

# KOENIG & BAUER

## **New Productivity in Sheetfed**

**Innovations leading to drupa – RA 106 X**

Sascha Fischer, Head of Product Management, Koenig & Bauer Sheetfed AG & Co. KG

**we're on it.**

**Over 200 years Koenig & Bauer**

**Koenig & Bauer  
Our pioneering  
spirit is intrinsic**



# Over 120 years Koenig & Bauer Sheetfed

A history of continued innovation

Planetary drive:  
founding the  
world reputation  
of Planeta

**1902**

World's first  
sheetfed offset  
press in unit design

**1965**

Universal gripper  
system as a  
globally  
unique solution

**1989**

World's first  
sheetfed offset  
press with  
disengaging of  
unused inking units

**1994**

DriveTronic SPC:  
the new benchmark  
for productivity

**2005**

AniSleeve:  
fastest anilox roller  
change in the world

**2012**

VariJET 106

**2018**

**1932**

World's first  
four-colour sheetfed  
offset press

**1974**

World's first  
sheetfed offset  
press with  
eight printing units

**1992**

Box frames cast  
in a single piece  
and continuous  
gear train

**2004**

DriveTronic SIS:  
unique in the world  
in sheetfed offset

**2008**

QualiTronic  
ColorControl:  
first inline colour  
control system

**2016**

Connected Services  
and customer portal

For further information please click the date

# Over 120 years Koenig & Bauer Sheetfed

A history of continued innovation



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## What are your expectations?

- What are you expecting?
- Where are your holdups in the process chain?
- What is preventing you to be most productive?

**You are in the center of our activities, you are the driving force behind all our innovations!**



# New Productivity in Sheetfed

Innovations leading to drupa

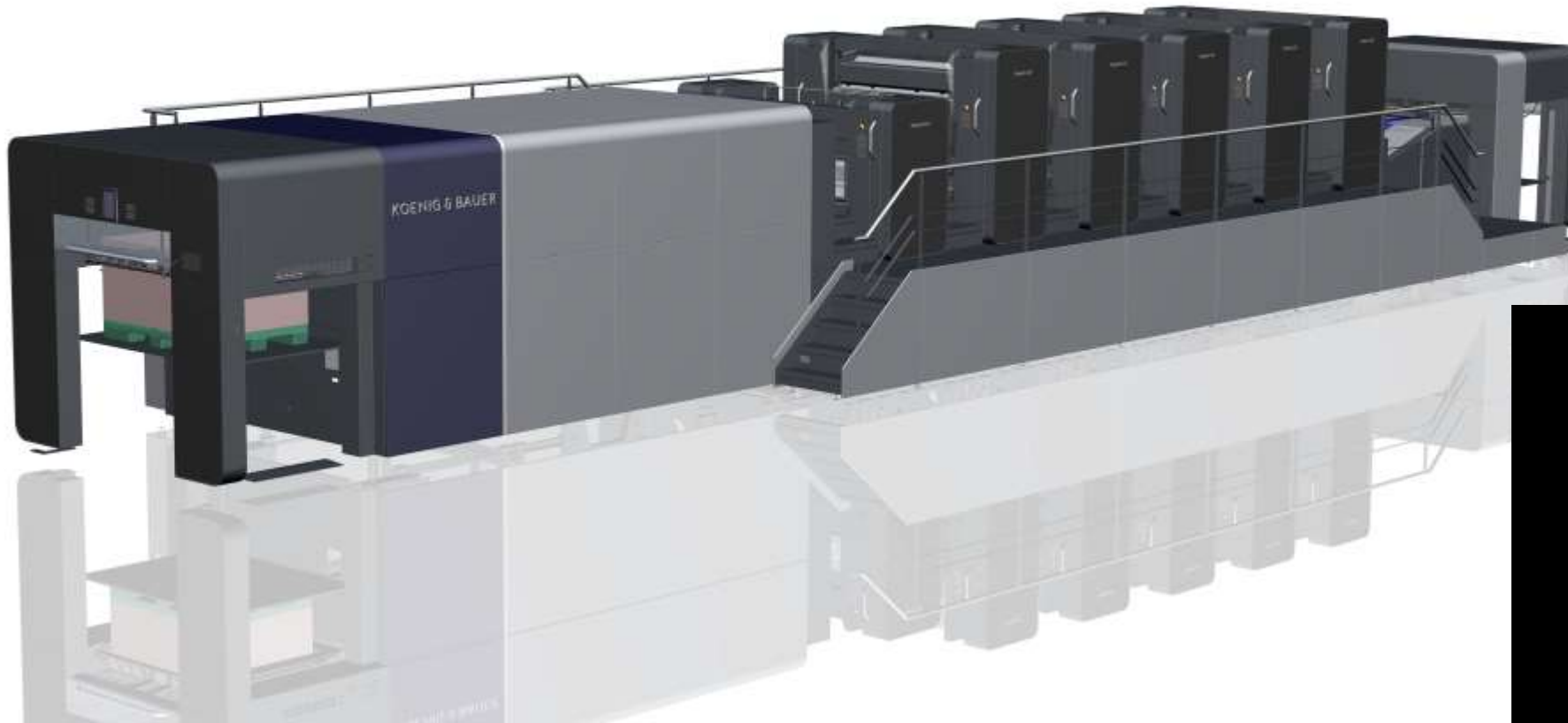
- 1 Shorter Make-Ready –  
**Faster to Print**
- 2 Higher Speeds –  
**Faster in Print**
- 3 Safe Processes –  
**Safe in Print**
- 4 Less Maintenance –  
**Longer in Print**
- 5 Digitalization –  
**Performance Benchmarking**
- = **Higher Productivity**





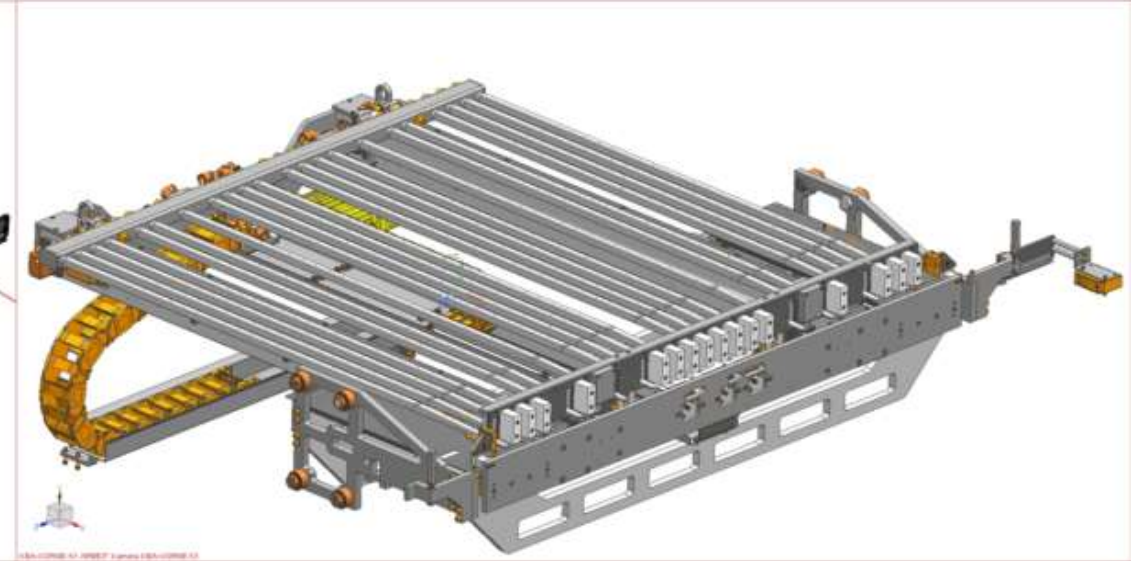
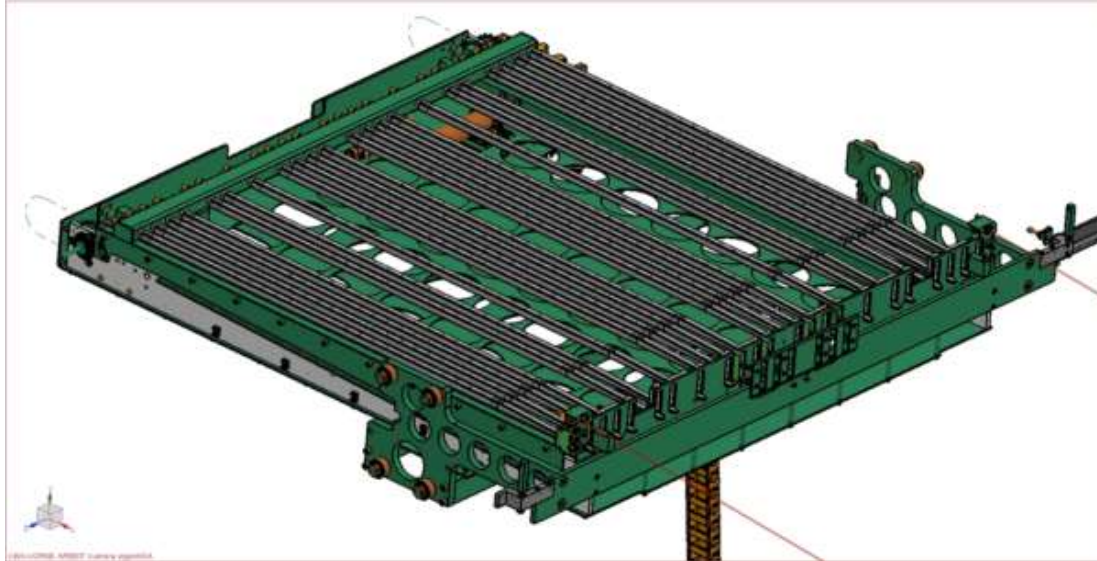
# New Design RA106 X

Intuitive graphical user interface and operations



# Feeder

## Motorized rake adjustment for non-stop feeder



### Currently:

- The rake itself realises the vertical motion and incorporates the rake drive
- Lateral rake movement only without load
- The rake runs on guide rollers
- Sheets held back by a stop plate at the front edge

### New:

- A crossbeam connects sides 1 & 2 and realises the vertical motion
- The drive is mounted directly on the crossbeam and permits positioning of the whole unit
- Linear modules provide for extension and retraction of the rake
- The rake can also move laterally with load



# Printing Unit

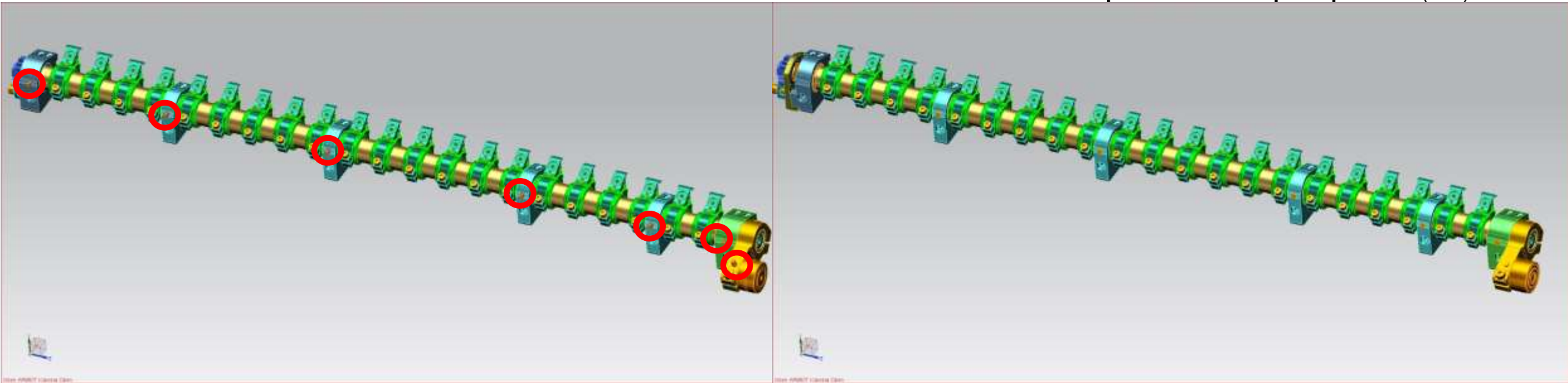
Less maintenance gripper curves

**Infeed drum, swing unit, impression cylinder / transfer drum**

**Currently:** multiple points / gripper shaft

**New:** Few to no lubrication needed, so

192 lubrication points less per press (6+L)



**In total 204 lubrication points less in a RA106 X-6+L**

# Inking Unit

## Pneumatic Ink Duct

- New development to seal the ink zones and to guarantee unhindered adjustment of the ink key settings.
- Today the only known solution to work reliable with all kind of UV ink systems
- The compressed air which escapes through the gaps between the ink keys replaces the grease as sealing agent and prevents penetration of the UV ink.

Ink duct

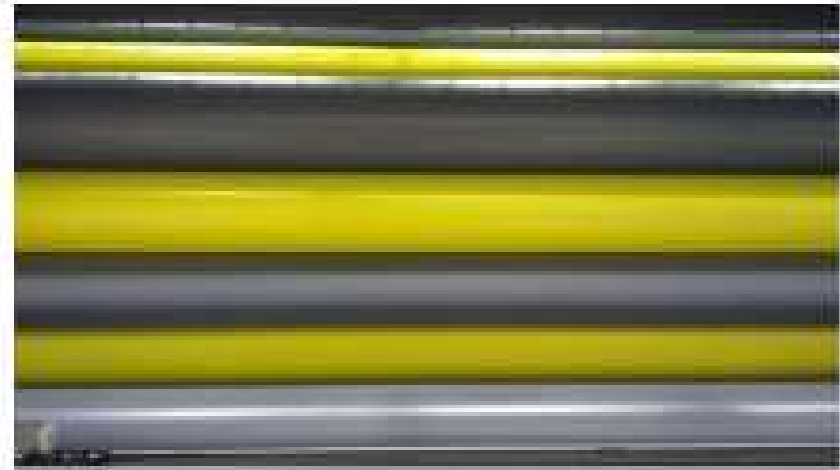
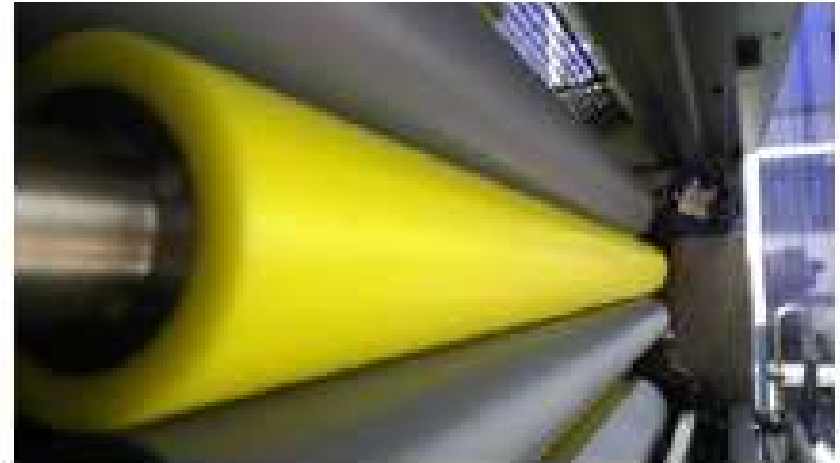


Ink duct with sealing air escaping between the ink keys – “bubbling” ink

# Inking Unit

## New rollers

- DuraPrint rollers in all UV and mixed application presses as standard
- Reduced washing times (adjustment of the washing programs during installation and commissioning of the press at the customers site)
- Up to 4 different circuits incl. deep cleaning available



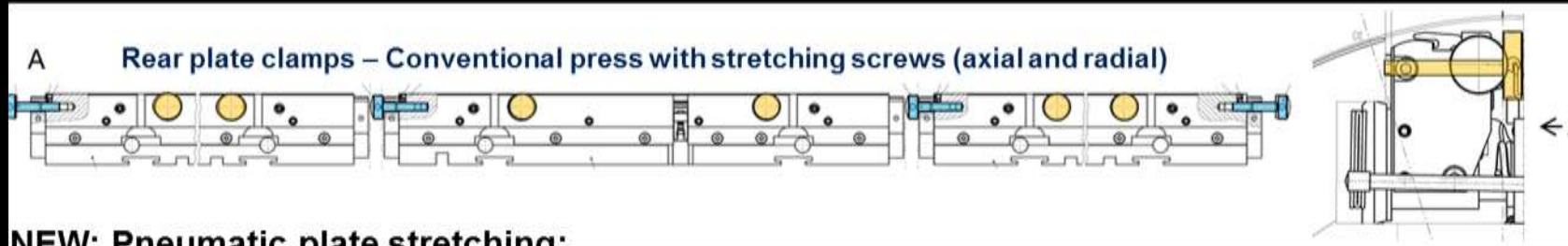
# Printing Unit

Unbent plates (Option)



# Printing Unit

## Plate stretching



NEW: Pneumatic plate stretching:





# Plate Logistics

## Rapida 106 X

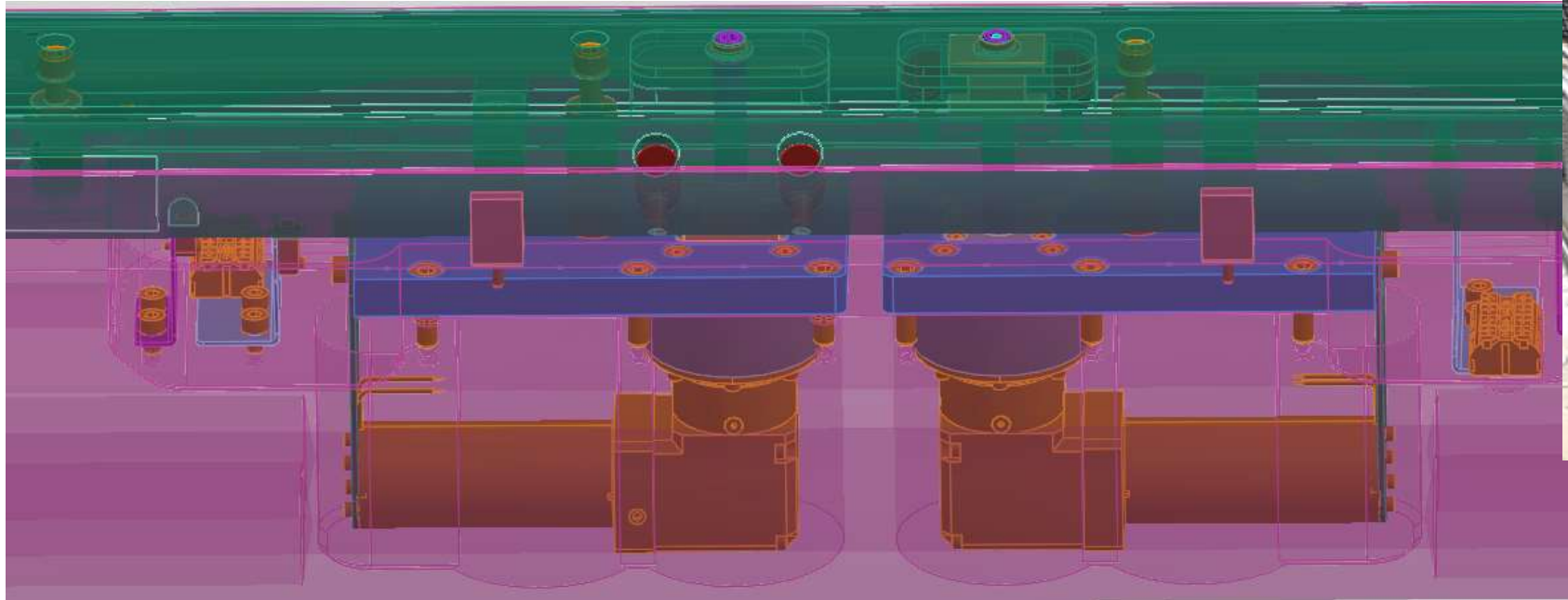
- **No obstruction** by installation above operator / outside machine area
- **Modular design** of the transport system for specific customer requirements
- **Intermediate storage / buffer** of the jobs
- Different track for plate feeding and removal, thus **no obstruction / incorrect change possible**
- Variable plate flow possible depending on hall layout
- Display of the plate sets of docked plate trolley on console
- Display of the plate sequence in the order list
- Identification of the printing plate on transfer to transport system (plate recognition system)
- Tracking and transfer of ID to press control system
- Up to 20 jobs/h, 1 change cycles takes 3 min



# Printing unit

## Motorized blanket tensioning (option)

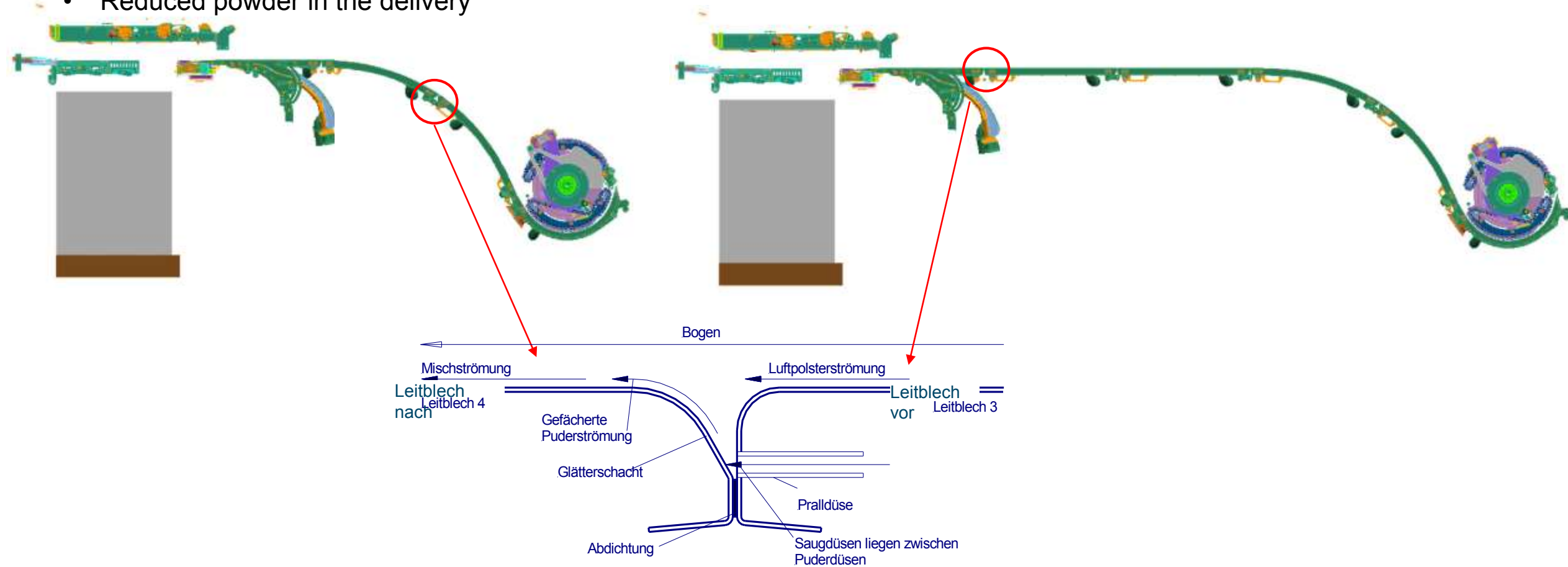
- Tool-free change of blankets
- Tensioning of blankets by two servo motors instead of manual tensioning with torque wrench
- Re-tensioning by push of button from control console



# AirTronic II

## Powder X – dual side powder application

- Powder application on the front- and backside of the sheet
- Reduced powder in the delivery



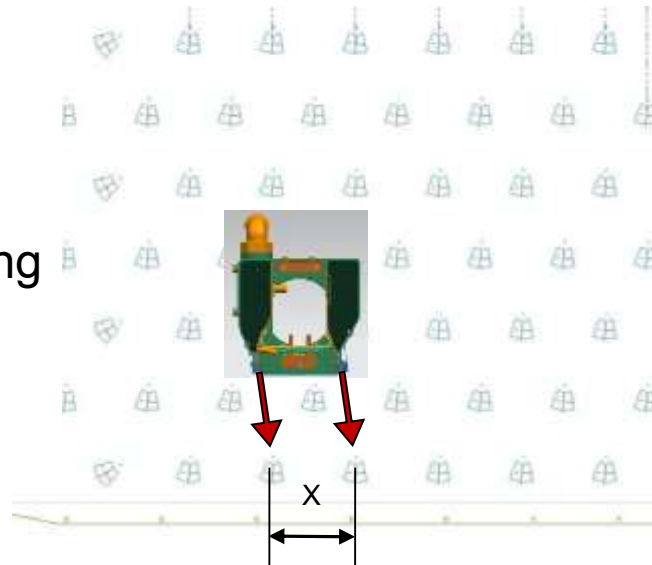
# AirTronic II

Optimized venturi sheet guiding system and dryer efficiency



Optimized geometry and  
direction of nozzles for:

Increased dryer efficiency without increasing  
connected load due to special double  
nozzles for optional use of  
IR + hot air or only hot air





# Status Display

RA 106 X

One LED stripe at the delivery

Color status with:

White	-	press in production
Blue	-	press in standby
Yellow	-	warning
Red	-	alert / fault

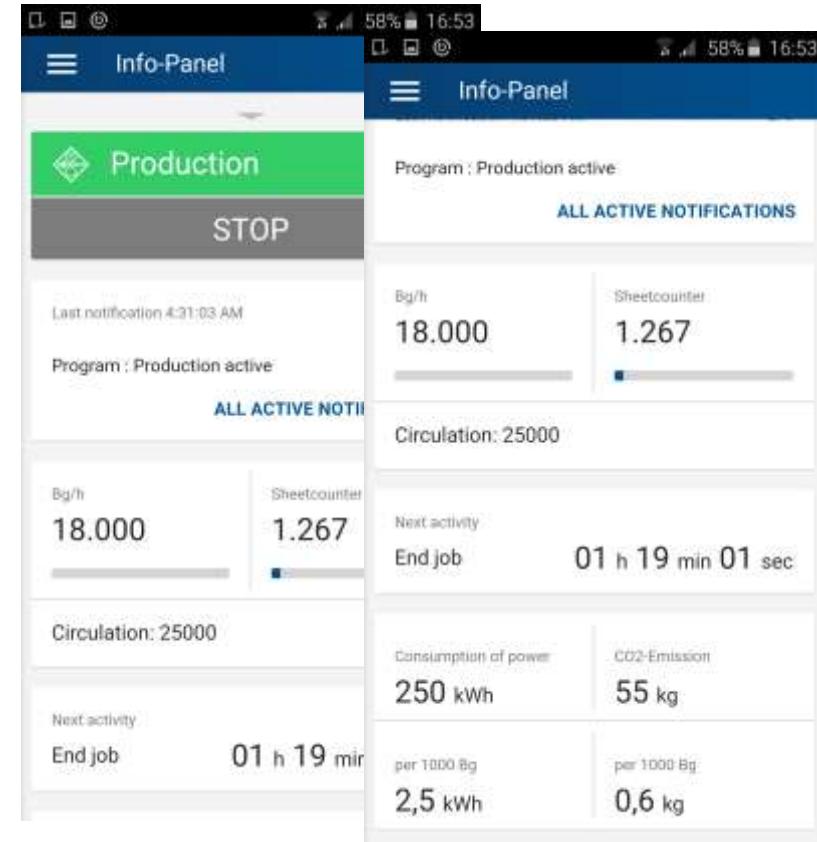
Detailed status of the press can be seen  
via the ErgoTronic App





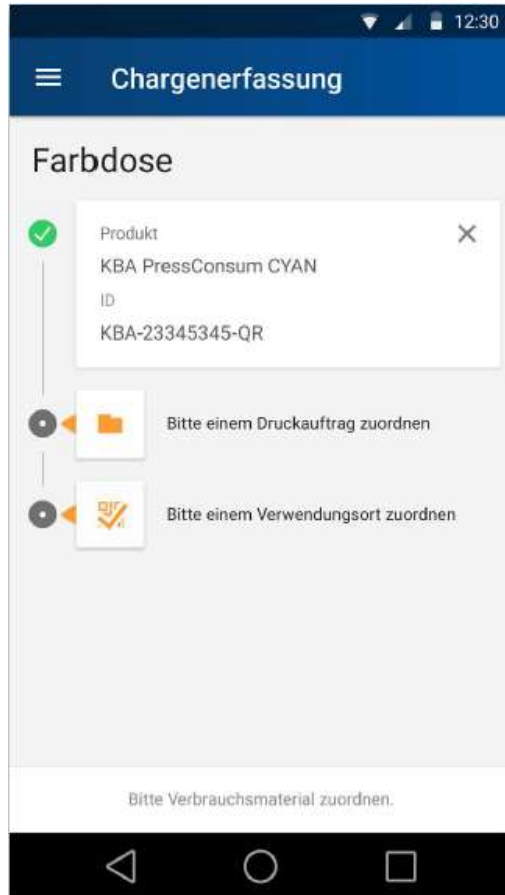
# Award-winning Rapida LiveApps

- Operating functions can be controlled via a smartphone
- Clear overview of all important information on the current and next jobs, as well as a list of remaining jobs and energy consumption values
- Maintenance Manager
- Consumables tracking
  - NFC-assisted recording of batch and serial numbers
  - Link to the central database of LogoTronic Professional
  - Automatic assignment to a particular job



# ProductionApp

## Extended production management



- NFC-assisted recording of batch and serial numbers
- Integration with the central database of LogoTronic Professional
- A process menu is opened automatically on the smartphone and guides the operator through all further steps
- An operating button is only required to start the scanning process
- Automatic assignment to a particular job, with subsequent saving of the data

### Useful for:

- Inventory management
- Tracking of consumables
- Remaining lifetime of consumables
- Suitable for a variety of processes and consumables (powder, inks, blankets, etc.)

# Connected Services

## Visual Press Support

- Interactive Video-Chat via mobile device
- Visual description of remote maintenance issues
- Highest efficiency in communication
- Several functions
  - Bidirectional audio & video transmission
  - Freeze- & screenshot functions
  - Graphic mark functions
- Fewer service visits by a technician
- Reduced service times and costs



It is wonderful that Koenig & Bauer  
Sheetfed has the best technology.  
But more importantly, **we can speak  
with you openly** on what is best for our  
organization.

Packaging printer, US

Together, we can determine  
the **ideal solution package**  
to meet your requirements.




# KOENIG & BAUER

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