PrintCity Alliance

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The PrintCity Alliance is...

...18 years young - here at Interpack 2017
PrintCity Alliance

Since 2013, we focused mainly on the packaging sector

... in German speaking markets
This region is highly active in creative packaging materials, techniques, design and applications

Some say German speaking markets have been the ‘melting pot’ of packaging creativity and innovation in Europe
From *print* to *packaging*
Objectives and Strategy

Understanding the world of our customers

Dialogue with all stakeholders along the Value Chain
Now we have thoughts of bringing our alliance members packaging leadership to more International markets again:

- Here at Interpack we have met with many from international markets
- Brand owners, designers, packaging producers and more
- We have the desire to increase international activity 2018 – 2020

Today we introduce the latest Interpack innovations and products of 3 of our leading PrintCity Alliance members:

- Epple Druckfarben, Leonhard Kurz, Metsä Board
epple. essence of passion.

See us with the PrintCity Alliance - Hall 11 - Booth B04
essence of passion
Intelligent Packaging

Dr. Carl Epple
Epple presents intelligent colour systems at Interpack

• Essence of passion – Full of passion for packaging print

• Diverse colour and varnish systems for intelligent packaging

• Important benefits for brand owners, print shops, agencies
What is intelligent colour?

- Epple offers special products focused on latest packaging needs
- The food sector has high standards of quality control – special needs

- *Here at Interpack we present a new migration harmless, organically neutral solution for food packaging needs...*
Printing Inside Packaging - Intelligent colour

• Epple is already a pioneer in materials in direct contact with food:
  
  - BoFood MU Next Generations – for the outside of packaging
  
  - BoFood organic – for inside printing
  
  - BoPack GAMA – migration reduced materials

• As mentioned, here at Interpack we focus on something new...
BoFood Organic

• *The only offset ink for direct food contact*

• Highly desirable and usable for *internal printing* of food packaging

• Intelligent Packaging can now use ‘inner surfaces’ for info and advertising:
  - QR Codes
  - Product information
  - Branding
  - Far more opportunities...
BoFood Organic

• Unprecedented possibilities for branded companies, production specialists and designers

• Intelligent packaging - now link to extra information on the Internet from printing ‘inside the box’

• *Increases brand power and reach*...


➔ *print samples are available at the PrintCity booth*
Thank you for listening

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www.epple-druckfarben.de
KURZ INSTANT PROTOTYPING

New prototyping service made by KURZ

Leonhard KURZ Stiftung & Co.KG

Stéphane Royère

Head of Business Area Industrial Products
Product Management Graphic Industry
WHY KURZ Instant Prototyping?

- Big product launches are rare
- Life cycle of packaging is getting shorter and shorter
- Tendency is going to smaller product lines with several variations
- Small or special editions, seasonal or for dedicated events (e.g. Super Bowl, Football World cup, Valentines…)
- Decisions on packaging or labels are done on a short term notice, not on the long term anymore.
  (Packaging relaunch has to happen within max. half a year, even one week…)
Authentic Metallization at Zero Series

- Setting up packaging or label mock-ups or prototypes
- Integrating KURZ hot stamping or cold foiling technology
- Conceptualizing with real metal effects before the first production run and reduce setting costs.
- Bringing packaging ideas into reality. Visualizing it.
- Playing with the diversity of KURZ portfolio – gold, silver, holographic designs, pigmented products – No limitations
- Creating new own shades.
- Being quick 24 hours to max 1 week.

→ KURZ Instant Prototyping
Variety of shapes and colors with a wide variety of films made by KURZ

Diverse combinations and color options feasible

MIX YOUR FOIL COLORS
Flexibility in overprinting and variety of attractive metallic color combinations possible by full-surface overprinting of the silver foil

Adjustment of cold foil and GlO effects (hot)

BE FLEXIBLE
Chocolate/Confectionary Packaging:

- Full integration & variety of gold/silver shades from KURZ.
- Original dies from h + m (Hinderer + Mühlich)
- Delicate, impressive and extraordinary relief effects
Integration of attractive & unique holographic effects for the sophisticated revaluation of labels

→ e.g. Light Line, Deep Lens & White Circle

NO LABEL LOOK
Package 1: MOCK-UP FLAT

One Mock-Up (packaging) flat or One Mock-Up (label) flat
→ Printed, die cut, folded → printed, cut, ready for adhesive bonding

- Incl. existing foil shades (LUXOR®/ALUFIN® colors or LIGHT LINE®)
- Simulation of flat (HOT) stamping or Overprinting possibilities (cold foil process or GIO)
- 3 variations of packaging or label samples
- Therefore, possibility to choose 3 existing colors (e.g. red/blue/green or 3 different colors shades or 3 different LIGHT LINE®/holographic shades)

Extra services:
- Additional colors (per packaging/color) from existing color range/product portfolio.
- Integration of own brand color (colormatch).
- Thereof: Foil sampling roll (2.500 m²) of this colormatch in LUXOR/ALUFIN

Package 2: MOCK-UP RELIEF

as per package 1 plus h+m stamping dies
Package 3 - MY CREATIVE DAY @ KURZ

Joint Mock-Up production at KURZ Fürth Germany
including full color adjustment and mock-up completion – 4

Example Agenda for the CREATIVE DAY:

- 09:00 Arrival in Fürth (all necessary preparations were finalized prior to that)
- 09:30 Demonstration of first color samples: adjustments can be done
- 10:00 Guided tour through KURZ company
- 11:30 Adjustments have been realized. Packaging or Label is available as silhouette and template for printing. Common templates release for mock up production
- 12:00 Lunch break
- 13:00 First packaging/label samples are finished. Design adjustments possible (e.g. bigger font).
  - Optimization of stamping foil integration was done automatically
  - Further alignment conversation
- 15:30 Finished mock ups are presented to the customer, final acceptance through customer
- 17:00 Final mock up handover. End of “MY CREATIVE DAY”
KURZ INSTANT PROTOTYPING

THE BEST WAY FOR PACKAGING PROTOTYPE OR MOCK-UP.

- INSTANT
- RAPID
- FLEXIBLE
- VARIABLE
- COLORFUL
- REAL METAL
- HIGH GLOSS
ABOUT KURZ

• Family owned company, since 1899 5th generation
• 5,000 employees
• 24 subsidiaries & 11 production locations
• Worldwide biggest stamping foil manufacturer
Thank you for your attention!

See you in
Hall 14 – Booth D25
or
at PrintCity in Hall 11 – Booth B04
Extrusion coated boards

Stefan Kranz, Technical Service Director
The barrier board market is growing

- The global barrier market is still dominated by plastics and metals
- Our first focus is on markets where our PE coated board is competitive

<table>
<thead>
<tr>
<th>Base board by end use (food and liquid)</th>
<th>2014 1000 tons</th>
<th>%</th>
<th>GAGR 2014 - 2020</th>
<th>2020 1000 tons</th>
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</thead>
<tbody>
<tr>
<td>Liquid packaging</td>
<td>3500</td>
<td>37%</td>
<td>3%</td>
<td>4200</td>
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<tr>
<td>Food service</td>
<td>3500*</td>
<td>31%</td>
<td>4%</td>
<td>3800</td>
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<tr>
<td>Frozen food</td>
<td>2200</td>
<td>23%</td>
<td>1.5%</td>
<td>2400</td>
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<tr>
<td>Fresh food</td>
<td>700</td>
<td>7%</td>
<td>4%</td>
<td>900</td>
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<td>Bakery</td>
<td>70</td>
<td>1%</td>
<td>2%</td>
<td>80</td>
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<tr>
<td>Beauty care</td>
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<td>1%</td>
<td>5%</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10045</strong></td>
<td><strong>100%</strong></td>
<td><strong>3%</strong></td>
<td><strong>11480</strong></td>
</tr>
</tbody>
</table>

*Partly sized paperboards without extra barrier e.g. plates
Entry to PE extrusion supports our growth strategy

• Metsä Board will grow in existing and new paperboard businesses

• We are entering also Food service market with food service boards (FSB)

• Metsä Board decided invest in PE extrusion in order to improve our position especially in food and food service markets offering new solutions to our customers

➔ Metsä Board key development project: Barrier coated board
Metsä Board barrier entry roadmap

- **2016**
  - Outsourced extrusion barrier

- **2017**
  - Own extrusion line in Husum
  - Outsourced, current dispersion technology
  - Improved dispersion
    - Less cost
    - Better functionalities
  - Bio-based raw materials

**FOCUS NOW**

**MARKET ENTRY**

**Sustainability**

**Technology**

**DEVELOPMENT PHASE**
Metsä Board starts with PE coated products

• Metsä Board will start extrusion coating using only LDPE (low density polyethylene) referred often as PE (polyethylene)
• PE fulfills the normal requirements and is the most commonly used barrier material in our target market
• PE generates following properties to the board
  – Good moisture barrier
  – Good water barrier
  – Grease barrier for short time
  – Good heat sealing properties
Base board: BM 1 in Husum
The most modern FBB machine in Europe

Capacity 400 000 t/a
Web width 6.6 m
Grammage range 185 — 350 g/m²
Products: FBB (MetsäBoard Natural)
          FSB (MetsäBoard Pro)
Extrusion line information - Husum

Line information
• Two extrusion coating stations (tandem)
• Capacity 100 000 t/a
• Drive speed 600 m/min
• Trim width 2200-3480 mm
• Machine length = ~100 m

Other parts of the investment
• In addition to extrusion machine investment includes winder, raw material handling, core handling and required planning and building costs
Metsä Board PE coated board product portfolio

- MetsäBoard Natural FSB Cup
- MetsäBoard Pro FSB Cup
- MetsäBoard Natural FBB
- MetsäBoard Pro FSB
- MetsäBoard Pro FBB Bright

**PE coated product portfolio**

**Standard**: Available for all customers, specs in internet

<table>
<thead>
<tr>
<th>0 or 12 g/m²</th>
<th>15 or 18 g/m²</th>
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<tbody>
<tr>
<td>LDPE</td>
<td>LDPE</td>
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</table>

**Other PE coatings**: Available for limited customers with separate approval for big volumes

- Hot cups
- Cold cups
- Ice cream
- Clamshells, plates, trays
- Frozen and fresh food
- Hygienic products

All baseboards made in Husum
Make the most of Metsä Board
Q & A