



- **Upgrades/Retrofits**
- **Workflow solutions**

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TeleSupportCentre

Rom, 24 February, 2011

Agenda

1. Upgrades & Retrofits
2. Workflow solutions & higher automation

Customer

150 Mio Euro turnover & 300 employees (web-fed)

Some facts per year:

- 300 control consoles
- 180'000 electronic modules
- 2'000 unit controllers
- 3'000 electrical cabinets
- 24/7/365 TeleSupport Centre & SmartMonitoring
- Upgrades & Retrofit Solution



We provide for our Customers turn-key solutions with our own products and with best-in-class products of partners, integrated into our open system-platform!

Optimize Automation & Workflow solutions for the complete printhouse

Planning
Tracking
Reporting

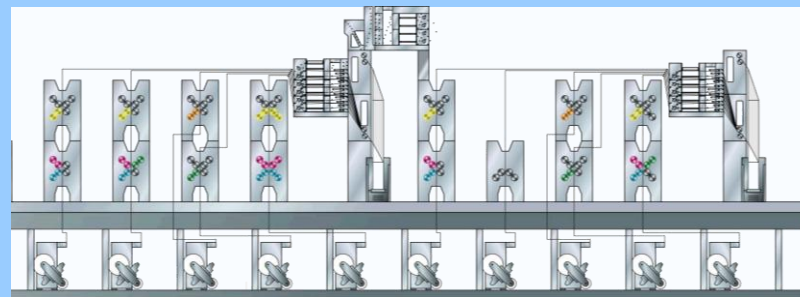


Publishing



PrePress

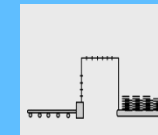
PRESS AUTOMATION



STORE

REEL HANDLING/Aurosys

Workflow
Maintenance
Networking



Finishing



Mailroom



Distribution

24/7 Tele Support Centre & SmartMonitoring

1. Upgrades & Retrofits

Compare to a 10 years old car ...



... repairs are necessary, spare parts difficult to get ...



... Solution: Scrapping ?



... or do a retrofit/upgrade, relax and drive another 8 - 10 years.



Automation & Workflow

Questions for everybody!

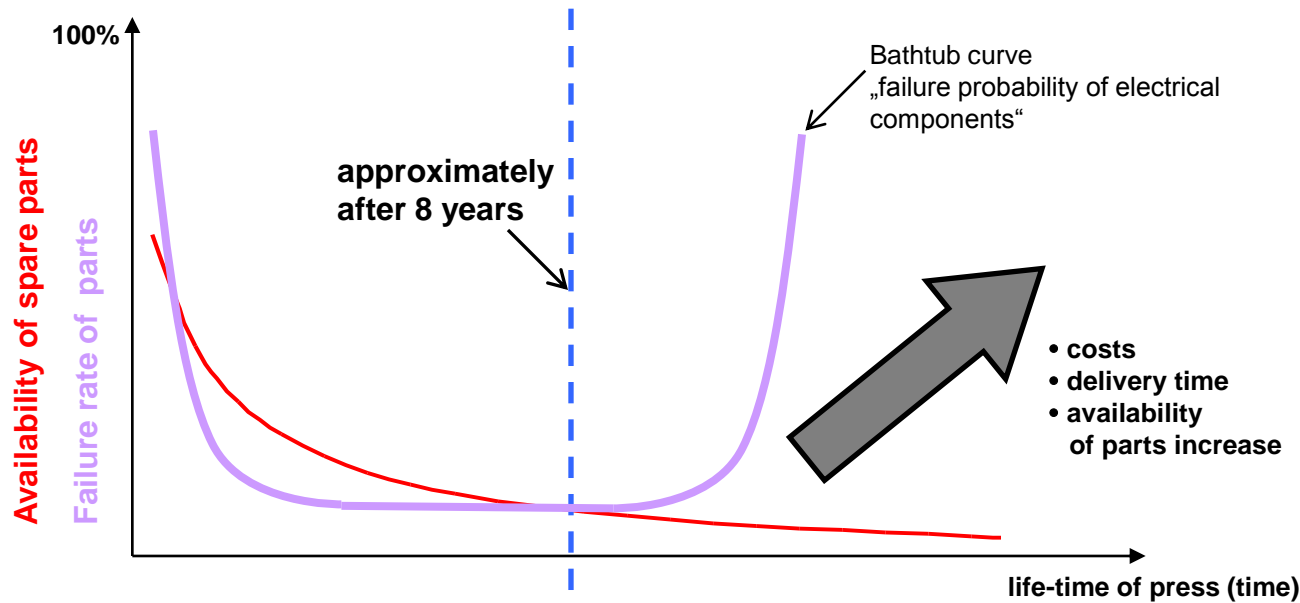
YES / No

- Do you think, that **all spare** parts for the operation of the press are **available** for the next years?
- Can you ensure **daily production availability** of the press for the next 5 - 8 years?
- Is your **staff well trained** even for **older** systems and **older** components?
- Can you ensure that a **system break down** can be **fixed very quick** (< 1h)?
Do you use **remote help** (telesupport)?
- Are you sure that your **make ready times** and **downtimes** of the press are at a **minimum level**?
- Do you know that **waste, “consume“ & energy figures** can be **further reduced**?
- Do you use **monitoring and reporting systems** to **analyze the production data** of your press and **reduce the production costs**?

If your answer to some of these questions is **NO than you should think about a retrofit or upgrade at your press**

Automation & Workflow

Product life cycle for automation systems

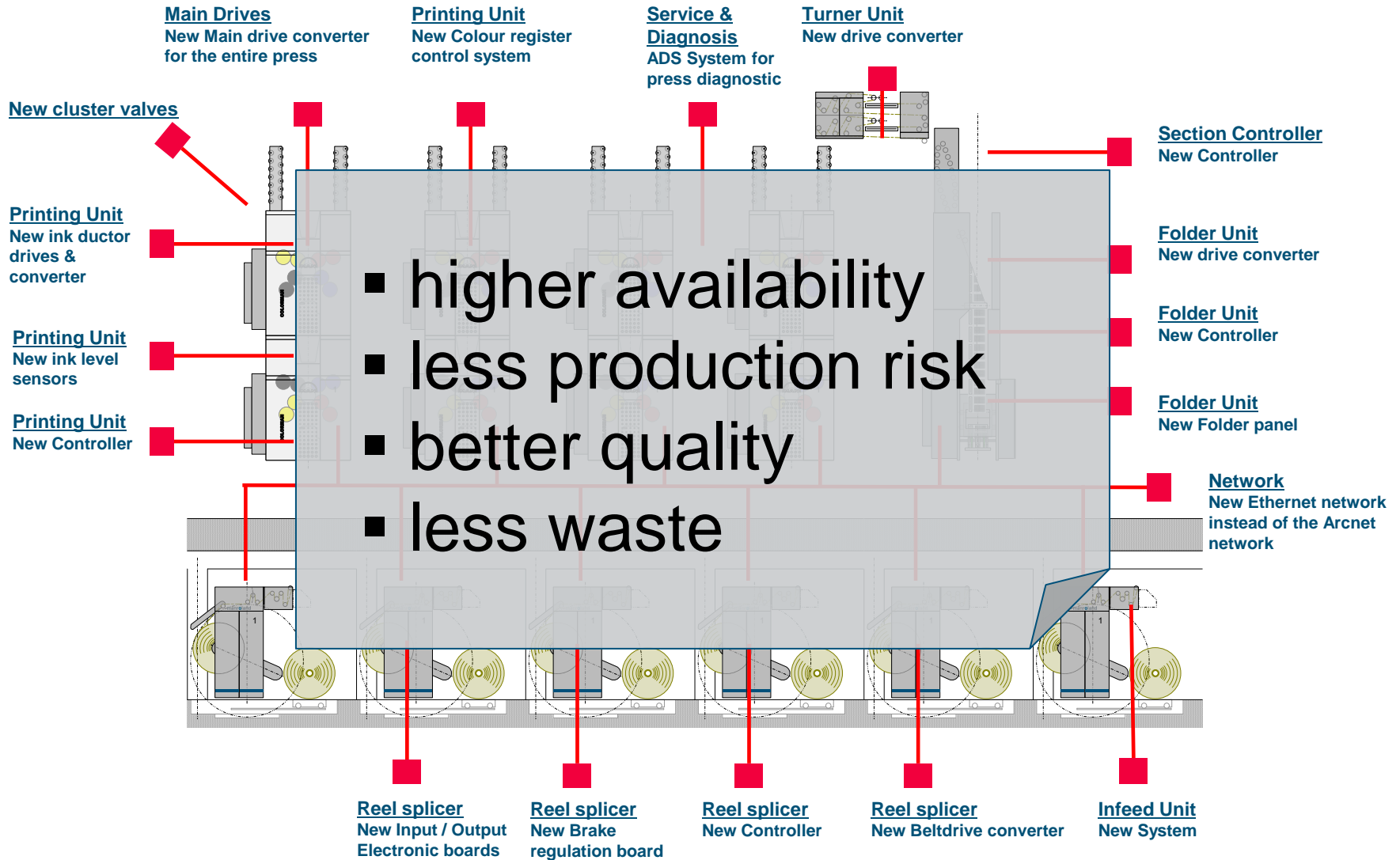


Prepare for the future

- ensure press production availability
- ensure spare parts to an acceptable price
- avoid downtimes/production risks
- reduce costs

Automation & Workflow

“Mechatrical” Retrofit project “Thairath”



Automation & Workflow

“Mechatrical” Retrofit project “Thairath”

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Some impressions



PECOM Center

- The retrofit project at 6 presses at Thairath has been performed in closed cooperation with the Customer “just-in-time”.
- Project was finished in October 2010

old

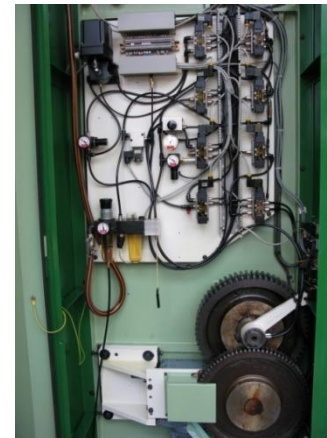


new

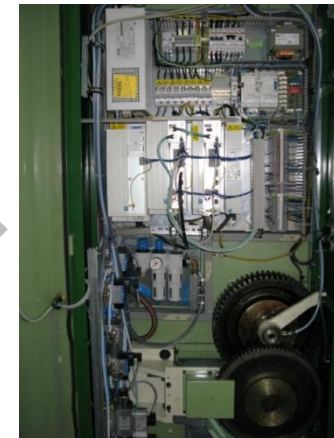


Printing Unit Controls

old



new

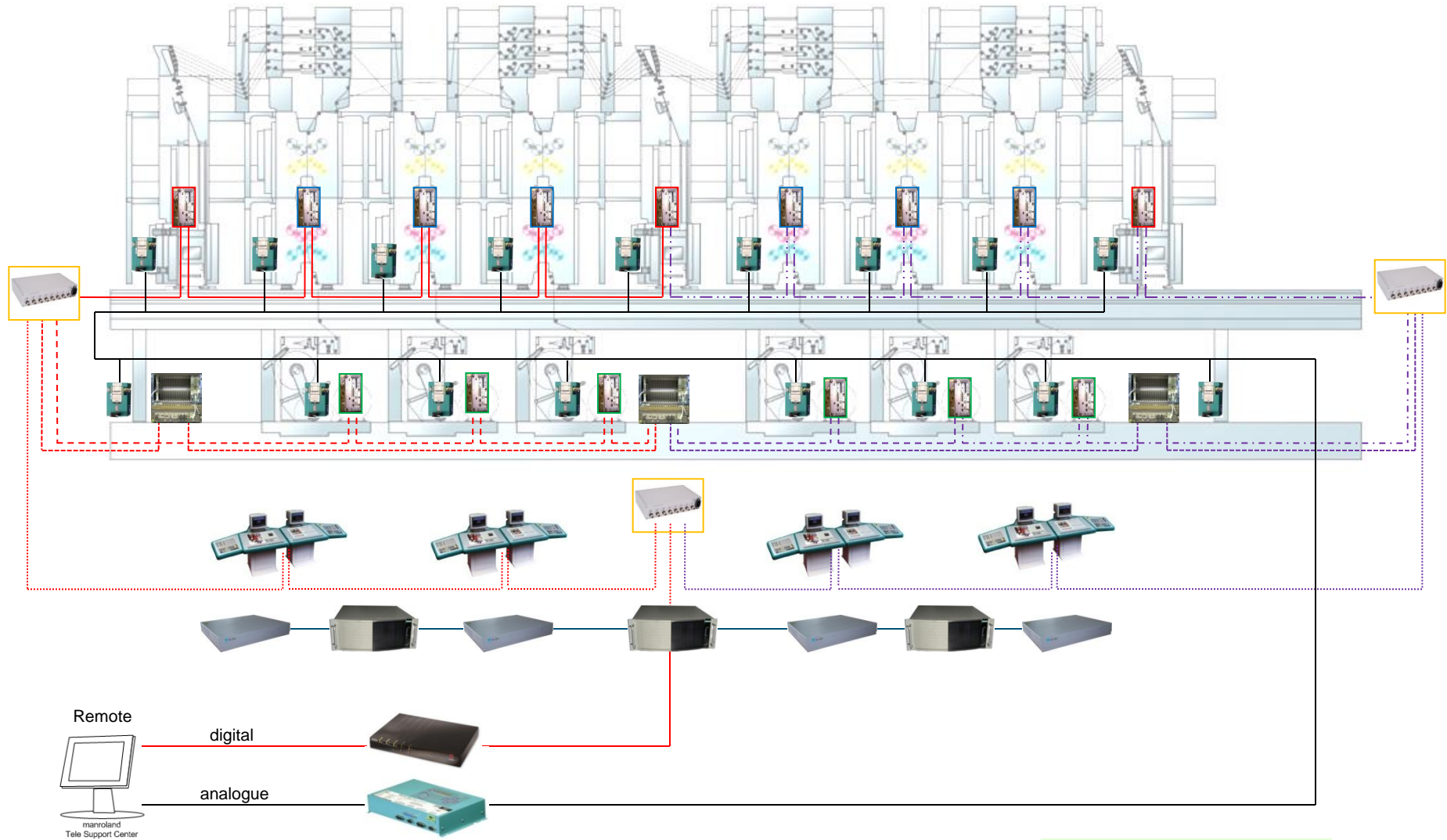


Reelstand Controls

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Further example of a retrofit

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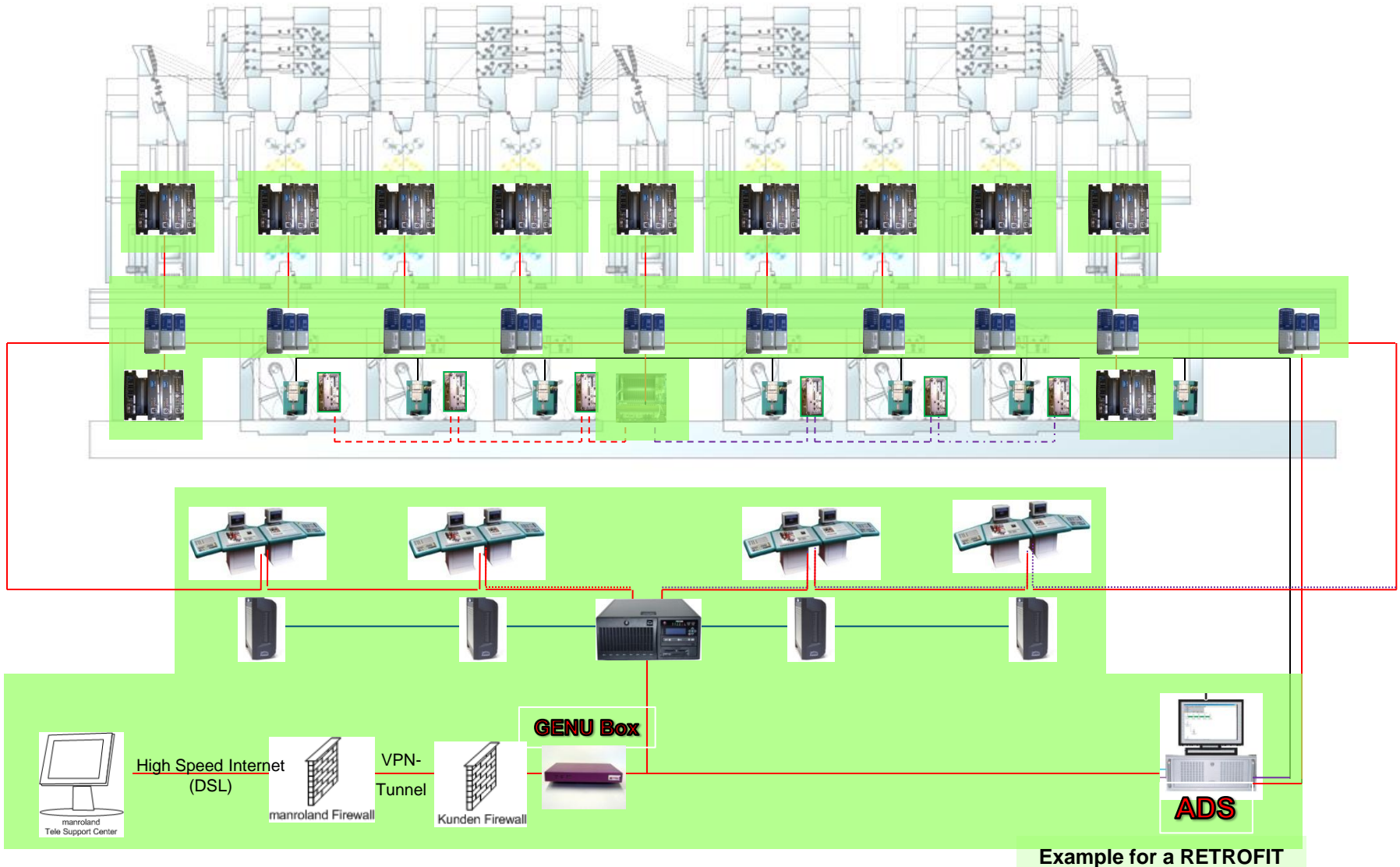


Example for a RETROFIT

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Example: Retrofit of complete console/network/control level

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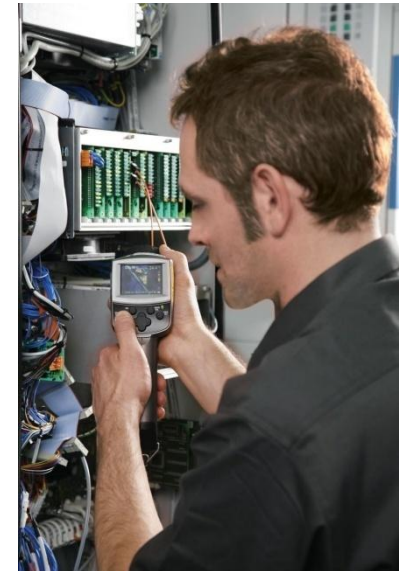


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Example for a 5 years Budget + Retrofit plan

Components of the Upgrade/Retrofit	Year 1	Year 2	Year 3	Year 4	Year 5
Electrical audit & thermo analysis					
Control and Operation desk`s					
Production planning station PPM					
Remote Diagnostic Server ADS					
Printing unit & Folder control					
Safety & Section control					
Press network					
Main drives & controls					
Controllars & Drives Auxiliary Drive					
Sensors and Electrical Component`s					
Webbreak detectors printing unit + folder					
Etc.... (to be defined)					
TOTAL	20%	35%	20%	10%	15%

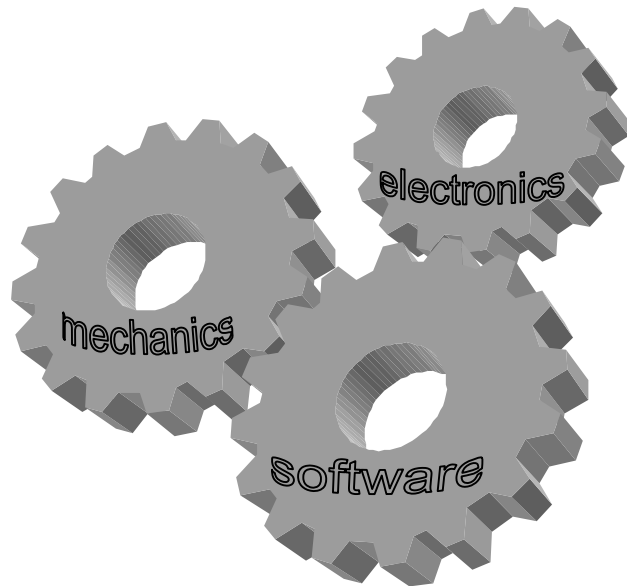
- Reduction of press downtimes and make ready times
- Waste reduction, optimization of quality
- Ensure the availability of the press by guaranteed supply with spare parts
- Advanced Telesupport to ensure the availability of the press
- Reduction of maintenance costs by planned preventive maintenance
- Reduction of Life-Cycle costs, reduce risk
- Basic for enhanced production possibilities and more automation



Increase efficiency of production

▪ Why should you realize retrofits in cooperation with manroland?

- Mechatronical analysis and optimization by inspection of the total system
- Technology transfer and innovation coming from the design of new presses
- Costs/benefits oriented modular retrofit concepts depending on the planned lifecycle of the press
- Support by manroland after the completion of the upgrade / retrofit
- manroland as central contact partner for mechanics, electronics and software



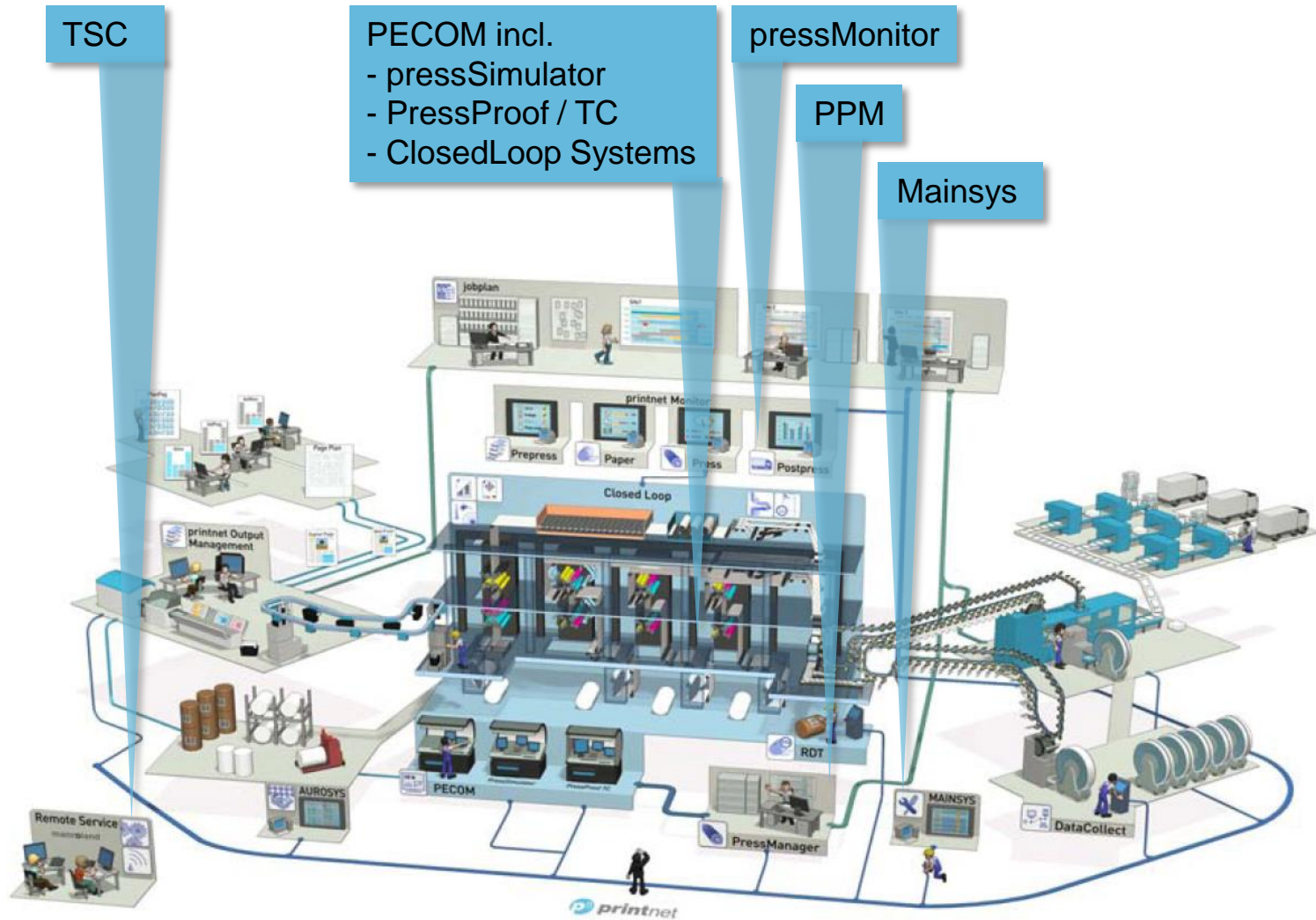
Consulting, project planning, construction and commissioning by using the know-how of the press manufacturer

2. Workflow solutions

Automation & Workflow

Example: printnet Press Components

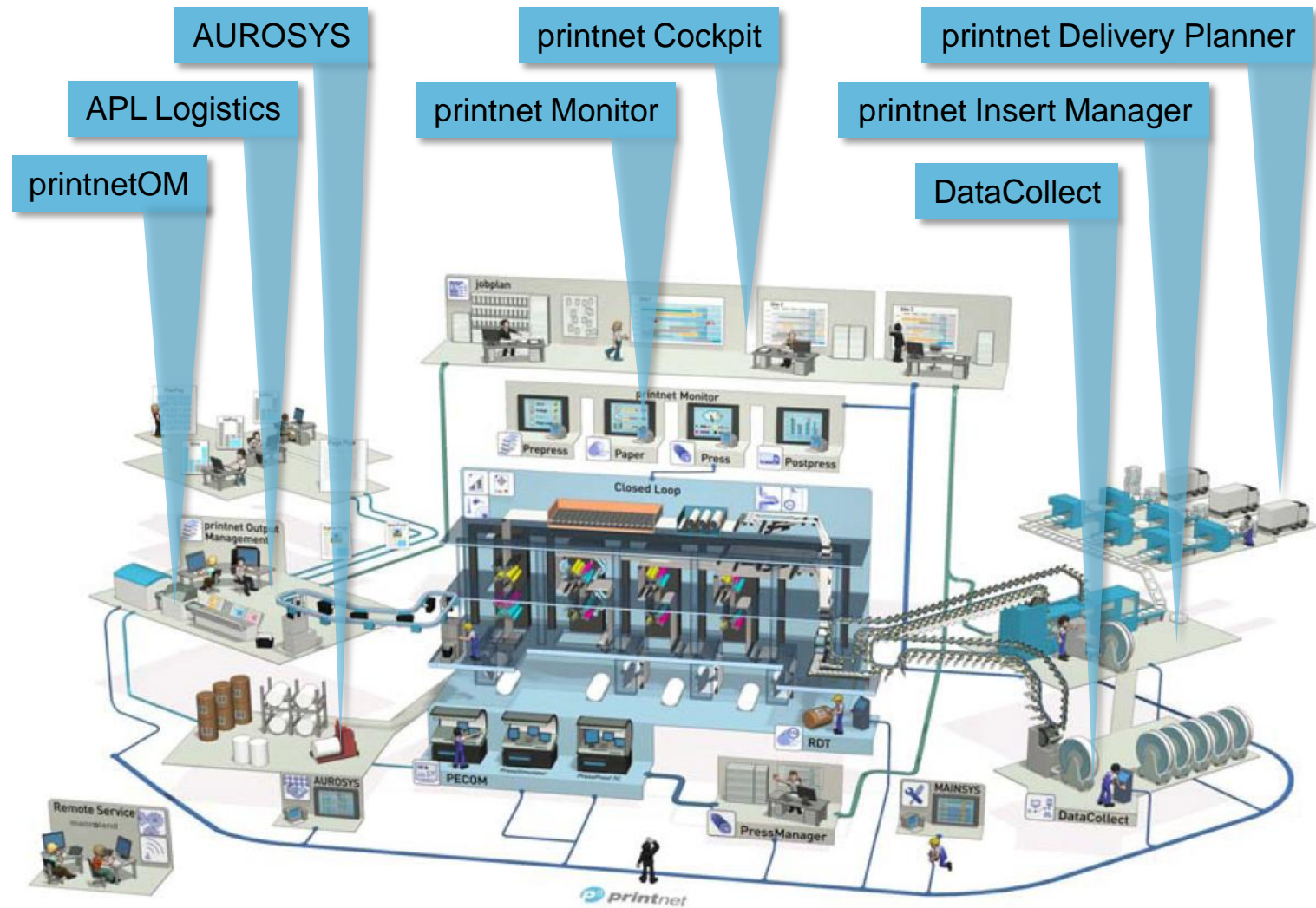
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Example: printnet Workflow Components

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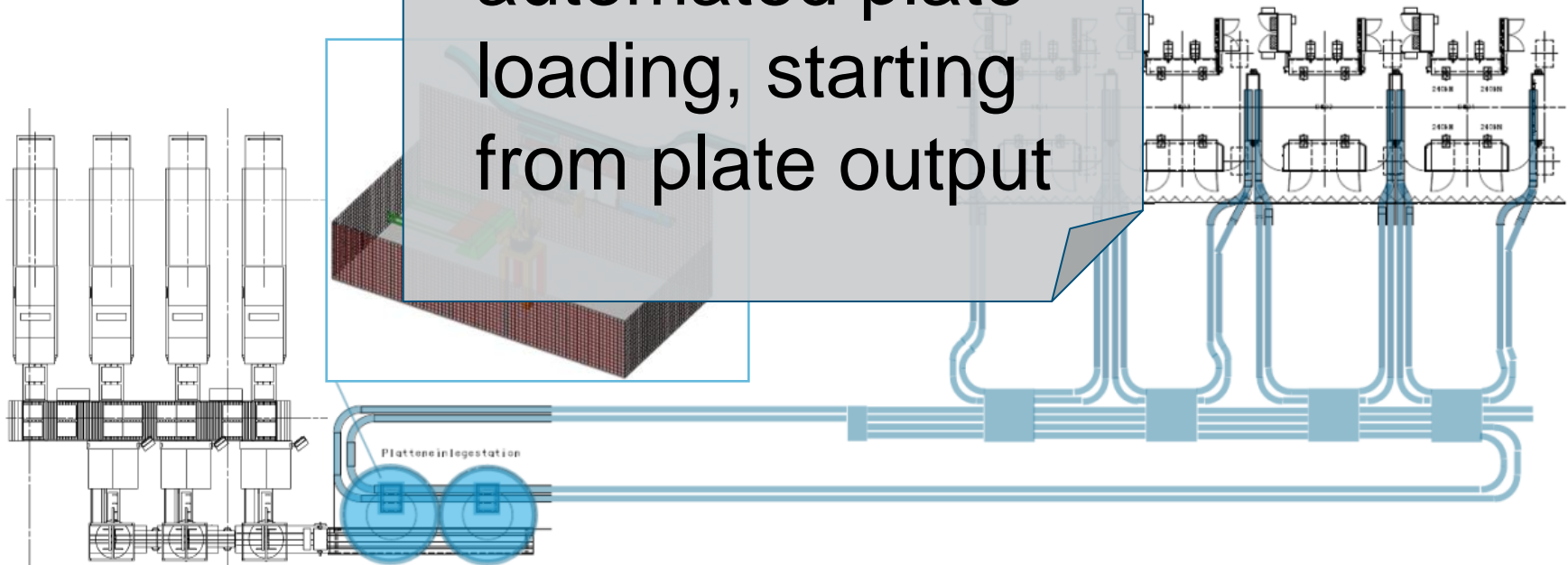


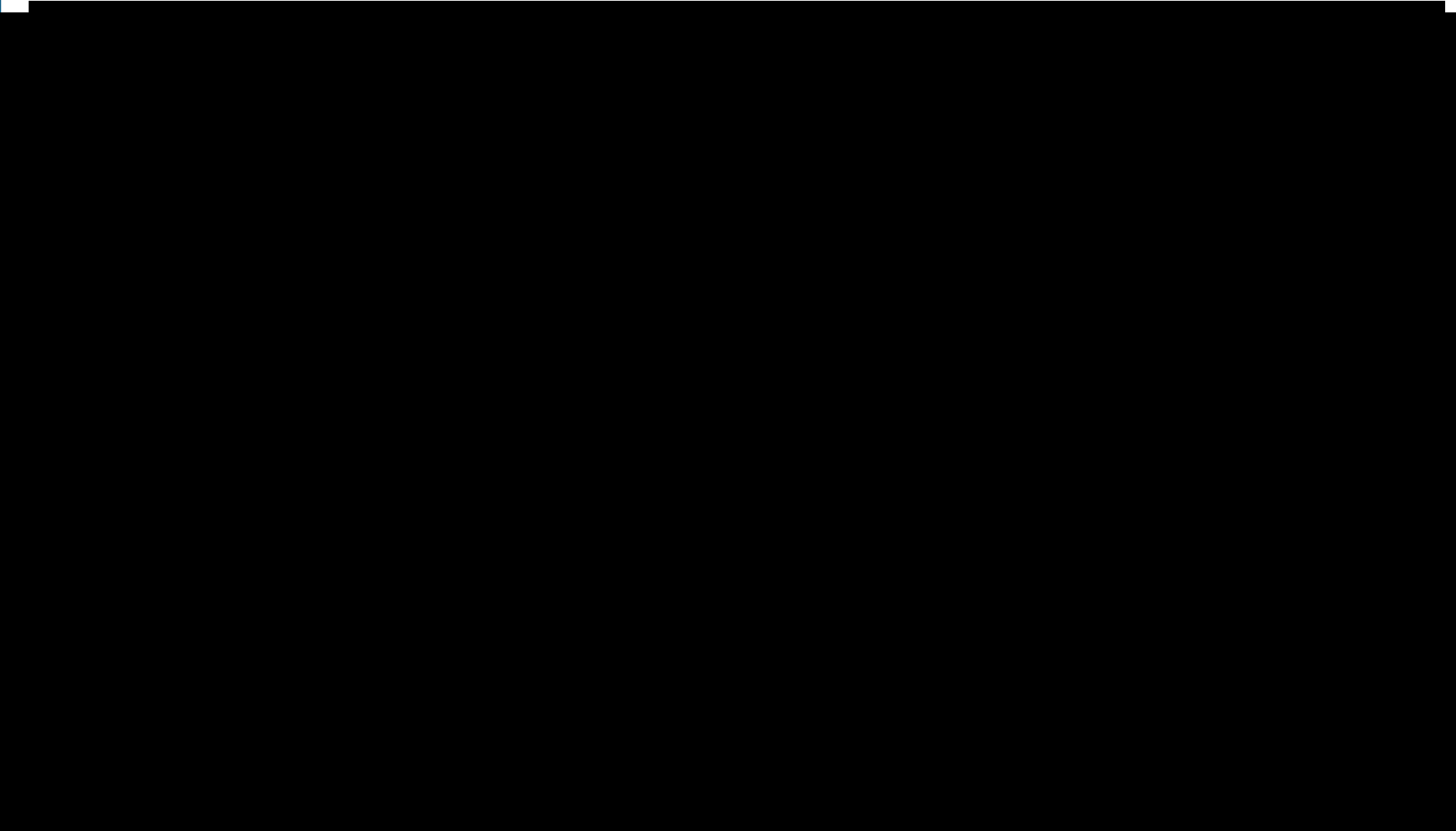
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Example: APL logistics

- Automatic transport into printing unit – **APL transport**
- Automatic loading of plates into boxes – **APL supply**
- Automatic, demand-oriented imaging of plates – **APL sequence**
- Control of the entire plate logistics – **APL control**
- In normal operation no intervention necessary

Benefit:
automated plate
loading, starting
from plate output

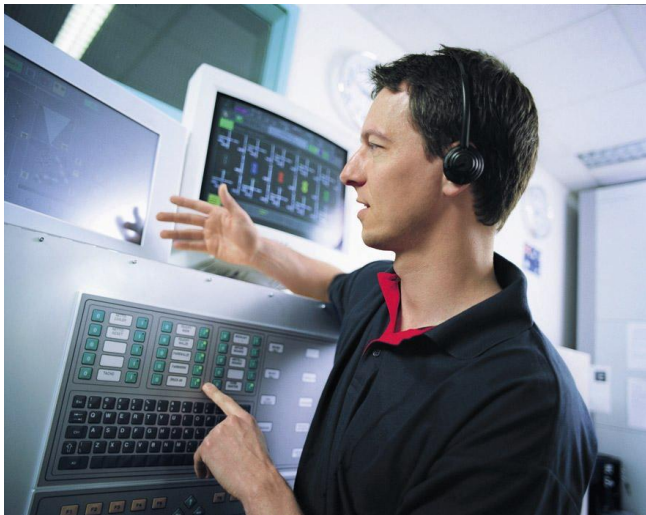




TelePresence comprehensive support

- TeleSupport → 24/7/365
- TeleInspection → Online-diagnoses
→ Troubleshooting
- TeleConsult → Statistics

- High press availability
- Cost Effective
- Monitoring press performance status
- Holistic diagnosis

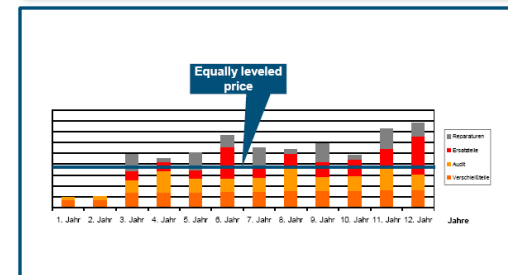


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Summary, questions & answers

- It is important to create a 5-8 years activity plan to ensure production availability and to increase efficiency / ROI
- Fixed & customized packages with fixed yearly budget rates over contract period
- Long-term partnerships and “mechatronical” thinking are helpful (Customer, partner, supplier)
- Keep communication alive

Components of the Upgrade/Retrofit	Year 1	Year 2	Year 3	Year 4	Year 5
Electrical audit & Remote analysis					
Control and Operation device					
Production planning station					
Remote Diagnostic Server ACS					
Printing unit & Toller control					
Safety & Section control					
Press network					
Main-frames & controls					
Controlbars & Drive-ink-Station					
ink level sensors					
Watermark detectors printing unit + roller					
Etc. (to be defined)					
Sum	100.000	500.000	200.000	100.000	50.000
↳ 1.000.000 (-) = 200.000,- p.a.					
→ 8 years service contract					
	200.000	200.000	200.000	200.000	200.000



Thank you for your kind attention!

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p^s printservices[®]

LifeCycleManagement

p^c printcom[®]

Process-compliant
system components

pⁿ printnet[®]

Workflowmanagement

p^a printadvice[®]

Consulting

- Increase of productivity
- Cost reduction
- High press reliability
- Increase of efficiency

