Industry 4.0 – Houses directly from the assembly line

Build better together!

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Managing Partner Operations
Agenda

- Introduction – Digitization in Construction
- RIB | Smart Production
- Modern Industry 4.0 Production for Prefab
The lack of digitization leads to inefficiencies

The construction industry is among the slowest to adopt digital technologies and traditional methods or isolated point solutions are inherently inefficient and wasteful.

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Slightest
Efficiency gains come from the construction industry over the last 60 years

10-20%
higher construction costs due to lack of coordination

170 mil.
Tons of materials go to waste every year

35%
Of time that construction professionals spend on non-optimized tasks

Only a few engineering and construction companies are taking advantage of digitalization.

So why does this work in other industries ...
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Digitalization for Prefabrication Industry
Prefabrication using an integrated Industry 4.0 Workflow

- Planning
- Production
- Prefabrication & Supply-Chain
- Logistics

**iTWO PPS**
Planning and Production Transport & Installation

**iTWO MES**
Production Mastercomputer

**iTWO ICS**
Intelligent Control Systems

**iTWO SCE**
Stockyard-Logistics & Control-Systems
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Modern Industry 4.0 Production-Line for Prefabrication
RIB | Smart Production - Industry 4.0
Flexible Multi-Line-Production – Flexible Model-Data

Source: Planbar
RIB | Smart Production
Industry 4.0

- Robotic Deshuttering
- Suitable Shutter System
- Cooperative Robotic Shuttering
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Industry 4.0

- Multilane Production
- Paperless Smart Stations
- Optimized Supply Chain and Materialflow
- Laserprojection
RIB Smart Production Industry 4.0

- Automatic Mesh welding
  Design to produce

- Automatic preparation of
  Insulation

- Automatic Concreting

- Optimized order at
  Batching plant
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Industry 4.0

- Automatic Plant-Logistics

- Safe integration of human work between automatic systems

- Trowelling

- Automatic Brickplacing
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Industry 4.0

- Inline Finishing

- Preplanned packing of delivery units

- Flexible, configurabel Software-Working-Plans
RIB | Smart Production Industry 4.0

- Fully integrated, Automatic Stockyard System
- Optimized Truckloading
- Integration of manual Stockyard operations
- Safety concept
RIB | Smart Production - Industry 4.0
Fully under digital control – like in automotive Industrie
Building Better Together