combine of 40 manufacturing companies has a sales network with 125 offices and representatives around the globe.
The hubergroup ... achieved total sales of approx.
825 Mio EUR in 2017

has more than 3500 employees
worldwide

is one of the biggest ink manufacturers
in the world

is the most innovative supplier in the
printing ink industry

Future UV growth markets

Commercial Offset:
• LED-UV set
• LED-UV news

Packaging Offset:
• LED-UV poly Low-Migration
• UV pack Low-Migration

Packaging Flexo:
• LED-UV poly Low-Migration
• UV pack Low-Migration
As printing-ink manufacturer, we bear a massive responsibility for both mankind and nature - and we intend to fulfil it through our products.

Heiner Klokkers
hubergroup CEO
Environmental & Employees Protection

- **Integrated Management System**
  - Internal and external audits
- **ISO 9001: 2008**
  - Quality management system
- **ISO 14001: 2004**
  - Environmental management system
- **OHSAS 18001: 2007**
  - Occupational Health and Safety Management System
- **ISO 50001: 2011**
  - Energy Management System
- **Responsible Care**
  - Responsible care of the chemical industry

Our Energy & Carbon Footprint Strategy

- **Continual expansion of renewable energy**
  - 2013 approx. 34%
  - 2016 approx. 44%
  - 2017 100% + CO₂ Cancelation

- **Avoidance and efficiency improvement**
  - Avoiding the use of dry pigments and dry resins, the energy demand could be reduced up to 50%. An energy management software controls and reduce our daily energy needs.

- **Energy cycle**
  - Efficient re-use of a process heat for heating and warm water
Status Deinking + Recycling

From hubergroup’s view not satisfactory!

Reasons:

• Too little pressure from outside
• Not in the focus of brand owners and end customers

We’ll stay on it!

Print systems not/hardly deinkable

• UV standards (Mailings, Packaging …)
• UV iron doped (LE-UV, H-UV …)
• UV LED
• UV Flexo
• UV Screen print
• UV Gravure print (Coffee packaging …)
• UV Finishing (Varnish …)
Other print systems not/hardly deinkable

- Digital (Indigo …)
- Laminated prints
- Photo books
- Partly: mineral oil free prints with both side water-based varnish

huber group Targets/Activities

- Sustainable Offset konv. + Offset UV + Liquid (e.g. Healthy Printing Project Cradle-to-Cradle)
- Developing of affordable inks (e.g. sheet-fed Cradle-to-Cradle-assortment)
- Ink technology for newest machine requirements
How does hubergroup proceed?

- Structured (e.g. mineral oil free HS)
- Building Network + Partnership (e.g. Healthy Printing project)
- Integrating process participants

Way of intermediate steps

- Define targets
- Analyse actual status
- Develop solutions
- Check feasibility
- Implement solutions and start all over again

The way is the goal!
What is the project comparable to?

100-meter run

Projects in the past

- Dampening solutions
- Water-based varnish
- Deinking of heat-/coldset inks
- Chlorine-free bleached paper
Current economic project

• BMW i3

What do we need for a successful implementation?

• Endurance
• Strong partners
• Willingness to see intermediate goals as success
Thank you for your attention!

Deinkability Update: UV Cured Prints

Axel Fischer
International Association of the Deinking Industry
(INGEDE)

INGEDE Symposium 2018
28 February 2018
Munich, Germany
Deinking of crosslinked inks

- **Problem:**
  - large particles
  - not or little hydrophobic

- **Dispersion varnishes**

_Dirt specks in a mill_
Dirt specks in a mill

Mineral-oil free ink – false claims

- Self-designed logo in customer magazine, sustainability report, all printed in LE-UV
Der erste Großauftrag an unserer neuen LE-UV-Maschine läuft.

Lebensbaum

Reaction!

Öko-Druckfarben

Crosslinked inks – real damage by UV

Crosslinked inks – real damage by UV
Crosslinked inks – real damage by UV

Mineral-oil free ink

- Deinkability test of prints with mineral-oil free ink
LE-UV ink

- Deinkability test of prints with LE-UV ink

Dispersion varnish

- Deinkability test of prints with dispersion varnish
INGEDE ...

- Discussion and joint testing with ink manufacturers in Germany, Europe and Japan
- Discussion with UV (and other) OEMs
- Discussion with printers and associations

- to be continued ...