

# LET'S CONNECT

■■■■ PRINECT ■■  
USER DAYS

**Prinect DFE Technology:  
much more than just a postscript rip!**

**Workshops 8 & 14**

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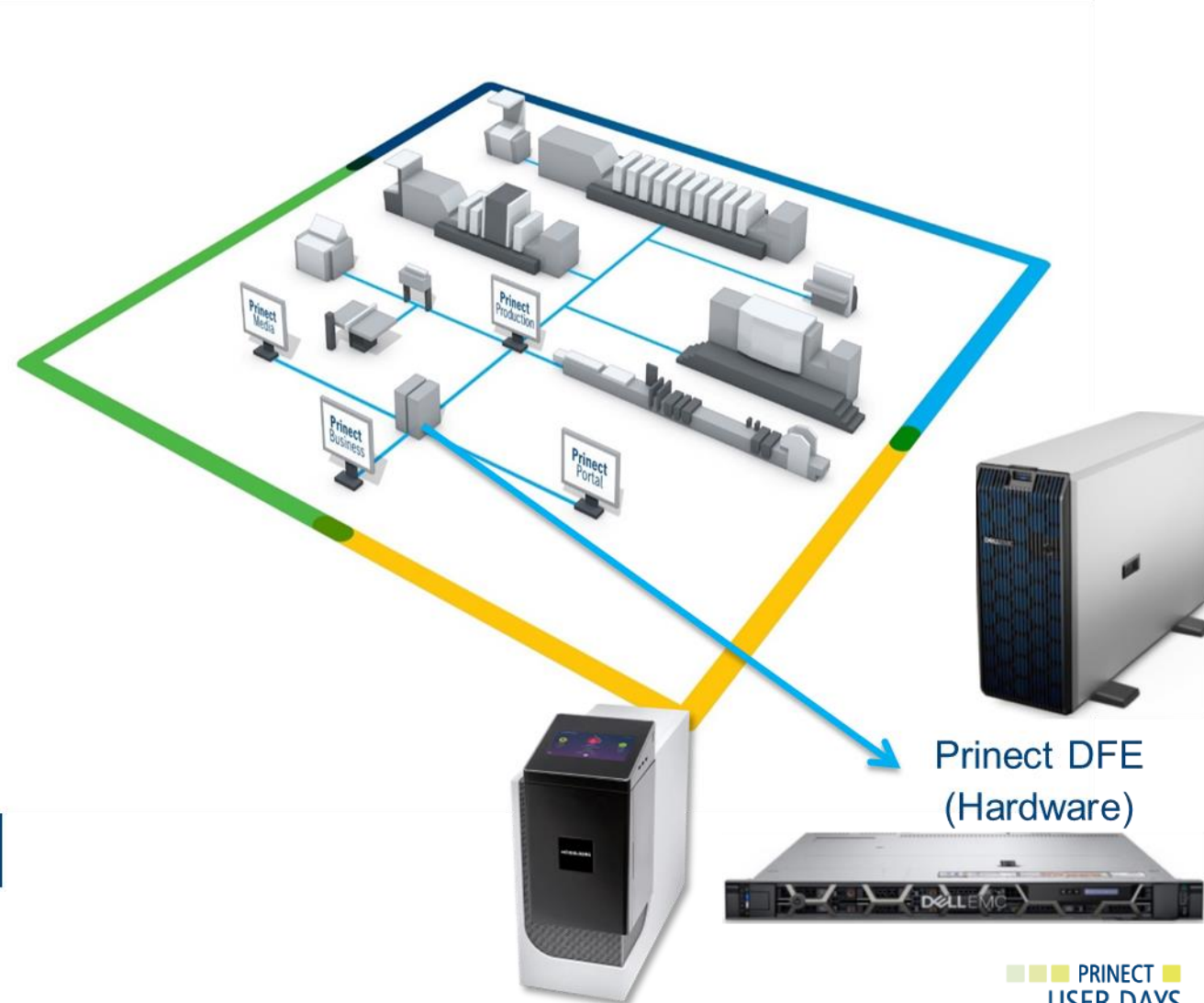
Why Prinect?

Prinect DFE

# Why Prinect?

Prinect supports the standardization of production.

- We offer the best color management in the industry
- Color Center for easy adjustment, calibration, and profiling of the digital press
- We have an integrated ink estimation (Digital Label)
- Easy layout generation is included
- Prinect is a scalable workflow
- Leverage your early investments



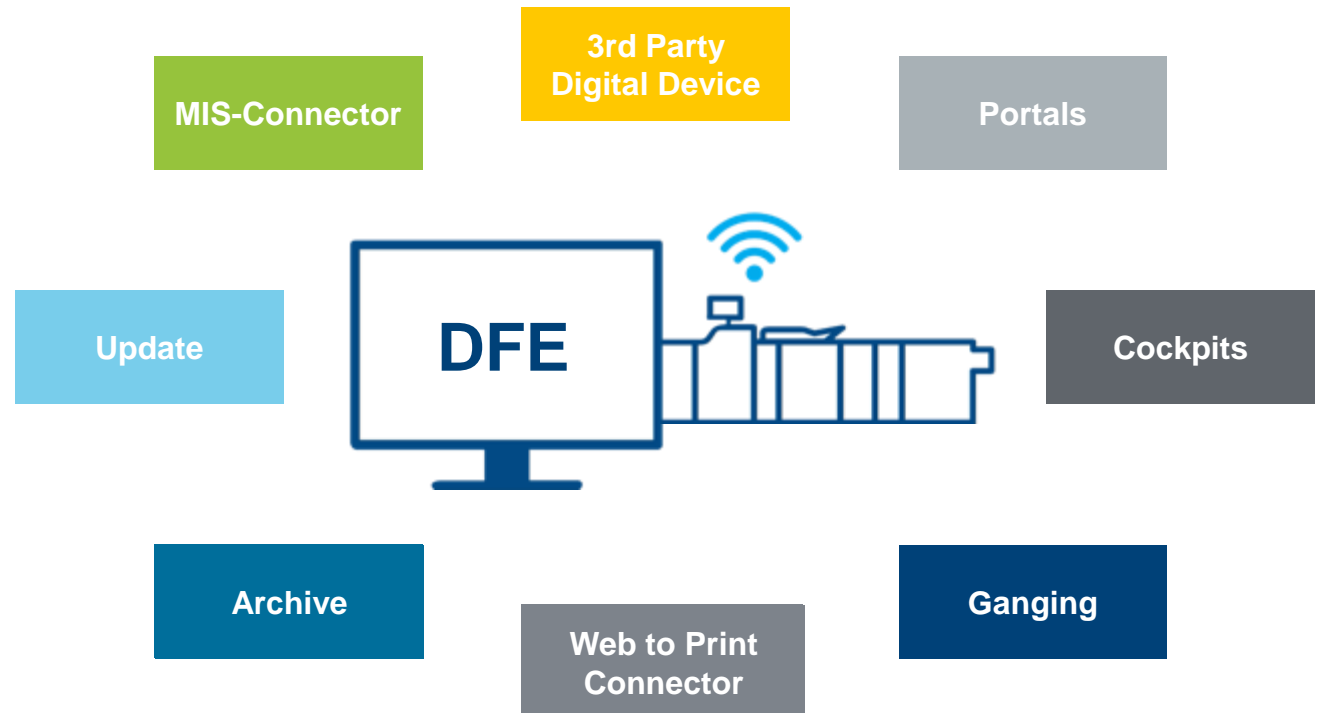
PRINECT  
USER DAYS

# What's Prinect Digital Frontend? Standalone & Integrated Workflow

## Standalone



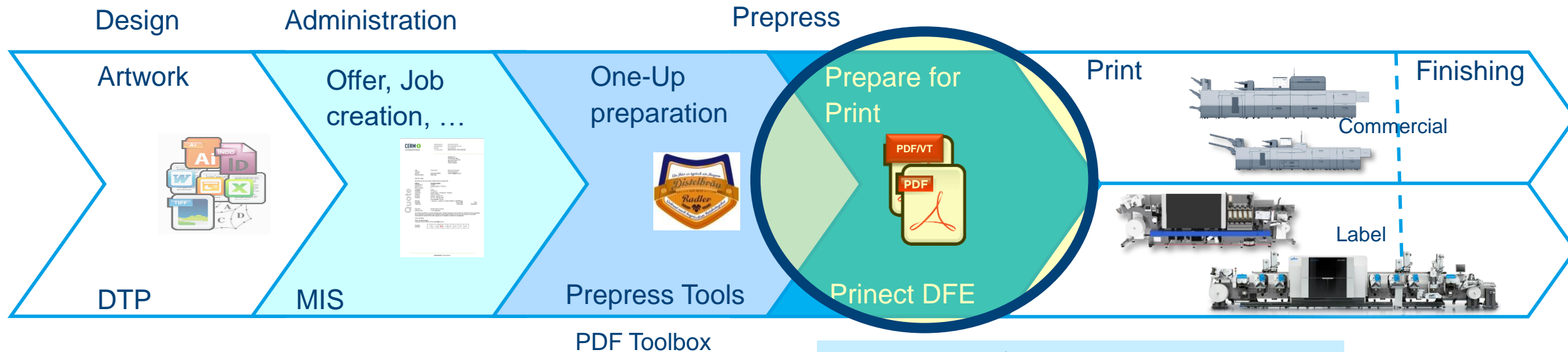
## Integrated with Prinect Production



# Prinect DFE

It is much more than just a postscript rip!

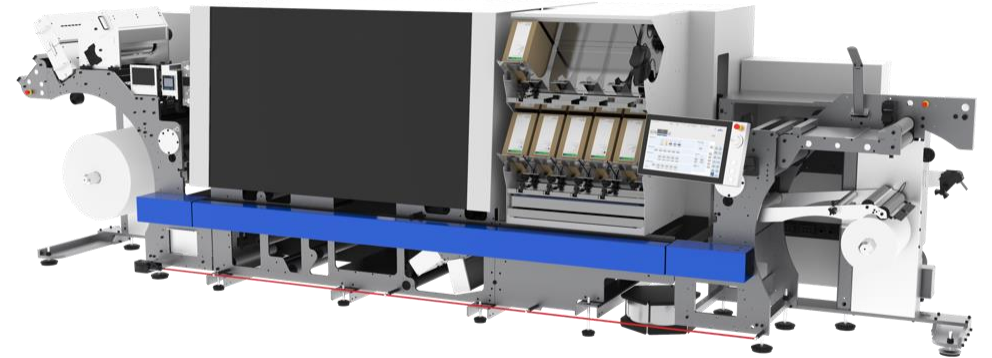
It is the **smallest workflow** you can have from Prinect.



- Automated preflight and PDF optimization
- Live rendered preview (WYSIWYG)
- Easy imposition (step & repeat)
- Spot color matching
- Job management and tracking
- Prinect Color Center
- Ink estimation via Prinect portal (Digital label)
- Data preparation for iVDP (Prinect PDF Toolbox)



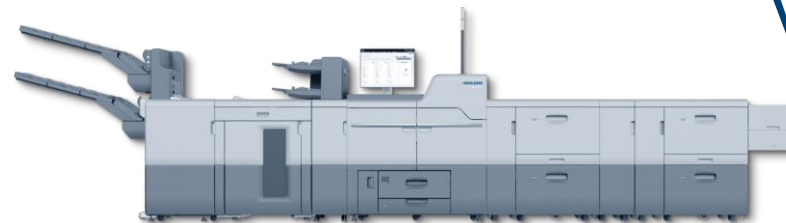
Labelfire 340



Gallus One



Versafire



# Prinect DFE components: what's including in?



Option for Versafire

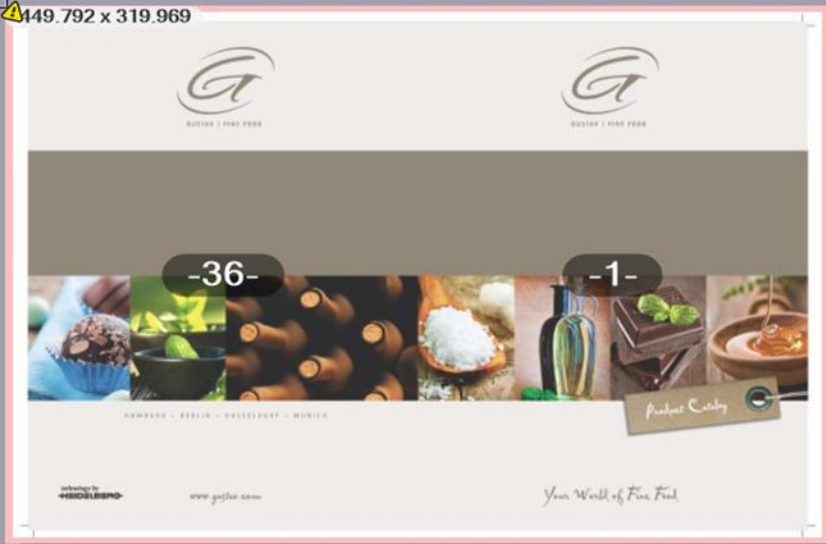
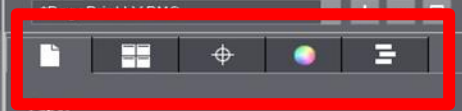
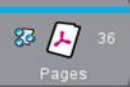




# Princt Cockpit

The screenshot displays the Princt Cockpit software interface, which is used for managing printing jobs. The interface is divided into several main sections:

- Job Overview (Top Left):** Shows the job name "Broschüre" and number "16-17162". It includes a "Documents" list on the left and a "Sheet" view in the center showing a brochure page with a "-1/40-" label.
- Settings (Middle Left):** A sidebar containing categories like "System", "Preferences", "Users", "Resources", and "Miscellaneous".
- Process Flow Diagram (Center):** A central workspace showing a sequence of steps: "AutotestQualify...", "HasSpotColors", "Prepare\_CMYK", "PagePrint\_ric...", "Quality.nw", "AutoPage", "ImposedPrint\_U...", and "AssemblePDF".
- Job List (Bottom):** A table with columns for "Elements", "Sequence", "Status", "Recent Message", and "Modification Date".
- Right Panel:** A "Display Successor Sequences" panel with a search bar and a list of sequence templates and elements.



1/9 Front (Mago Gloss)



1/9 Back (Mago Gloss)



34

3



4

33

Mago Gloss

Width 449.79 Height 319.97

Cover

Non-printing Margin

<input type="checkbox"/>	4.0	<input type="checkbox"/>	4.0
<input type="checkbox"/>	3.5	<input type="checkbox"/>	3.5

Subject Offset (manual)

+X+ 0.0  +Y+ 0.0

Imposition Trimmed Size

Bleed and Trim Allowance



Job list

Training

Job Group

Job Number

PRJOBS

Training

Combination\_LF\_FLX

Combination\_LF\_FLX\_Label

Combination\_LF\_FLX

Overview Name: Combination\_LF\_FLX Number: Combination\_LF\_FLX

Product Description Colors Processing

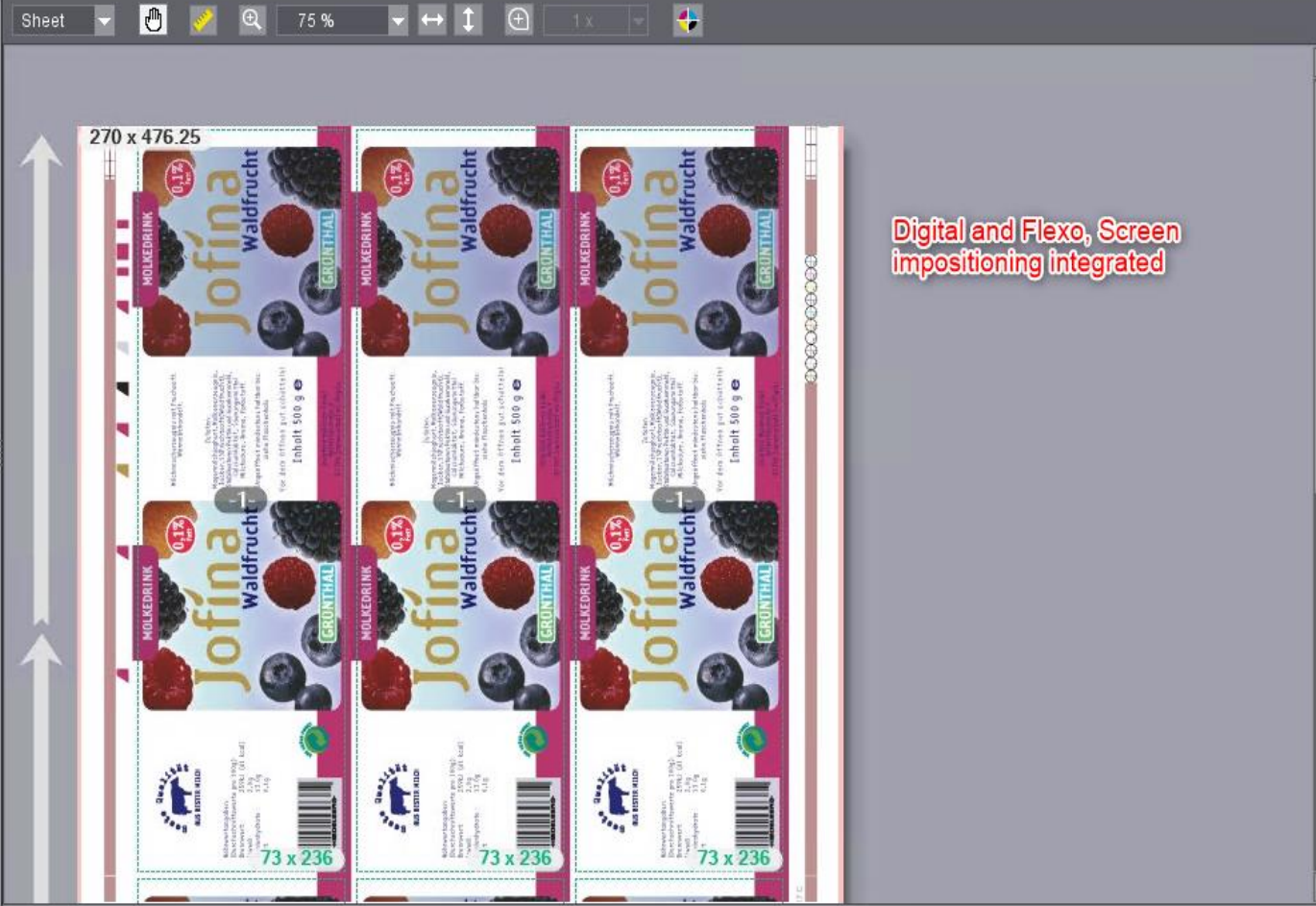
Documents 1 Pages 1 Imposition 0 Proof 0 Digital Printing

Documents

Sheet

75%

1 x



Grid, Crop, and Color icons

Layout

Use CFF2 File

Columns 3 Repeat

Rows 2 Repeat

270° 2.125 4.0

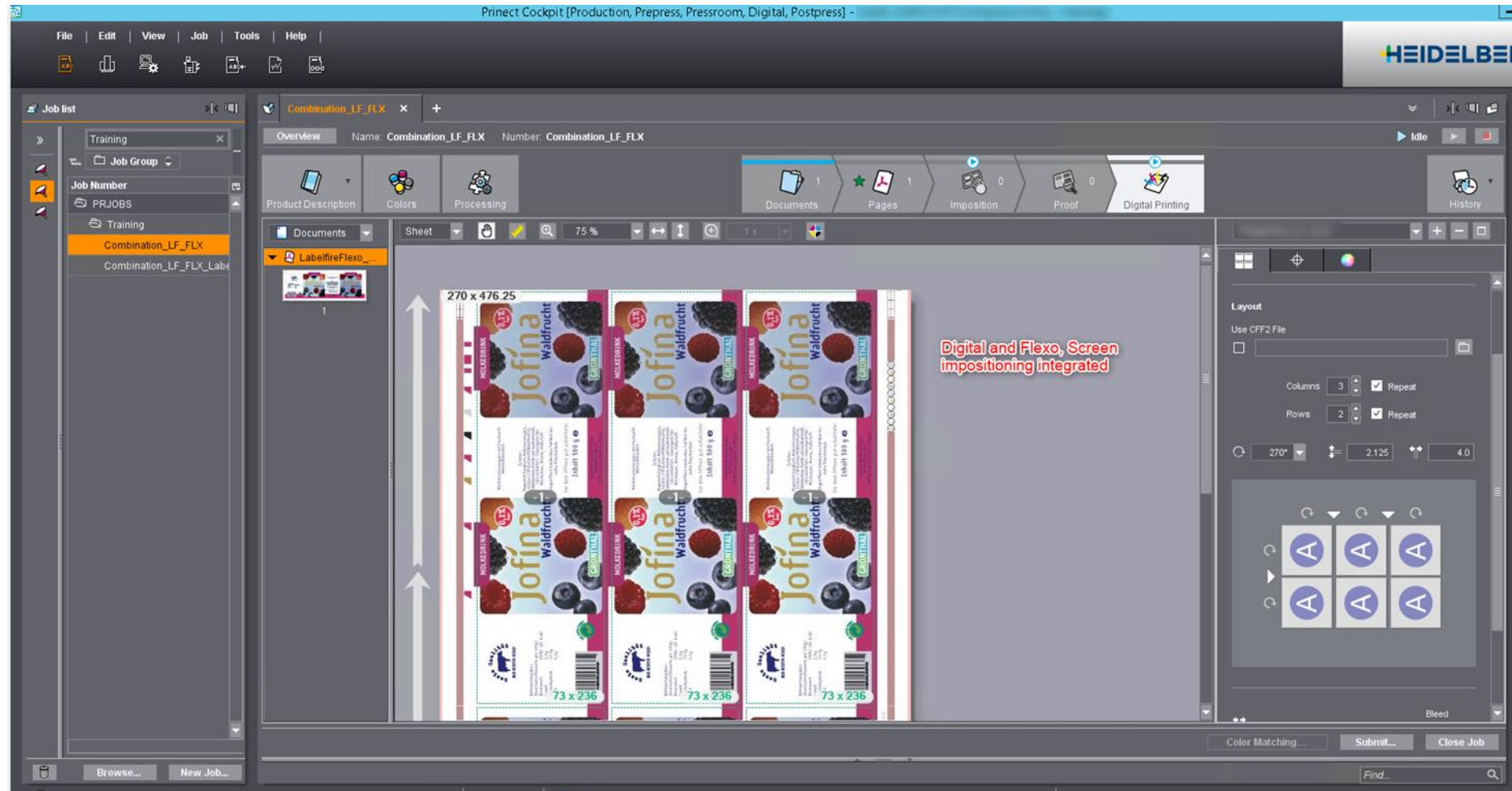
Bleed

Color Matching... Submit... Close Job

Browse... New Job...

Find...

# Princt Cockpit: Pre-flight, live rendered previewed, step & repeat, job management etc.



# Princt Cockpit: step & repeat, Interactive Marks...etc.

The screenshot displays the Heidelberg Prinect Cockpit software interface. The main workspace shows a 2x3 grid of labels. The top-left label is green and labeled 'COCKPIT-CLEANER - APPLE', with dimensions 340 x 304.8 and 98 x 148.5. The other labels are orange and labeled 'COCKPIT-CLEANER - GRAPEFRUIT', also with dimensions 98 x 148.5. Each label features a hand using a brush on a surface, a product image, and a QR code. The interface includes a top toolbar with zoom (65.31%), pan, and other tools. On the right, a settings panel for '\*Fasson PE Top Clear 7C-W' is visible, with the following options:

- PQC Strip: Height 5.0
- Color Marks: +X+ 4.0, +Y+ 4.0
- Register Mark: Marks per Side 2, Labeling
- Spot Color Patches: 0.0
- Sensotec Mark: +X+ 4.0, +Y+ 30.0, Digital printing unit is: Master
- Punch Mark: +X+ 0.0, +Y+ 0.0, Width 3.53, Height 3.53
- Info Text: +X+ 5.0, +Y+ 5.0, 0°

# Prinect Cockpit: color management

The screenshot displays the Prinect Cockpit interface. On the left, a multi-page layout for 'FORMEL 1' juice labels is shown, featuring images of hands holding bottles and various fruit illustrations (apple and grapefruit). Dimensions like '340 x 304.8' and '98 x 148.5' are visible. On the right, a control panel for color management is active, showing the following settings:

- Color spaces in PDF file...**
  - must still be customized
  - are already prepared
- CMYK Work Color Space**
  - ISOcoated\_v2\_eci.icc
  - ▶ CMY Matching
- Keep Black**
  - ▶ Keep Black
- Spot Colors**
  - Remove "DieLine"
  - ▶ Output Quality  $\Delta E_{00}$ 

Gallus Schwarz	0.28
PANTONE 361 C	0.00
PANTONE 485 C	0.01
PANTONE Orange 021 C	0.53
- Spot Color Matching...

# Prinect Cockpit: spot color matching

**Spot Color Matching**

Color Name: ■ PANTONE 485 C

Original Color ■

L*	a*	b*
49.72	69.1	54.63

Selected Color ■

L*	a*	b*
49.72	69.1	54.63

**Settings**

Step Width:

Correction:  Lightness / Chroma  Color Cast

Paper Grade: glossy coated

Output Device: Labelfire

**Print Test Page**

- All Spot Colors
- Gallus Schwarz
- PANTONE 361 C
- PANTONE 485 C
- PANTONE Orange 021 C
- Add White Background

Print Test Page...

	A	B	C	D	E
1	<span style="color: red;">■</span>	<span style="color: red;">■</span>	<span style="color: red;">■</span>	<span style="color: red;">■</span>	<span style="color: red;">■</span>
2	<span style="color: red;">■</span>	<span style="color: red;">■</span>	<span style="color: red;">■</span>	<span style="color: red;">■</span>	<span style="color: red;">■</span>
3	<span style="color: red;">■</span>	<span style="color: red;">■</span>	<span style="color: red;">■</span>	<span style="color: red;">■</span>	<span style="color: red;">■</span>
4	<span style="color: red;">■</span>	<span style="color: red;">■</span>	<span style="color: red;">■</span>	<span style="color: red;">■</span>	<span style="color: red;">■</span>
5	<span style="color: red;">■</span>	<span style="color: red;">■</span>	<span style="color: red;">■</span>	<span style="color: red;">■</span>	<span style="color: red;">■</span>
6	<span style="color: red;">■</span>	<span style="color: red;">■</span>	<span style="color: red;">■</span>	<span style="color: red;">■</span>	<span style="color: red;">■</span>
7	<span style="color: red;">■</span>	<span style="color: red;">■</span>	<span style="color: red;">■</span>	<span style="color: red;">■</span>	<span style="color: red;">■</span>

Tagged patches cannot be output correctly on paper.

$\Delta E_{00}$ : 0.01

# Live Demo



# Prinect Digital Frontend Versafire

## Pallet sheet

### Production Requirement

- Separate Job Stacks from other/next jobs
- Differentiate Job-Stacks for finishing
- Assign Jobs to finishing steps

### Current Situation

- Only limited functionality with previous DFE

### New Prinect DFE Solution

- Use of default pallet sheet PDF incl. default variables
- Creation of customer specific pallet sheets in design program and adding variable marks with Prinect Barcode Editor (PDF Toolbox) onto page
- Pallet Sheets can be drawn from any tray (watch out possible fuser temp changes)

### Benefits of Solution

- Customized the pallet sheets possible
- Pallet sheets content have owned desired marks
- Many variables possible

### Variable-Marks

- Job name
- Job id
- Customer name
- Customer id
- Quantity
- Delivery Date
- Product Name
- Paper Name
- Paper Format
- OneUp Count
- ICC Press Profile
- Project ID
- Cutting Program Number
- Press Name Press ID
- Thumbnail

Maschine: \${PressName}

---

Auftragsnummer: **\$(jobid)** 

Auftragsname: \${jobname}

Kunde: \${customername}

Fälligkeitstermin: \${DeliveryDate}

---

Druckmenge: \${Quantity}

Bedruckstoff: \${PaperName}

Bedruckstoffgröße: \${PaperFormat}

---

Nächster Arbeitsgang:  \$(CuttingProgramNumber)

---

Kommentar:

---

Unterschrift Mitarbeiter: \_\_\_\_\_



## Prinect Color Center: advanced color management

Prinect Color Center is a built-in advanced color management tool within Prinect DFE. During industrial production, it's always required:

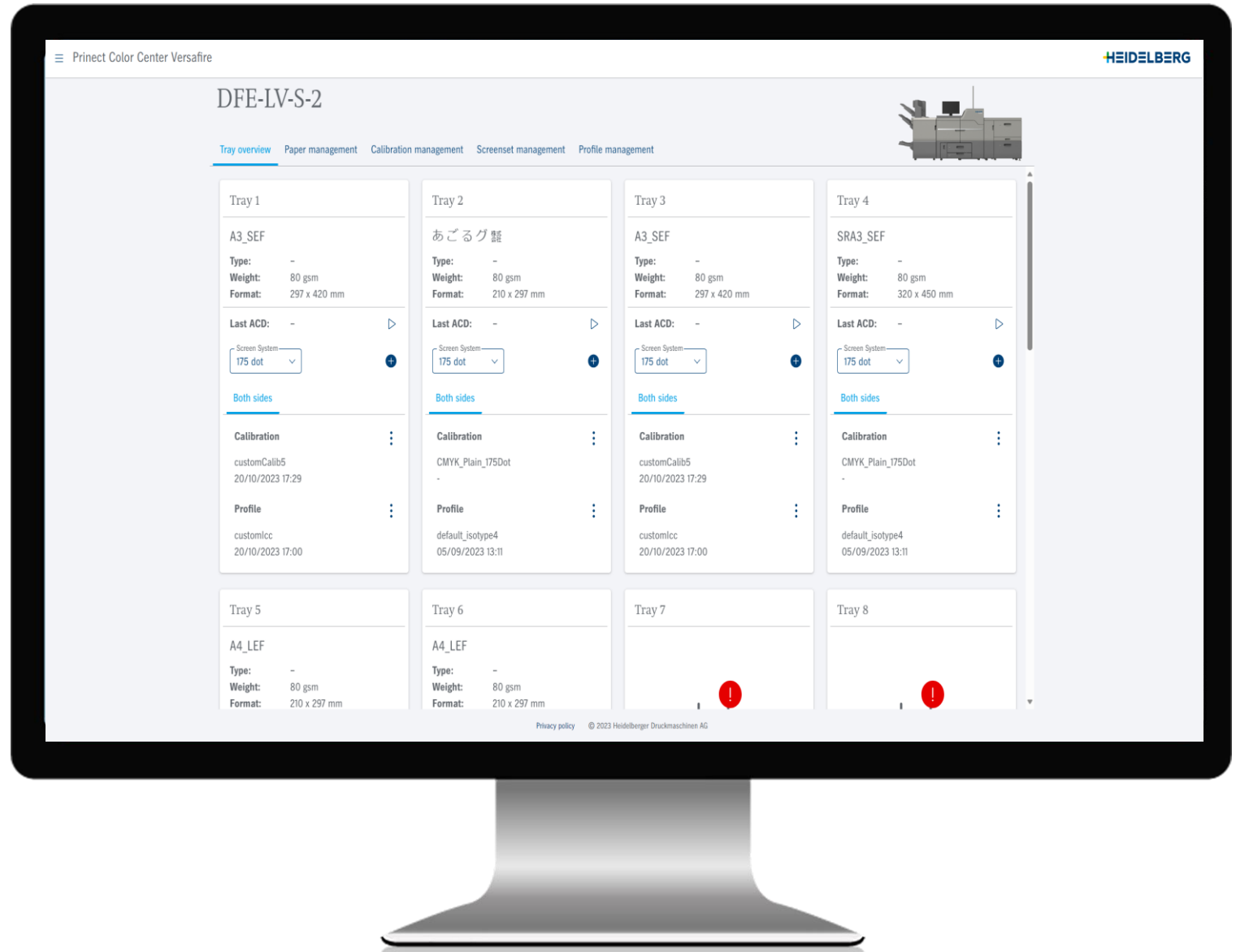
- A simple media/substrate calibration
- Easy media-specific profiling (ICC)
- A standardization of processes

**Prinect Color Center can easily solve the above requirements!**

# Prinect Color Center (Versafire)



- One look and feel
- Modern, unified and intuitive
- Visualize UI
- Wizard guides



# Prinect Color Center (Versafire)

## Production Requirement

- Simple media Calibration
- Easy media specific profiling (ICC)
- Standardization of processes

## Current Situation

- Separate tools for profiling and calibration
- Difficult to handle

## New Prinect DFE Solution

- Within Prinect DFE
- Leverage the technology from Labelfire/Gallus One
- An advanced color management in an integrated loop with Versafire
- Central media specific calibration and profiling
- Central measurement server  
→ one Spectrophotometer for all output devices
- Web-based operation on all devices (PC, Tablet, Mobile)

The screenshot displays the Prinect Color Center Versafire web interface. At the top, it shows the machine model 'DFE-LV-S-2' and navigation tabs for 'Tray overview', 'Paper management', 'Calibration management', 'Screenset management', and 'Profile management'. Below these are four tray configuration panels (Tray 1 to Tray 4), each showing details like paper type (A3\_SEF), weight (80 gsm), format (297 x 420 mm), and calibration settings. A fifth tray (Tray 5) is partially visible at the bottom left.

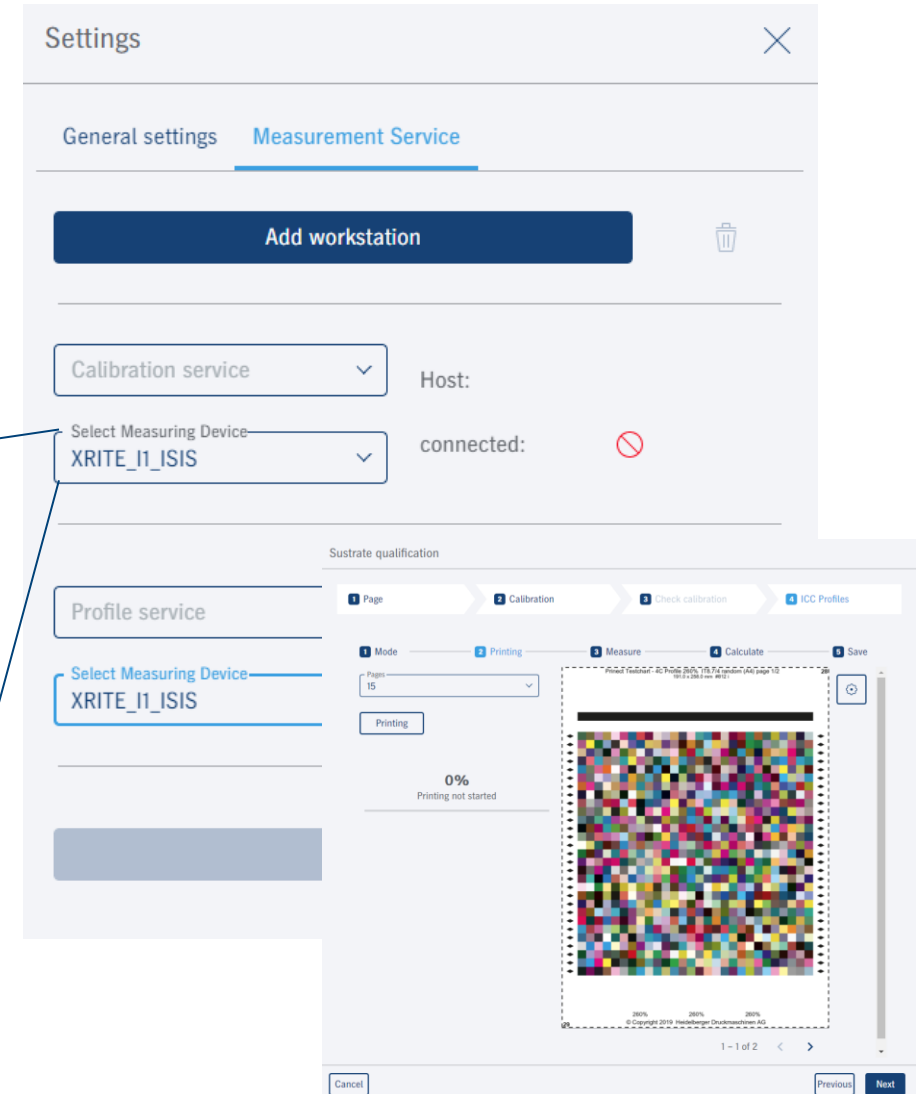
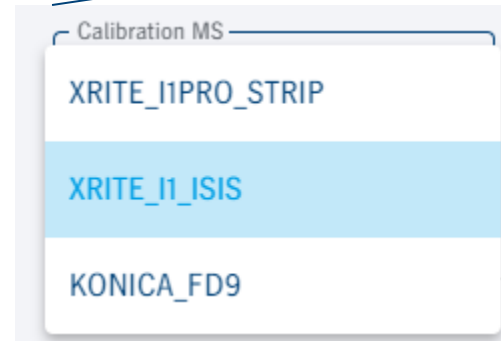
Overlaid on the interface is a 'Reprofing' window with a four-step process: 1. Print Test Chart, 2. Measure Test Chart, 3. Calculate ICC Profile, and 4. Save profile. The 'Measure Test Chart' step is active, showing a color calibration chart with a 'HEIDELBERG' logo. To the right of the chart, there are controls for 'measuring instrument', 'number of pages' (set to 2), and 'Print' buttons. A legend indicates 'Front' and 'Back' measurement options.

On the right side of the 'Reprofing' window, there is a 'Measurement and Target Curves' graph. The graph plots 'Density values' (y-axis, 0 to 2.1) against 'Nominal values' (x-axis, 0 to 100). It shows multiple curves for different color channels (C, M, Y, K) and compares 'C Values', 'M Values', 'Y Values', and 'K Values' against their respective 'C Target', 'M Target', 'Y Target', and 'K Target'.

# Prinect Color Center (Versafire)

## Functionality

- Simple creation of media-specific ICC profiles
- **Support with handheld (i1 pro) or automatic spectrophotometer (ISIS or FD9/MYIRO-9)**
- Optimal color matching of “offset” matching
- Optimal output quality also for blueish or yellowish paper
- No “color knowhow” needed!
- Automatic assignment of ICC profiles to media for simple later reuse
- Overall improved output quality
- **Competitive Advantage**
- No need to extra on the option
- No extra training/service costs
- No need for advanced color knowhow



# DFE-LV-S-2



- Tray overview
- Paper management
- Calibration management
- Screenset management
- Profile management

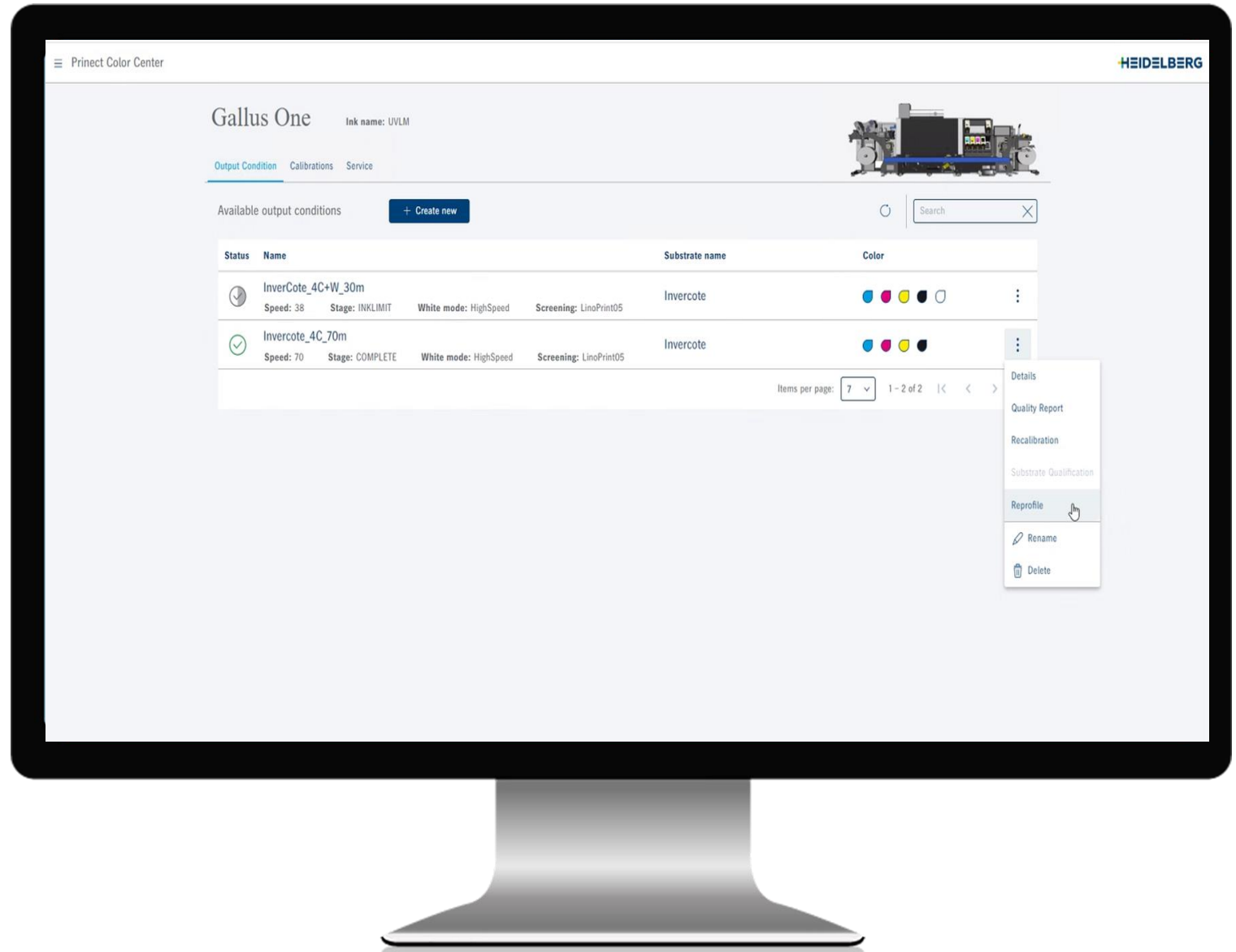
Tray 1	Tray 2	Tray 3	Tray 4
<b>A3_SEF</b> <b>Type:</b> - <b>Weight:</b> 80 gsm <b>Format:</b> 297 x 420 mm	<b>A4_SEF</b> <b>Type:</b> - <b>Weight:</b> 80 gsm <b>Format:</b> 210 x 297 mm	<b>A3_SEF</b> <b>Type:</b> - <b>Weight:</b> 80 gsm <b>Format:</b> 297 x 420 mm	<b>SRA3_SEF</b> <b>Type:</b> - <b>Weight:</b> 80 gsm <b>Format:</b> 320 x 450 mm
<b>Last ACD:</b> -	<b>Last ACD:</b> -	<b>Last ACD:</b> -	<b>Last ACD:</b> -
Screen System 175 dot	Screen System 175 dot	Screen System 175 dot	Screen System 175 dot
<b>Both sides</b>	<b>Both sides</b>	<b>Both sides</b>	<b>Both sides</b>
<b>Calibration</b>	<b>Calibration</b>	<b>Calibration</b>	<b>Calibration</b>
customCalib5 20/10/2023 17:29	CMYK_Plain_175Dot -	customCalib5 20/10/2023 17:29	CMYK_Plain_175Dot -
<b>Profile</b>	<b>Profile</b>	<b>Profile</b>	<b>Profile</b>
customlcc 20/10/2023 17:00	default_isotype4 05/09/2023 13:11	customlcc 20/10/2023 17:00	default_isotype4 05/09/2023 13:11
Tray 5	Tray 6	Tray 7	Tray 8
<b>A4_LEF</b> <b>Type:</b> - <b>Weight:</b> 80 gsm <b>Format:</b> 210 x 297 mm	<b>A4_LEF</b> <b>Type:</b> - <b>Weight:</b> 80 gsm <b>Format:</b> 210 x 297 mm		

# Live Demo

# Prinect Color Center (Gallus One)



- One look and feel
- Modern, unified and intuitive
- Visualize UI
- Wizard guides



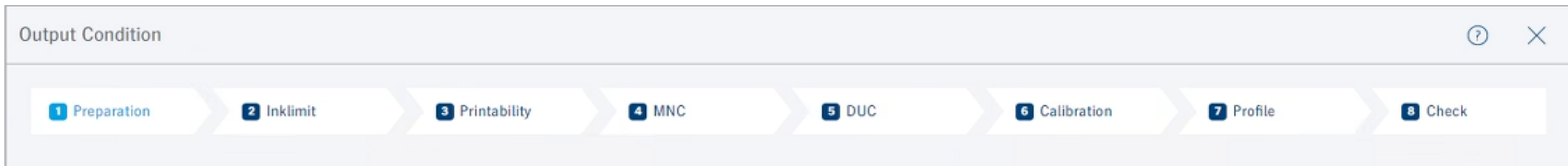




# Prinect Color Center (Gallus One)

## Central quality manager for substrates and output conditions

- Easy qualification of new substrates to enable optimum print quality
- Wizard guides through output conditions incl. profile creation



1. Preparation / create output condition
2. Ink limit: to set the maximum ink quantity for the current material
3. Printability comprises both the print quality of the image and the mechanical properties of the ink layer such as adhesion, drying and scratch resistance.
4. Missing nozzle compensation
5. Print head calibration – density unevenness compensation
6. ICC profile Quality check + report



## Prinect DFE USP

- Automated preflight and PDF optimization
- Live rendered preview (WYSIWYG)
- Easy imposition (step & repeat)
- Spot color matching
- Job management and tracking
- Prinect Color Center
- Workflow automation with group-sequences
- Ink estimation via Prinect portal (Digital label)
- Data preparation for iVDP (via PDF Toolbox)
- Seamless integrate into HEIDELBERG Customer Portal
- Fully integrable into Prinect Production Manager



# Q & A

**Thanks for your attention!**