

The next big thing in high volume packaging.

interpack 2023

Dr. Ludwin Monz & Matthias Boog | Dusseldorf, 05.05.2023



HEIDELBERG: The Company.

Market segments and key points.



Packaging printing



Label printing



Commercial printing



Electro mobility



~ € 2.4 billion
Sales (FY 22/23)



~ 9.500
Employees



170 years
Reliable and highly innovative partner for more than 170 years



Global reach Sales & service network at 250 locations in 170 countries

HEIDELBERG is shaping the printing industry. Driven by the market.



Customer needs are our guiding principles.



With **increased automation** we help our customers be **more efficient** and deal with an increasing lack of qualified staff.



Digitization allows our customers the **optimization** of their **workflows** as well as increased **connectivity**

Our solutions: Clear answers to the essential challenges of the market.



**Cost
pressure**

Higher productivity
through automation



**Lack of qualified
personnel**

Increasing
digitization



**Increasing demands
regarding sustainability**

Resource
conservation

We continue to evolve printing business and explore business areas.

Shaping the printing market

Expand within **packaging printing** and go for **digital** in commercial printing.

Optimize workflow of the **printing** process, also beyond (sheetfed) printing presses.

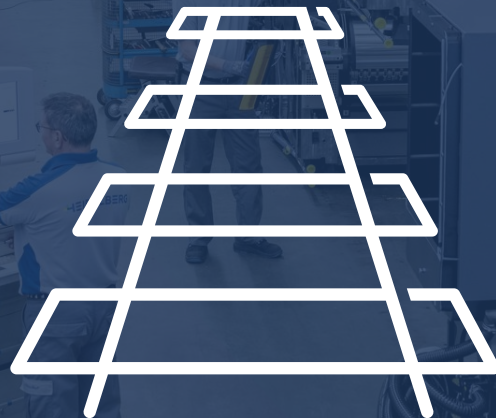
Expand share of **recurring revenues** through lifecycle business.

Explore new adjacent business areas

EV-Charging business, as the first step in this segment, benefitted from **technology synergies to the core business.**

New business fields must:

- Address **megatrends**
- have a critical **market size**
- and fit the **capabilities of HEIDELBERG**



Creation of value finance HEIDELBERG future

A growing market: Packaging and label printing.

Increase of printing volume of

+2,3%

in the packaging market worldwide (PPV)

Globally

**increasing demand
for packaged goods**

due to the growing world population

Increase of the share of folding boxes

**from € 69
to € 76 billion**

in the overall PPV until 2027.

Strong trend towards

zero waste

and water-based inks

Source: Heidelberg bn. Euro, constant 2009 prices & exchange rates

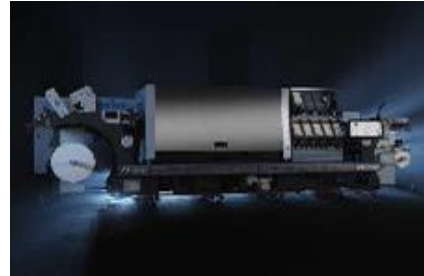
We support our customers along the folding carton production chain. End-to-end.

We continuously **extend our product range** along the production process...

Offset



Digital

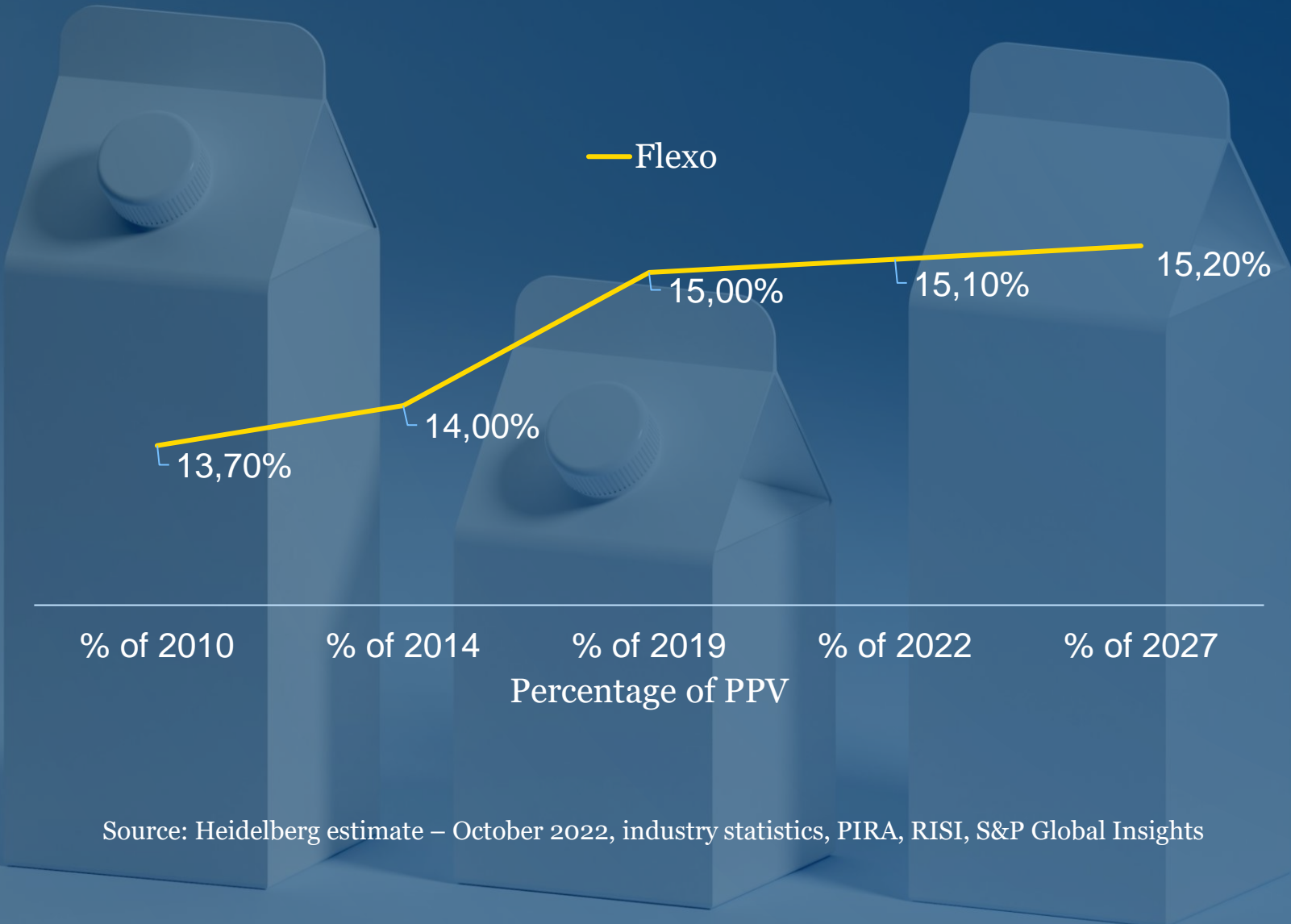


Flexo



... and pursue other growth areas with **new technologies.**

Flexo on a growth course in the folding carton market.



Source: Heidelberg estimate – October 2022, industry statistics, PIRA, RISI, S&P Global Insights

Introducing non-stop production. Engineered in Weiden.
The new HEIDELBERG Boardmaster.



Flexo solutions made in Weiden.

A history of pioneership

- 100 specialists
- Several decades of flexo printing experience
- Founded in 1993

The flexo division within the HEIDELBERG Group

Since 2014 part of HEIDELBERG family

Technology leader in flexographic printing

- Design, assemblance and installment of innovative inline flexo printing presses and die cutters
- Drying systems
- Embellishment solutions
- Data collection and analysis
- Sales & services

Flexo printing: A segment on the rise in folding carton production.

2,4%

annual growth
of flexo printing in
the folding carton
production value.

15%

of the folding carton
value is currently
produced via flexo.

Source: Heidelberg bn. Euro, constant 2009 prices & exchange rates

How the Boardmaster answers the markets most urgent requirements.



Efficiency

- Improved OEE with flying job change - Push to Stop
- Non-Stop operation
- 50% less maintenance costs due to fewer moving parts



Quality and Safety

- Easy to use
- Globally accepted print quality
- Safety during job changes
- High level of automation (Intellimatch)



Sustainability

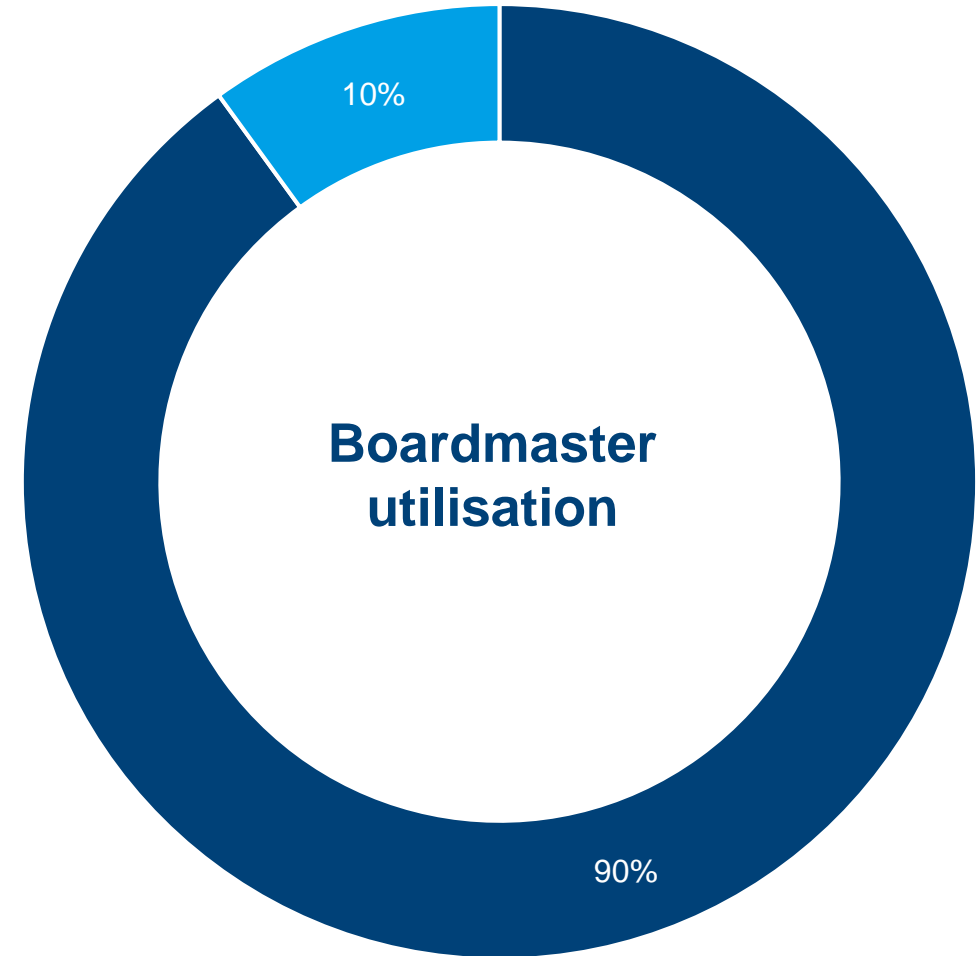
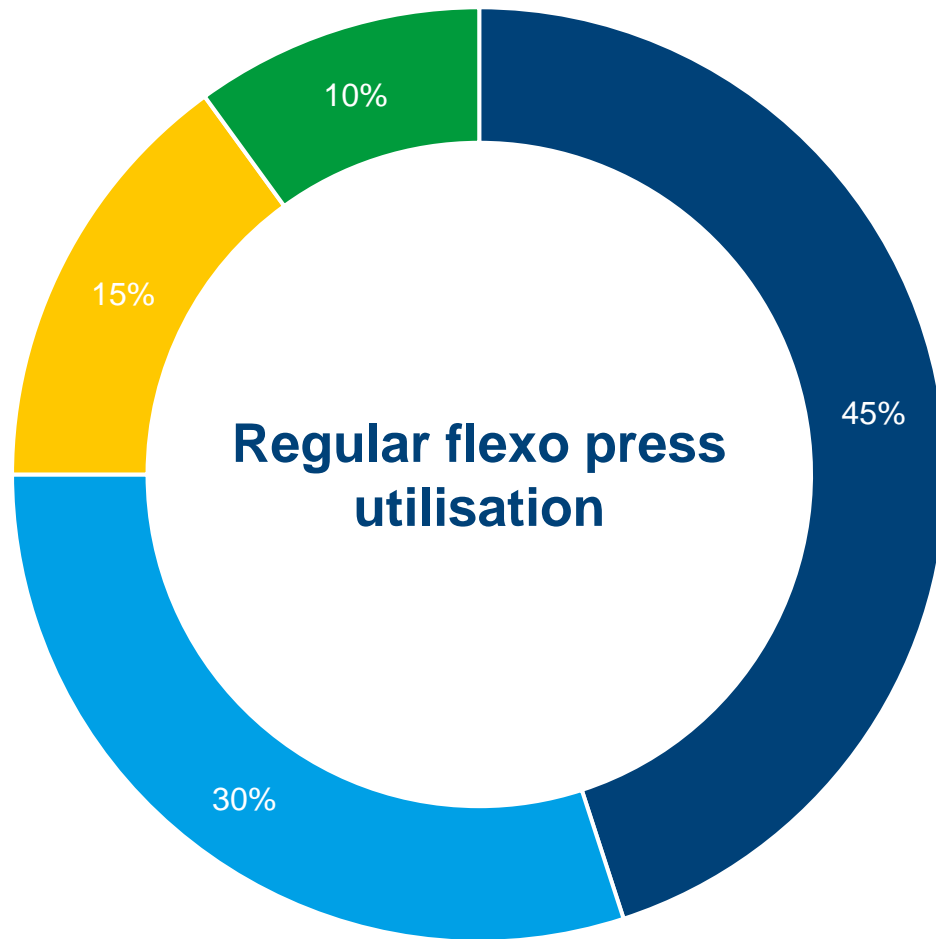
- Significant less energy consumption
- Less start up waste
- Waterbased inks



Modularity

- Investment security for customers
- Optional inline value adds: Flat bed die cutter, laminating, cold foiling

A new era of efficiency in folding carton printing. Doubling productivity while reducing costs.



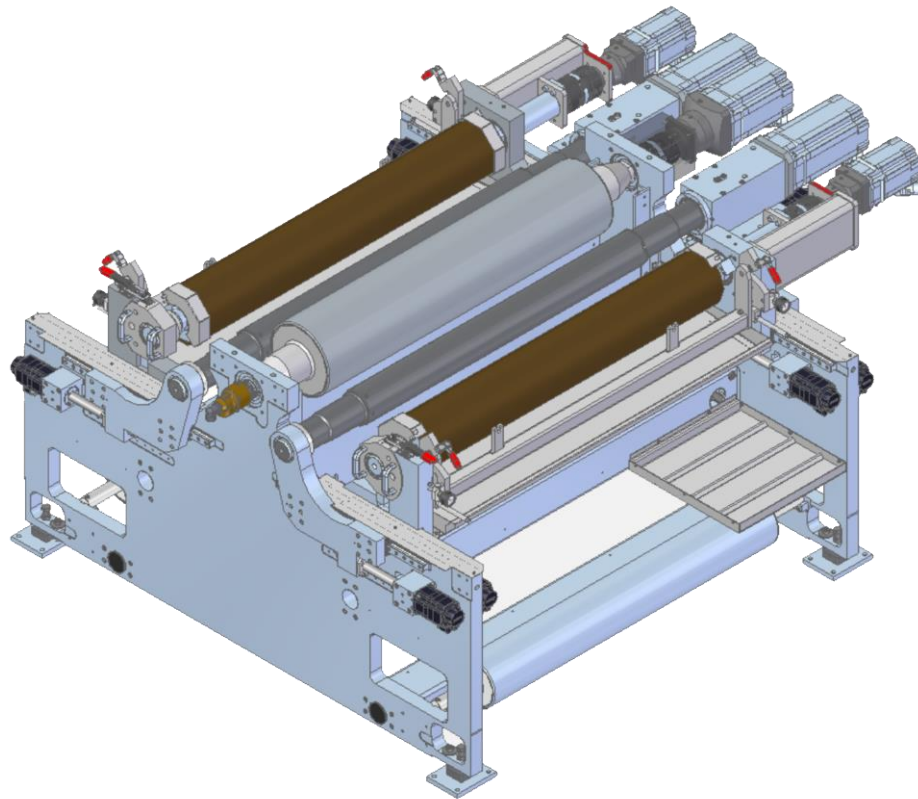
■ Production time ■ Set up time ■ Wash up time ■ Down time

The art of productivity. Simplicity through technology.



The first wide web in-line press
Up to 60% in total changeover
impressive performance,
with zero changeover downtime
(sheet substrate)

A revolutionary print deck design.



Non-Stop Print Deck

- Less start up waste
- Shorter web length
- Autonomous print settings
- Non-Stop operation
- Better ergonomics
- Reduced footprint
- Significantly less energy consumption
- Operator friendly due to compact design

Intellimatch:

The fully automatic offline sleeve scanner that ensures quality.

**Automatic setting of optimal
press parameters
Built-in quality control**

Intellimatch

**A new dimension in high volume folding
carton printing.**

**The first Flexo Printing Press with
ZERO changeover downtime.**

The next big thing in high volume packaging. The new HEIDELBERG Boardmaster

**Thank you for your attention.
Any questions?**

HEIDELBERG Boardmaster – Fact Sheet.

- **Max machine speed** 600m/min equal to 38.000 Sh/h, Option up to 800m/min equal to 48.000 Sh/h
- **Print width** 850mm (33 in), 1020mm (40 in), 1400mm (55 in), 1650mm (65 in)
- **Repeat range** 405/480... 1070 mm (15,95 /18,90 ... 42,1 in)
- **Running direction** right to left OR left to right
- **Substrate width** up to 1670mm (up to 65,7 in)
- **Substrate weight** 70-800 g/m² (17 ... 164 lbs / MSF)
- **Substrate caliper** from 95 up to 1.016µm (4..40pt)
- **Printing method** Flexo (HiDef flexo printing)

HEIDELBERG Boardmaster – Fact Sheet.

- **Backside printing** Yes, possible in every print unit, just change the web path
- **Ink systems** Water-based inks / UV-inks (no ink/water balance, no powder)
- **Drying** Hot air / UV curing
- **Optional value adds (inline)** Laminating, Cold foiling, digital imprint, rotary embossing, screen printing
- **Machine configuration** Roll to roll, roll to sheeter, roll to cutter
- **Ideal combination with** Heidelberg FCL Flat bed die cutter, Inline or Offline
- **Max cut speed** 25.500 Sh/h (300m/min)
- **Cut width** 850 - 1400mm