Smart Print Shop – ready for a digitized world

Pre-drupa Press Conference

Stephan Plenz | Heidelberg, February 18, 2016

Print media: growing versatility.
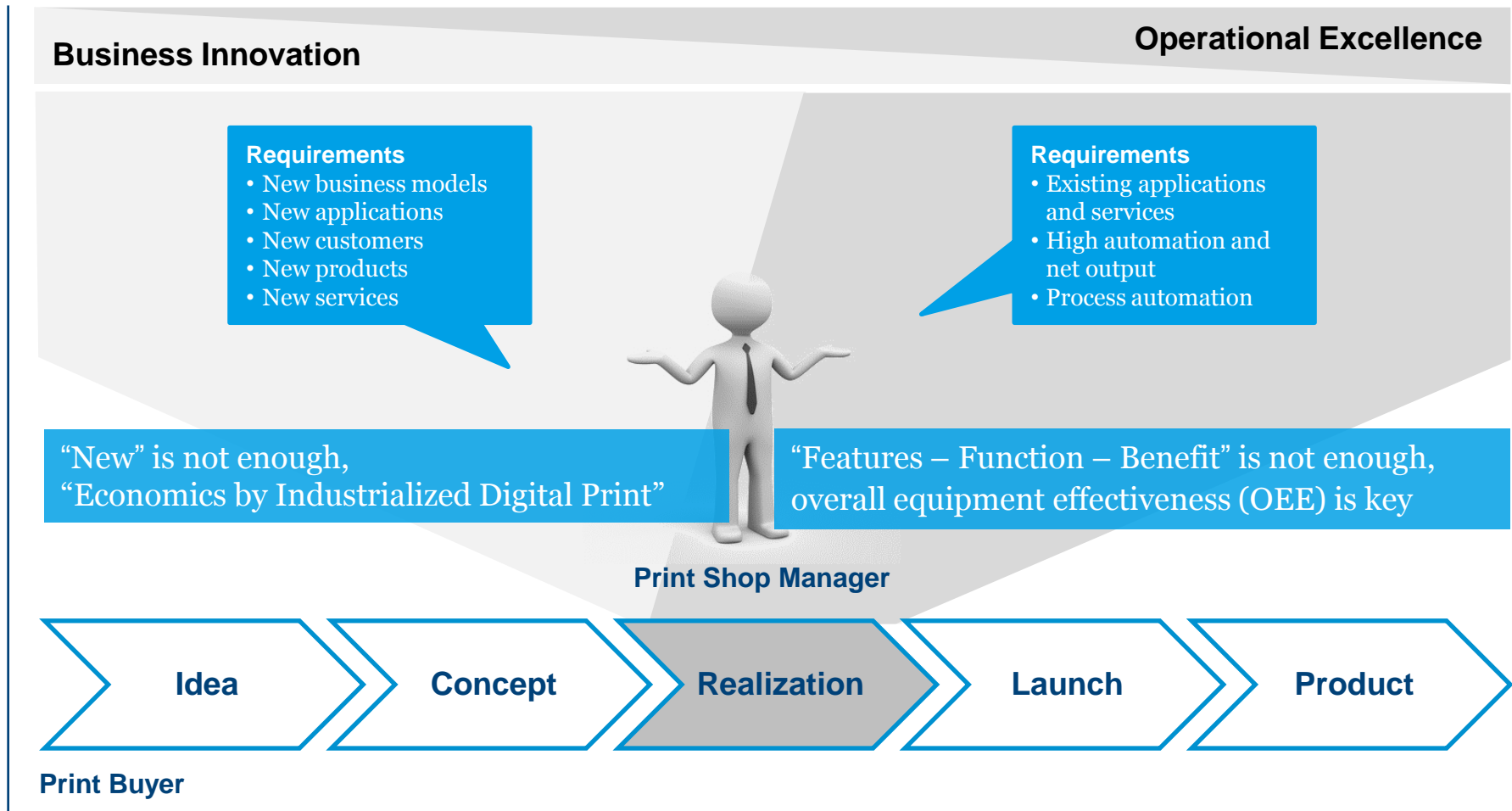## Product portfolio and manufacturing are changing.

Daily challenges of our customers.
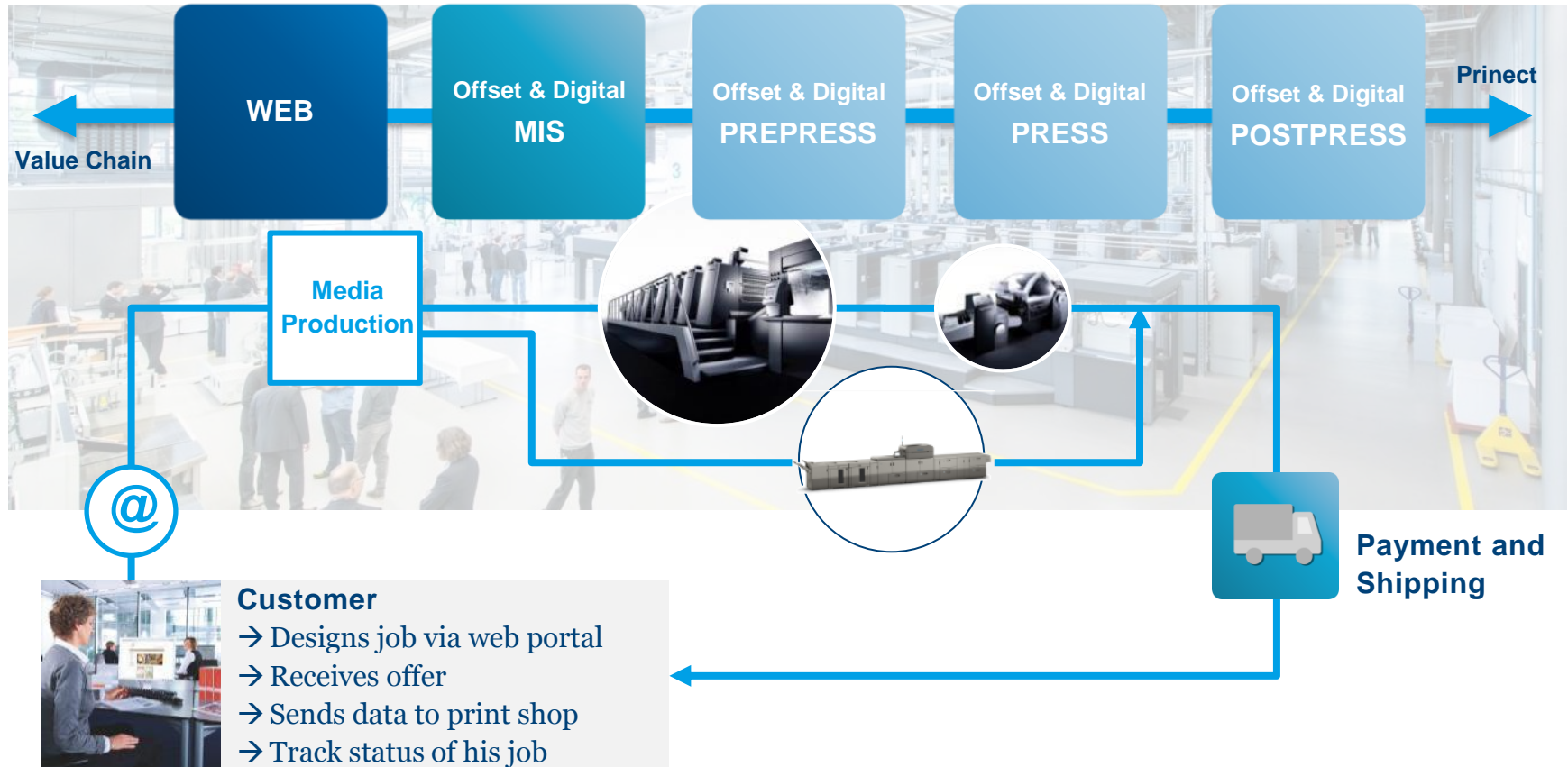## Business innovation and operational excellence.

Business Innovation

Operational Excellence

Requirements
- New business models
- New applications
- New customers
- New products
- New services

Requirements
- Existing applications and services
- High automation and net output
- Process automation

"New" is not enough,
"Economics by Industrialized Digital Print"

"Features – Function – Benefit" is not enough,
overall equipment effectiveness (OEE) is key

Print Shop Manager

| Idea | Concept | Realization | Launch | Product |

Print Buyer

Product portfolio in digital and offset.
Integration is key.

Business Innovation

Operational Excellence

Investment

Capacity

= Digital

= Sheetfed Offset

Product portfolio in digital and offset.
Integration is key.

Value Chain

| WEB | Offset & Digital **MIS** | Offset & Digital **PREPRESS** | Offset & Digital **PRESS** | Offset & Digital **POSTPRESS** | **Prinect** |

Media Production

@

Payment and Shipping

Customer
→ Designs job via web portal
→ Receives offer
→ Sends data to print shop
→ Track status of his job

→ Generating real benefits from the Smart Print Shop for our customers and the print buyer

→ Optimization of the efficiency in the entire value chain

Operational excellence.
Overall equipment effectiveness for sheetfed presses.

Max. Performance at 18,000 s/h, 24/7 → 158 mill. s/a

OEE

Reduced average production speed

Maintenance and technical availability

Minimum 2 min make-ready per job

Performance border

Area of achievable performance

100%

90%

85%

60%

50%

40%

25%

15%

0%

500   1.000   2.000   4.000   8.000   16.000   32.000

Average run length
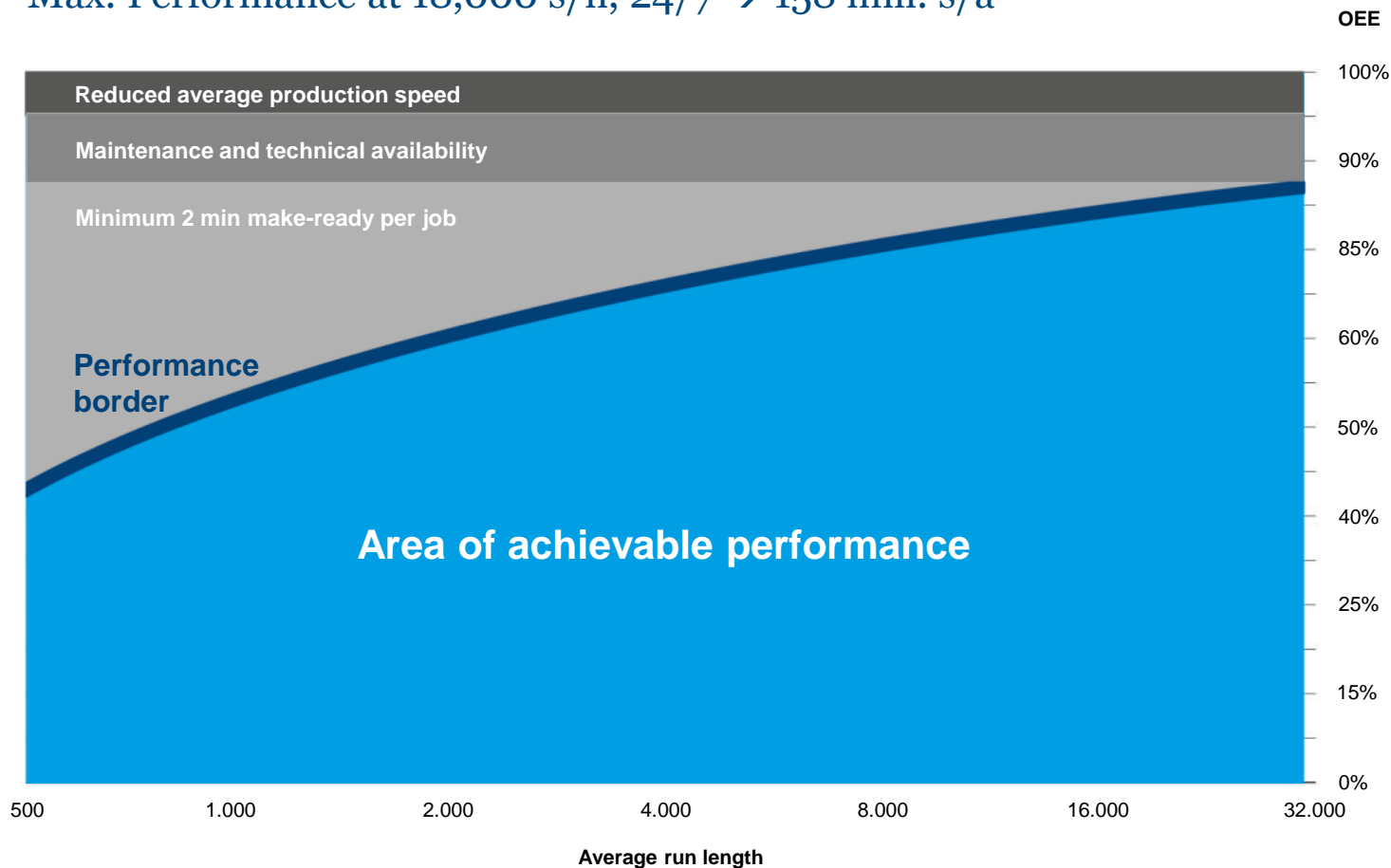
Operational excellence.
Overall equipment effectiveness for sheetfed presses.

There is still a lot of room for improvement.

OEE

Reduced average production speed

Maintenance and technical availability

Minimum 2 min make-ready per job

Performance border

Area of achievable performance

Area of currently achieved performance

100%

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85%

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15%

0%

500   1.000   2.000   4.000   8.000   16.000   32.000

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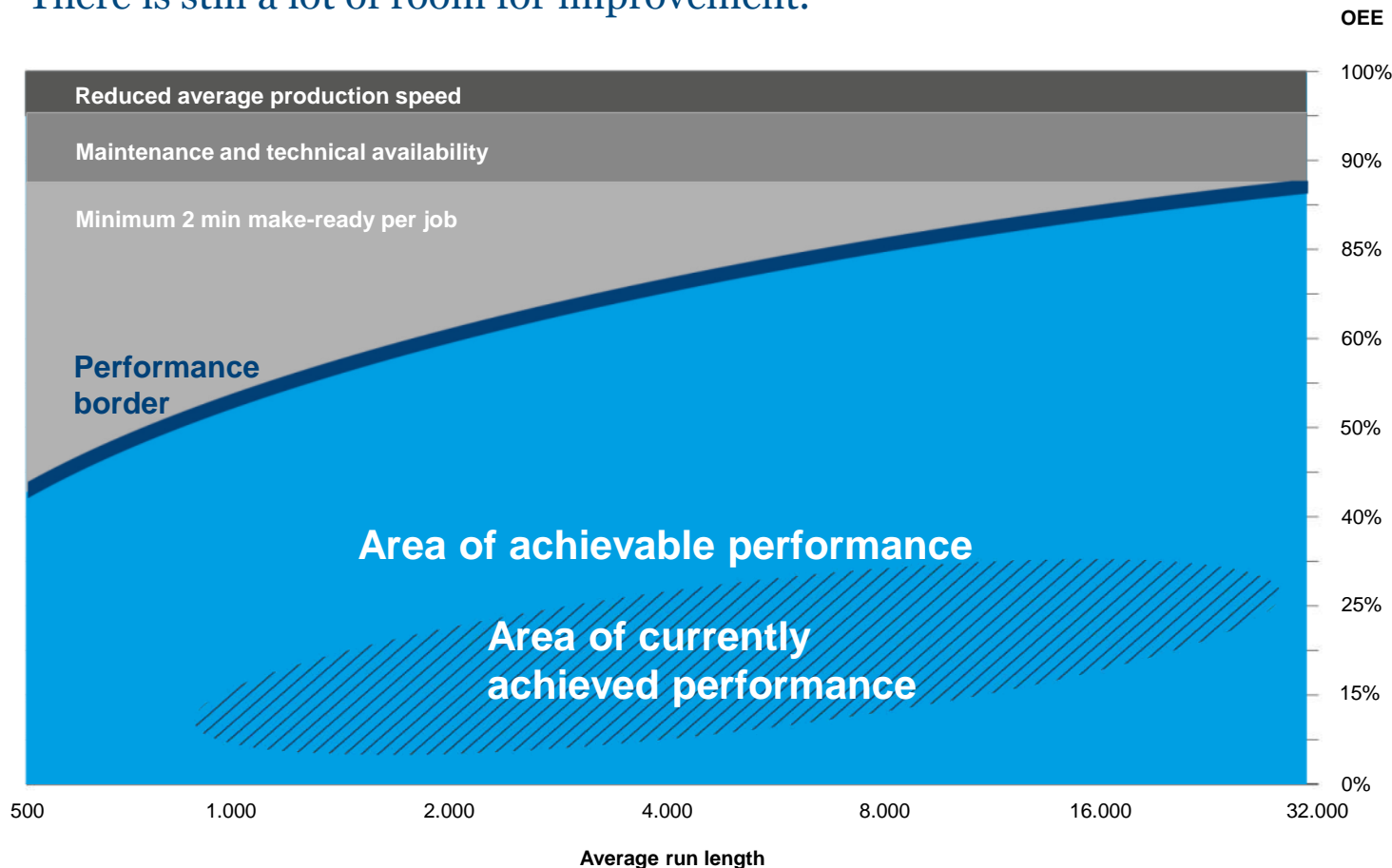
Operational excellence.
Overall equipment effectiveness for sheetfed presses.

Speedmaster inspired: potential can already be used today.

OEE

- Reduced average production speed
- Maintenance and technical availability
- Minimum 2 min make-ready per job

Performance border

Customer 1
XL 106-5

Customer 2
XL 106-8-P+L

Customer 4
XL 106-8-P

Customer 3
XL 106-8-P

Area of currently achieved performance

100%
90%
85%
60%
50%
40%
25%
15%
0%

Average run length

500 — 1.000 — 2.000 — 4.000 — 8.000 — 16.000 — 32.000
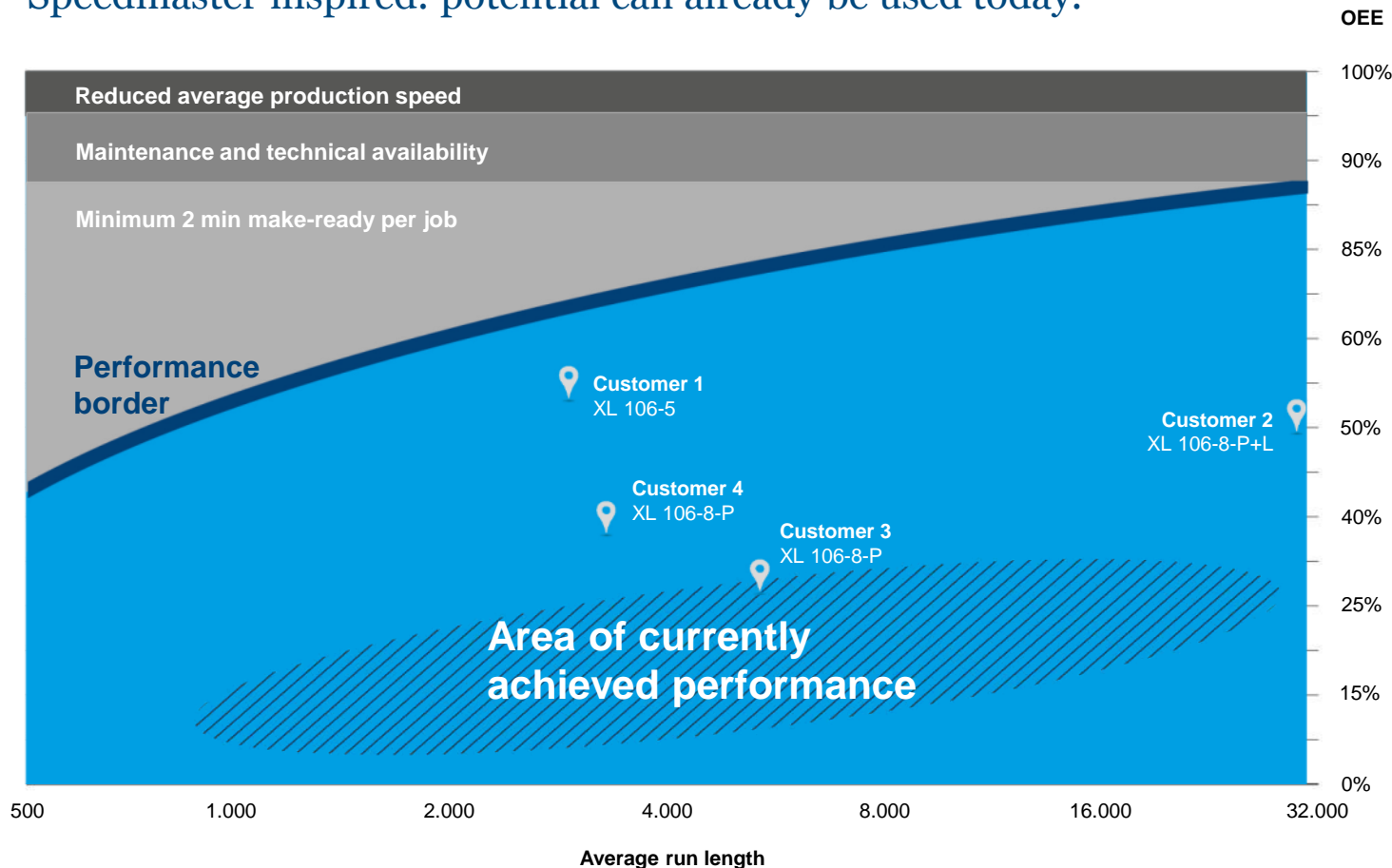
Operational excellence.
Overall equipment effectiveness for sheetfed presses.

Smart Print Shop: improved OEE and profitability.

OEE

Reduced average production speed

Maintenance and technical availability

Minimum 2 min make-ready per job

Performance border

Smart Print Shop

Area of currently achieved performance

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Average run length
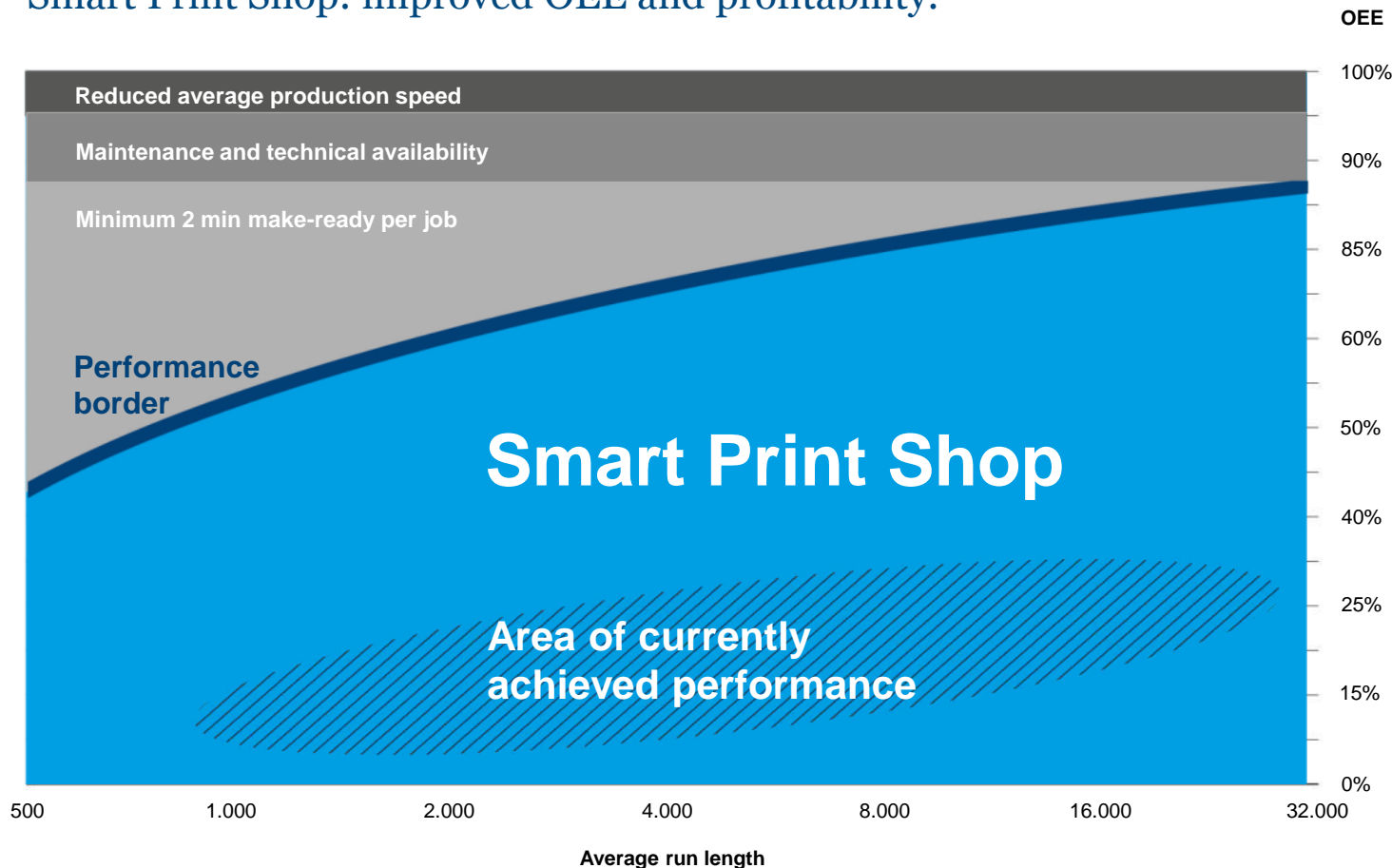
Starting point for Smart Print Shop.
The new-generation Speedmaster.

35×50

100×160

50×70

70×100

Full workflow integration and ease of use.
New Prinect Press Center XL 2.

The intelligent human-machine interface for real industrial print production

Prinect Press Center XL – makes performance easy.
New, intuitive, smart phone-like operation.

With the integrated touchpad **or** **at the multi-touchscreen**
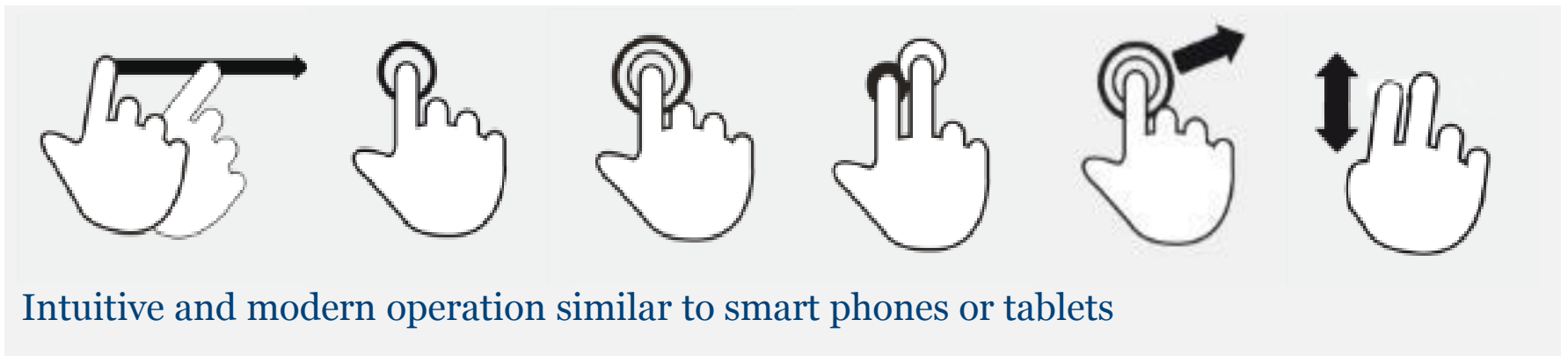
Intuitive and modern operation similar to smart phones or tablets

Prinect Press Center XL – makes performance easy.
New, intuitive, smart phone-like operation.

New: myWallscreen

New: Direct selection over 3 main masks:
Job, Machine and Production

65" with 4K resolution

New: favorite bar

Wallscreen XL – keep peak performance under control.
New myWallscreen – for personalized transparency.

View: „Speedmaster"

View: „Jobs"

Actual measured values from the measurement system

Display of current job image and ink zone profile
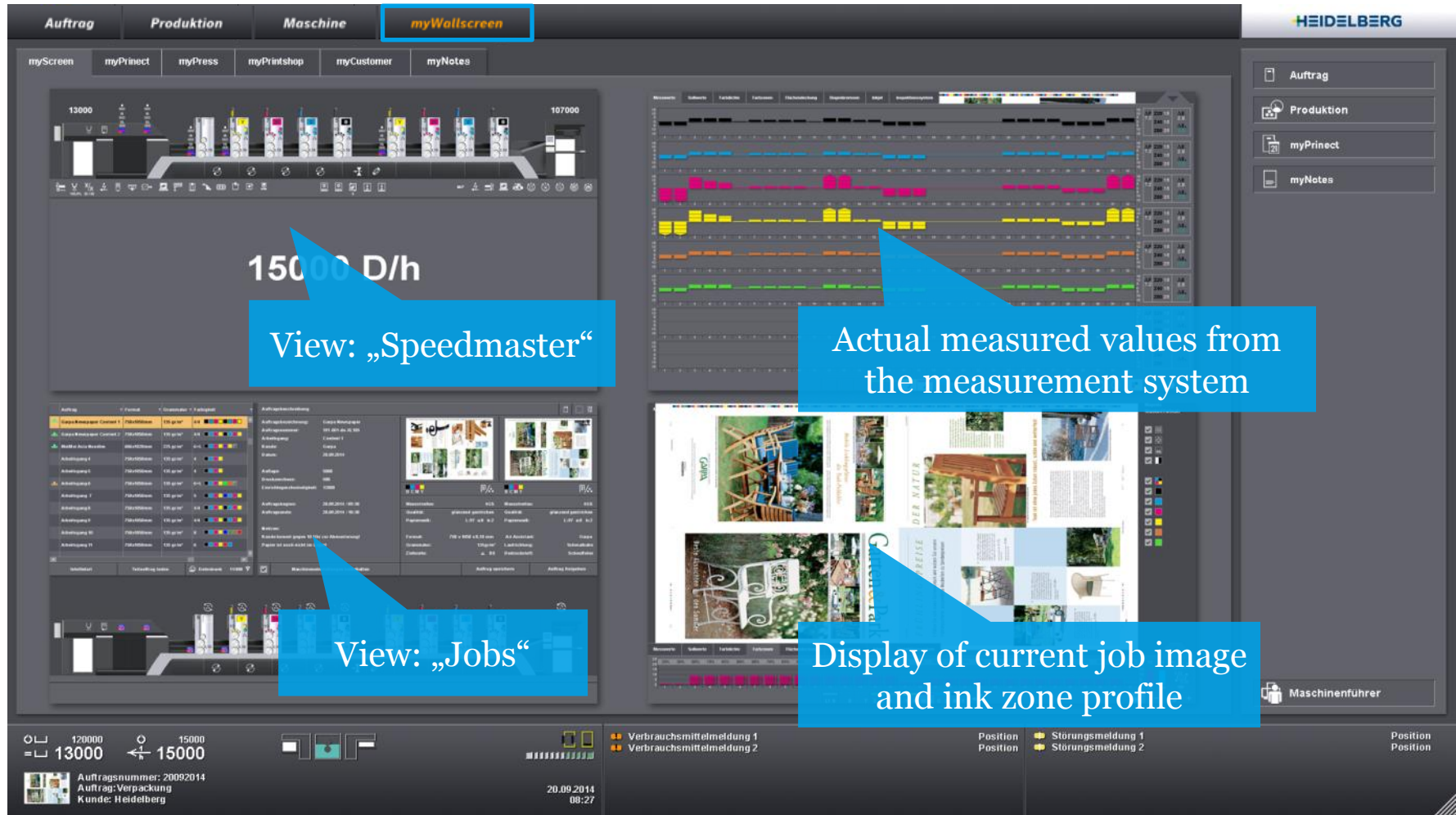
Wallscreen XL – make your daily life easier.
New helpful Prinect widgets for myWallscreen.
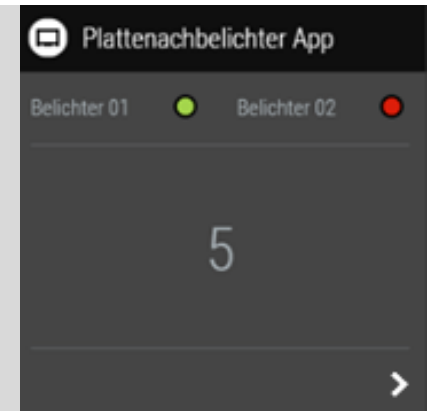
Status widget
→ Displays activity of started job

XL106-8-P5+L

Innenteil_1 0/5

Grundeinrichten

Auftragsnummer: T-16-0300
Auftragsname: .... Broschüre Country
Kunde: .... Villeroy & Boch
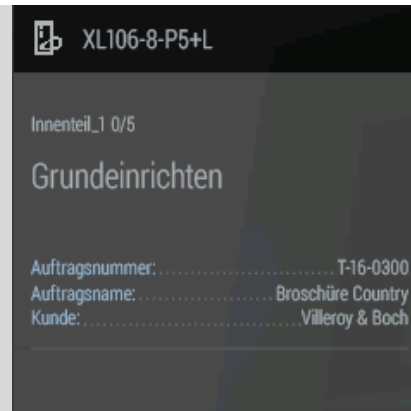
Plate on demand widget
→ Displays activity of started job

Plattenachbelichter App

Belichter 01 ● Belichter 02 ●

5

Overprint widget
→ Displays critical areas of job in progress

Gesamtfarbauftrag App

Pallet sheet widget
→ Displays pallet number of started job
→ Displays copies on pallet of job in progress
→ Fast print function

Aktueller Palettenzettel

Palettennummer: 1
Exemplare: 563

Wallscreen XL – make your daily life easier.
New Prinect widget – overprint function.

Identify critical areas with high ink coverage on the sheet.

Wallscreen XL – make your daily life easier.
New Prinect widget – plate on demand function.

Automated remake of plates

Color and quality measurement system production.
New Prinect Inpress Control 2.
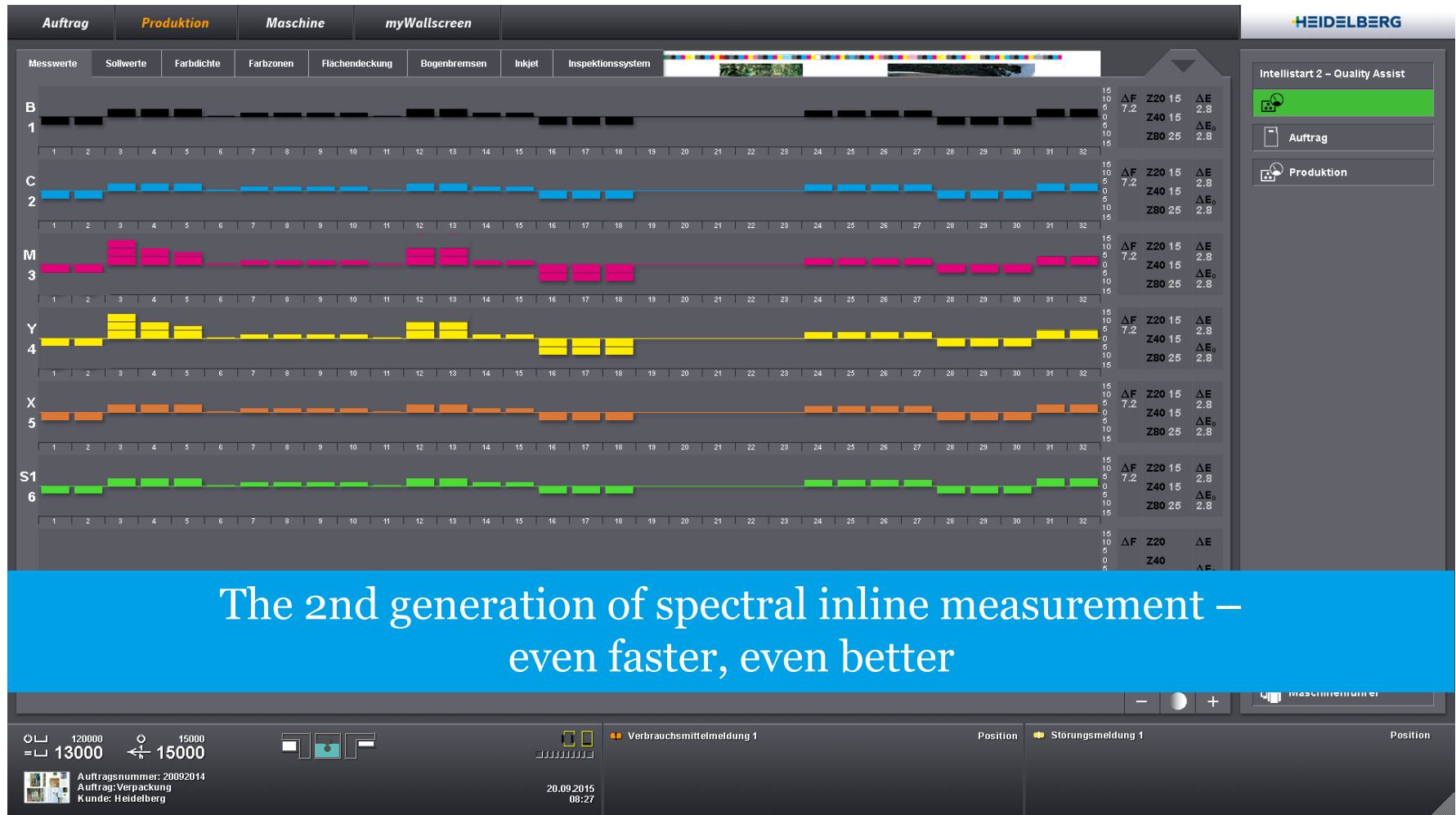
The 2nd generation of spectral inline measurement –
even faster, even better

Color and quality measurement system production.
New Prinect Inpress Control 2.

The 2nd generation of spectral color and register inline measurement system – even faster, even better with:
→ extremely fast make-ready for maximum productivity
→ continuous production monitoring

New

Faster measurement and control algorithm:
→ save up to 20% setup waste!
→ first measurement results appear 50% faster

New

Measuring of color bar on opaque white

Color and quality measurement system production.
New Prinect Image Control 3.

The most versatile measuring device with even more functionality

New and unique
Allows measuring not only of color bars on opaque white but controlling of the opaque white itself as well.

New and unique
Proof match – teach in your proof or original sample as reference and match this reference with minimum Delta E*.

Unique
Full-sheet color measurement for optimal quality in the printed image.

OEE optimization for short runs.
New Speedmaster XL 75 Anicolor 2.

→ Anicolor Booster offers higher ink densities by pushing a button.
  Wide range of substrates can be printed without changing ink series or Anilox rollers.

→ Selectable de-inking programs for quicker job change.

→ Faster wash-up for faster ink change.

→ Anicolor UV version is ready for shipment.

With Anicolor a reduction of **83%** in waste sheets is possible*.

*Example of a customer real production month

New-generation Speedmaster – universal and reliable.
More XL technology for Speedmaster CX 102.

→ New Prinect Press Center XL

→ New wash-up device and new wash control software for wash-ups under one minute

→ New Prinect Inpress Control 2

→ New fully automatic nonstop delivery

→ New air transfer system with universal grippers

→ New DryStar LED technology

Perfect integration makes the difference.
Completed: Heidelberg DryStar LED portfolio.
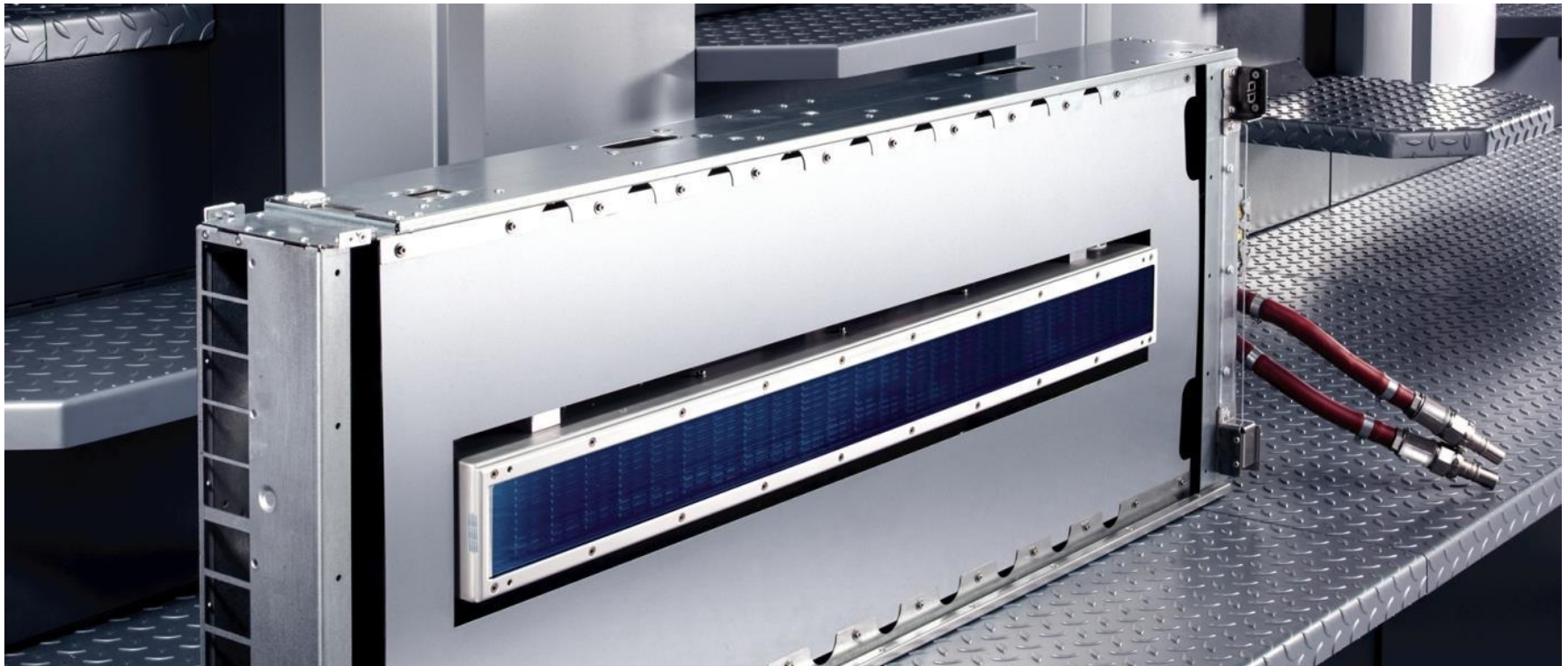
Outstanding curing power for industrial production.
Highest energy saving rates with unique LED auto format setting.

Perfect integration makes the difference.
Completed: Heidelberg DryStar LED portfolio.

Facts

More than 200 PU`s are in daily production

Over 60 DryStar LED bars sold over all formats

1 billion sheets printed: proven LED experience

Technology designed by Heidelberg

Qualified for models XL 75 - XL 106

Single- and multi-bar system range

Free positioning – interchangeable

Advantages

Unique double lens technology

Unique peak and dosage values at highest sheet distance

Up to 50% energy saving due to format adaptation

Up to 90% energy saving compared to UV lamp technology

Proven HD Saphira consumables with inks and coatings for LED

Total service from one source

Ready for a digitized world.
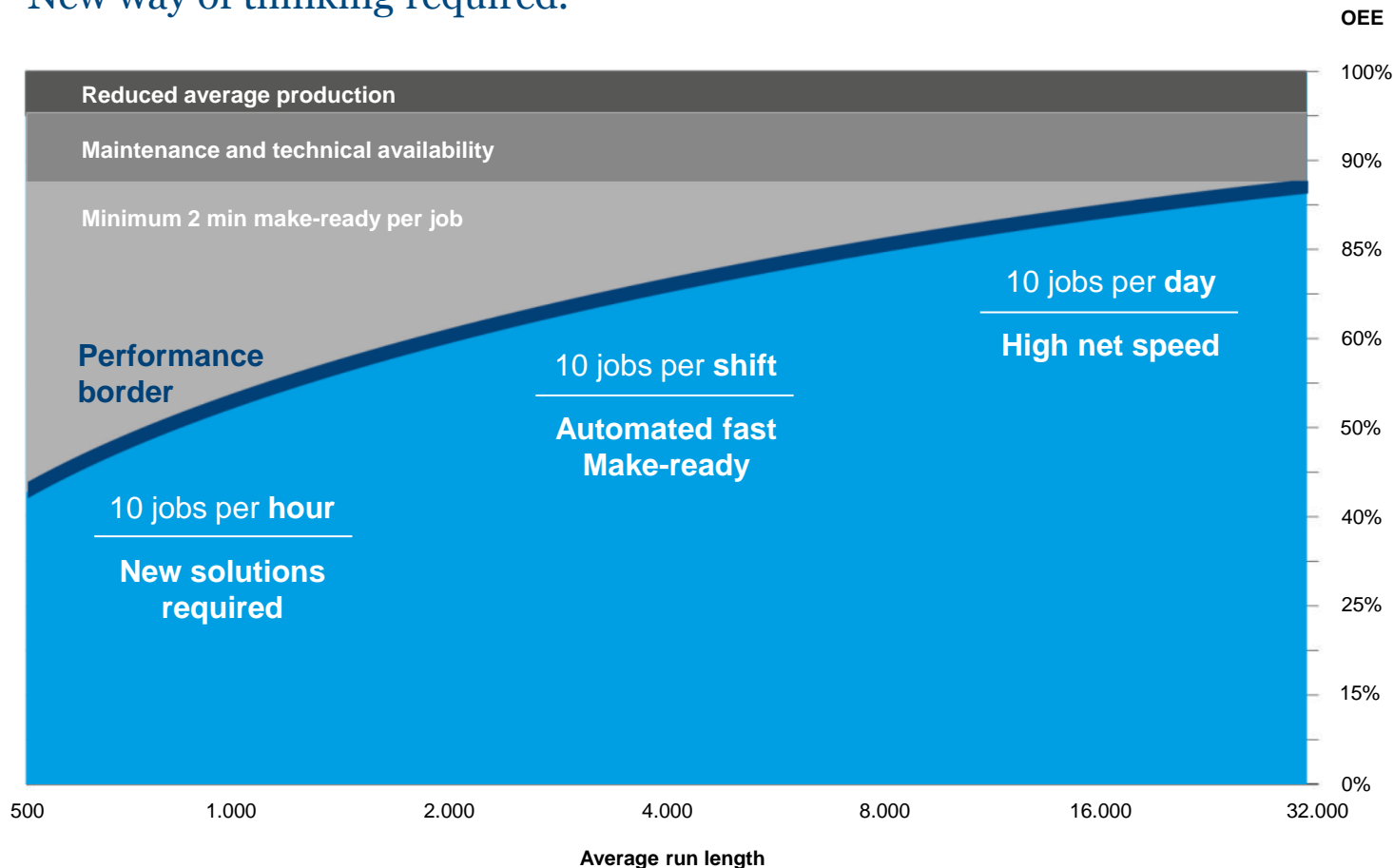## The new-generation Speedmaster.

35×50

100×160

50×70

70×100

Operational excellence.
Overall equipment effectiveness for sheetfed presses.

New way of thinking required.

OEE

- Reduced average production
- Maintenance and technical availability
- Minimum 2 min make-ready per job

Performance border

10 jobs per **hour**

New solutions required

10 jobs per **shift**

Automated fast Make-ready

10 jobs per **day**

High net speed

100%
90%
85%
60%
50%
40%
25%
15%
0%

500   1.000   2.000   4.000   8.000   16.000   32.000

Average run length

More to come…
drupa 2016
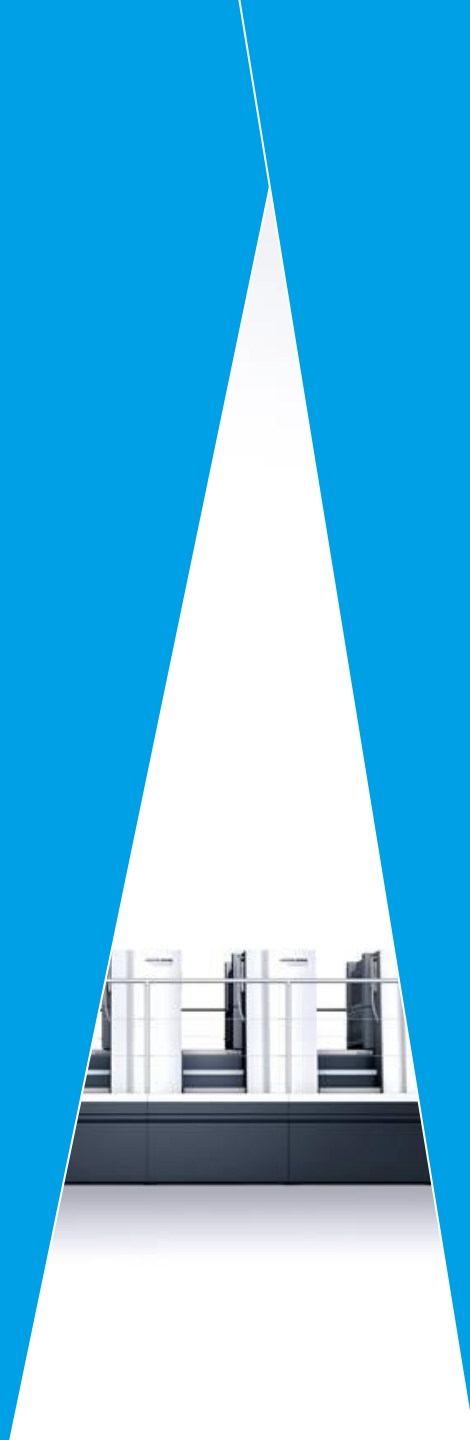
Heidelberg: partner for a digitized world

WEB → Offset & Digital **MIS** → Offset & Digital **PREPRESS** → Offset & Digital **PRESS** → Offset & Digital **POSTPRESS**

Smart Print Shop
Ready for Industry 4.0

Business | Media | **Prinect** | Portal | Production

Thank you. Time for questions.

Stephan Plenz

HEIDELBERG