



MAKE

BETTER

USE OF
TECHNOLOGIES

Dieffenbacher

—
Your solution provider
for composites in
E-Mobility-Applications

DIEFFENBACHER

MOVE FORWARD. TOGETHER.



DIEFFENBACHER: HERE TO STAY SINCE 1873



Long-term orientation
150 years in the
business



Independent
family-owned



Close to our customers
1,900 employees worldwide



Resilient
acting in 4 different
markets



Solid revenue
Turnover 450+ mil. €
yearly



THE DIEFFENBACHER EXPERTISE



Wood-based Panel Industry

Forming

Recycling

Energy





GLOBAL COMPETENCE





YOUR SOLUTION PROVIDER FOR E-MOBILITY



Tape laying process



SMC



LFT-D/GMT



Wet molding





CHALLENGES AND OUR SOLUTIONS FOR E-MOBILITY



Challenges:

- Plant availability
- **Plant Downtime**
- Best part quality
- **High output**
- Highly customized products
- Recyclability, green footprint
- **Various materials and technologies**
- Flame retardancy
- High weights of battery packs

Solutions:

- **LFT-D Technology for inline recycling**
- **Hybrid Production Lines**
- **SMC Technology with material saving cutting technology**
- **Digitalization for downtime reduction / prevention**
- **Predictive maintenance solutions**
- Completely automated solutions from a single source
- Combination of materials (LFT-D + Tapes,...)



SOLUTIONS FOR THE E-MOBILITY

Based on Experience, Progress and Innovation

D

Hybrid thermoplastic technologies

Tailored Blank Line Fiberforge + Fibercon

SMC – Sheet molding compound

EVORIS – Digitalization Platform

LFT-D – Long Fiber Thermoplastics

HP-RTM – High-Pressure resin transfer molding

LCM – Liquid compression molding

**E-Mobility
Solutions**



WE GOT THE SOLUTION FOR YOUR CHALLENGE



DIEFFENBACHER– LFT-D Line



DIEFFENBACHER– SMC Line



DIEFFENBACHER– LCM Line



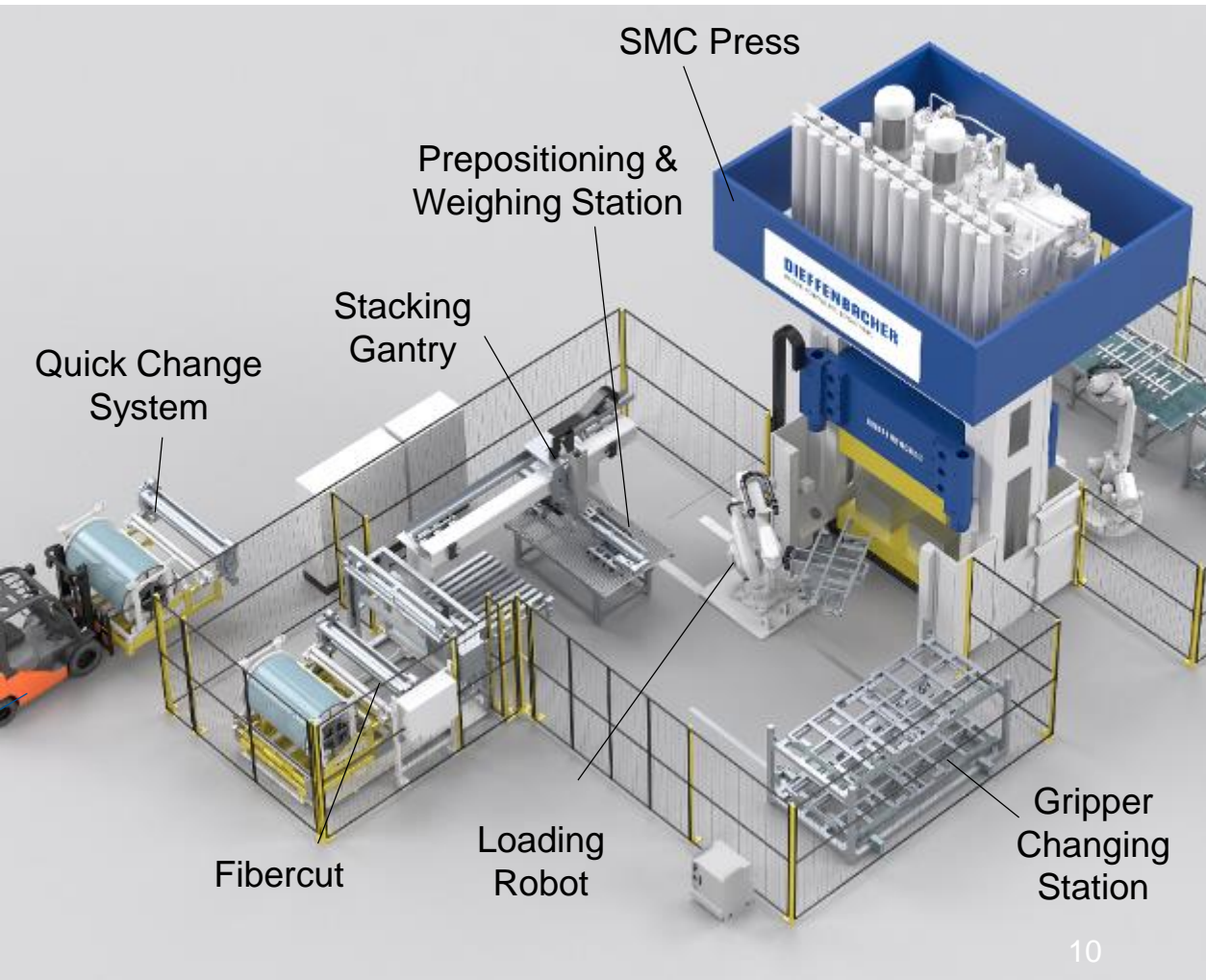


FULLY AUTOMATED SMC-PLANT WITH FIBERCUT





DIEFFENBACHER SMC LINE AUTOMATION



Fully automated Dieffenbacher SMC Production Line

- Fully automated cutting machine -> Fibercut
- High speed stacking gantry for short handling times
- Prepositioning & weighing station
 - Weight measuring of SMC-cuts
 - Creating part specific layup patterns
 - Optional possibility of active weigh compensation
- Loading robot with part specific gripper
- Optional gripper changing station
- Dieffenbacher SMC press
- Unloading robot with part specific gripper
- Output conveyor belt



THE DIEFFENBACHER FIBERCUT, VIDEO



INCREASE PRODUCTIVITY



Completely automated SMC-cutting and stacking system



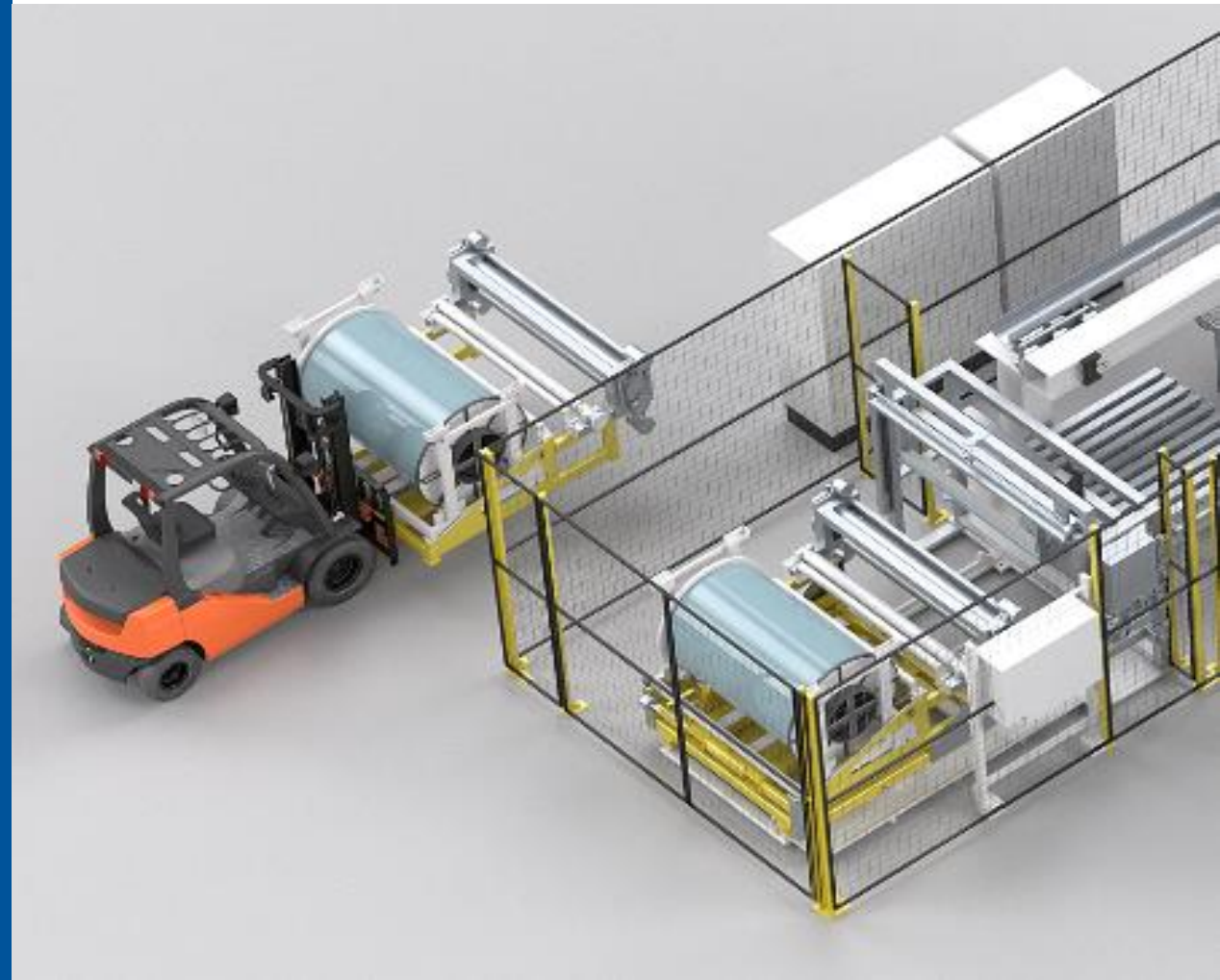
FIBERCUT – MATERIAL CHANGE OVER

Quick change of SMC

- The Fibercut gives alarm that end of material will be reached soon
- Limit switch detects end of material and stops the Fibercut
- Empty quick change unit will be removed with a forklift
- Fully prepared quick change unit with new SMC charge will be loaded with a forklift

The new SMC charge is prepared entirely offline without stopping the production.

SMC reloading time: < 5 minutes

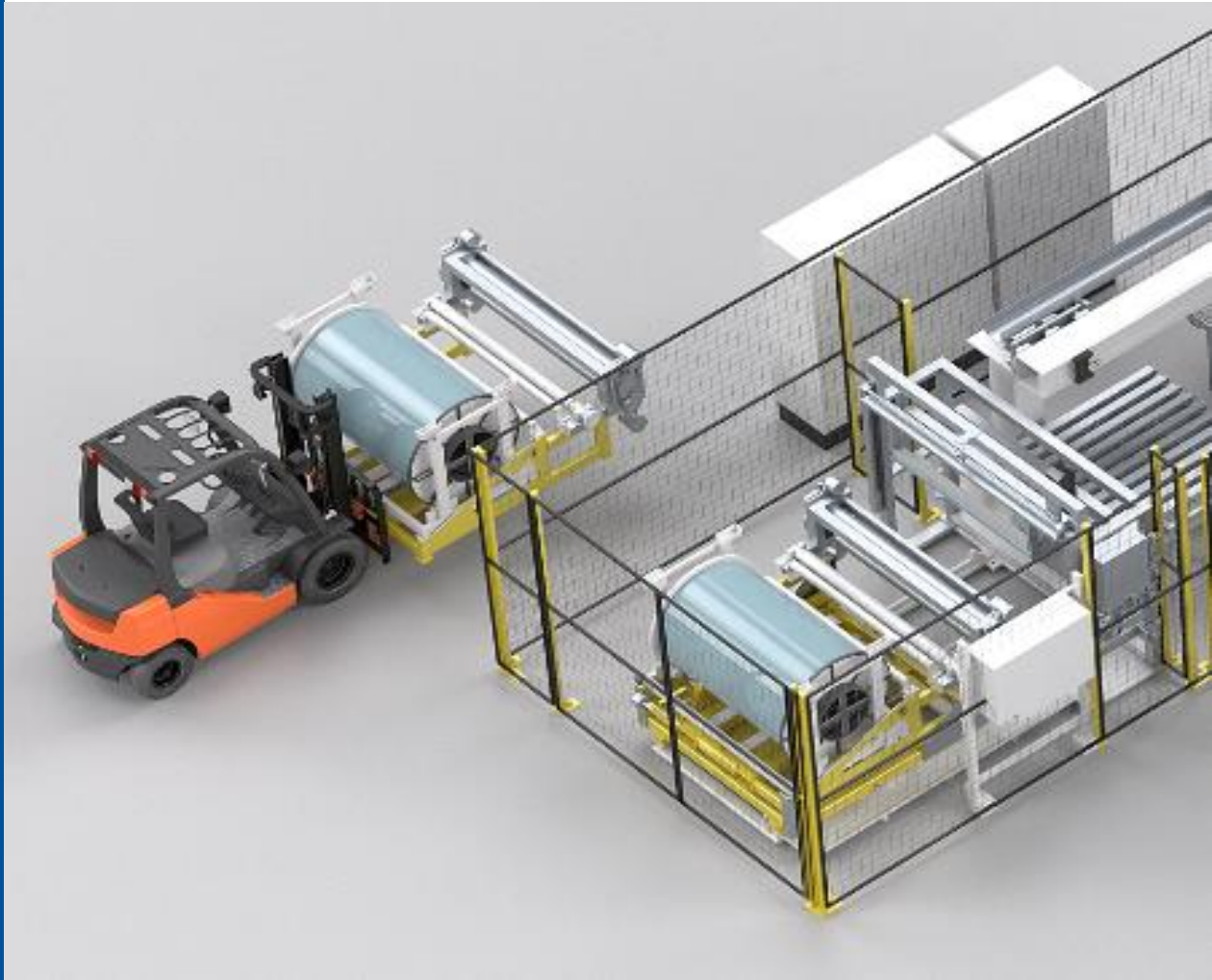


The Dieffenbacher Fibercut utilizes SMC Festoons and Coils



FIBERCUT – MATERIAL CHANGE OVER

Annual Production (e.g. @120s)	80,000	pcs
Material consumption per part	25	lbs
Material consumption per year	2,000,000	lbs
Material per Festoon	2,500	lbs
No. of coil changes	800	
Savings per change	10 - 15	min
Savings per year	135 - 200	h
~4,000 – 6,000 parts additionally per year		
~20,000 – 30,000 parts in 5 years of production		
Improvement of output rate ~5-7%		



The Dieffenbacher Fibercut utilizes SMC Festoons and Coils



DIEFFENBACHER SMC TECHNOLOGY - ADVANTAGES



Precision - suitable for **Class-A** components (IMC)

Economic machine concept for SMC components

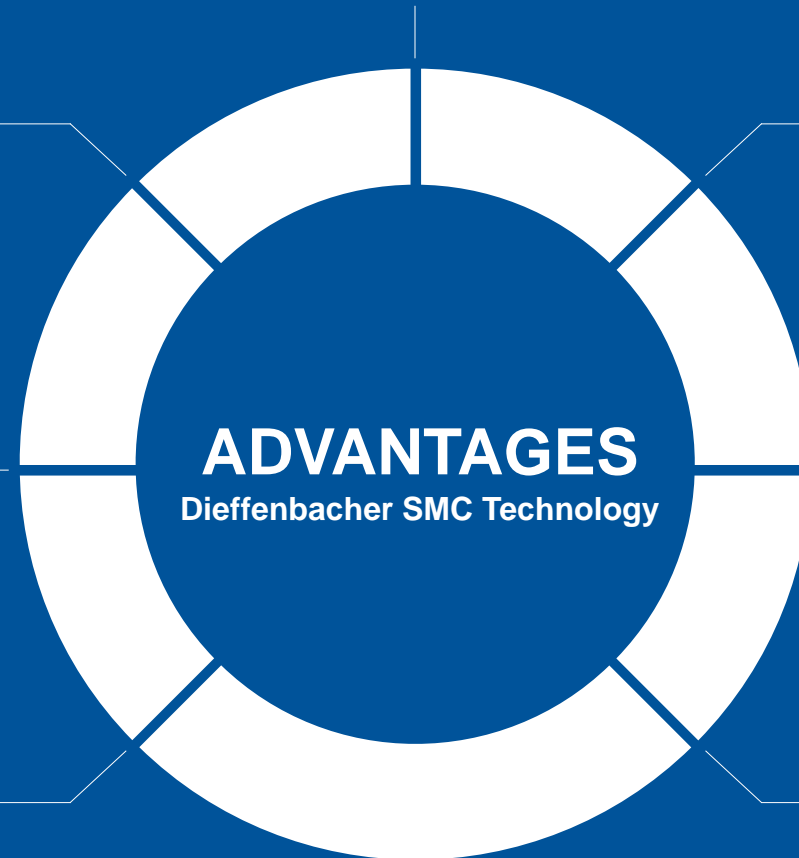
Superior Control System for perfect line integration and smooth processes

Fully automated for highest throughput and constant part quality

Digitalization with EVORIS for better Process insight and optimization

Advanced Press Technology for reduced scrap rate and less rework

Dieffenbacher Fibercut for material savings, cycle time reduction and robust processes





BETTER

INSIGHTS



EVORIS
Smart digital platform
for the forming industry

DIEFFENBACHER

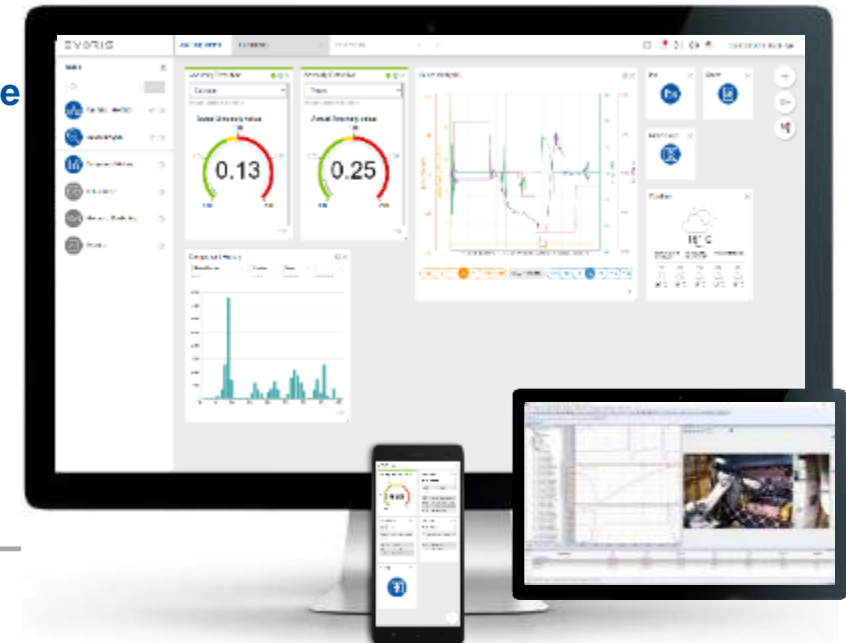
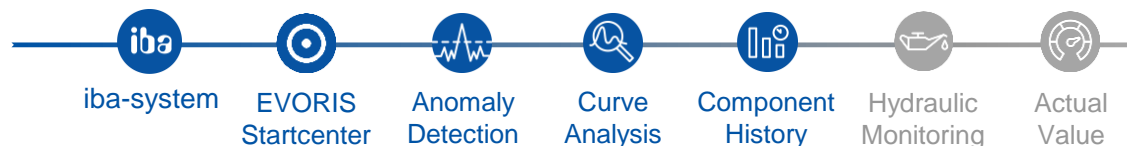
MOVE FORWARD. TOGETHER.





Digitalize your Plant

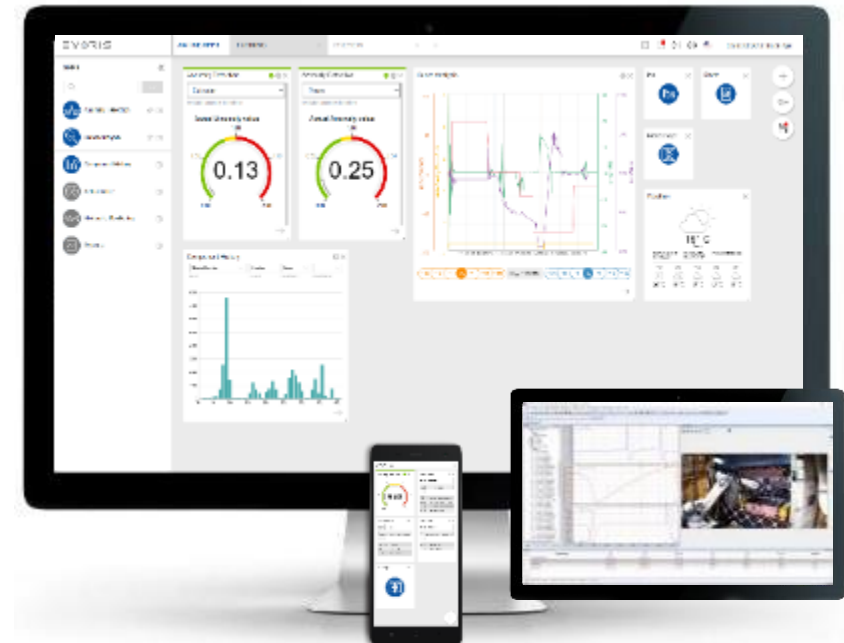
- Comprehensive plant connectivity
- Modular and browser-based platform with apps
- Self-learning systems based on artificial intelligence
- Company-wide access at any time – even mobile
- Trainings and ongoing expert support
- Continuous updates and further developments

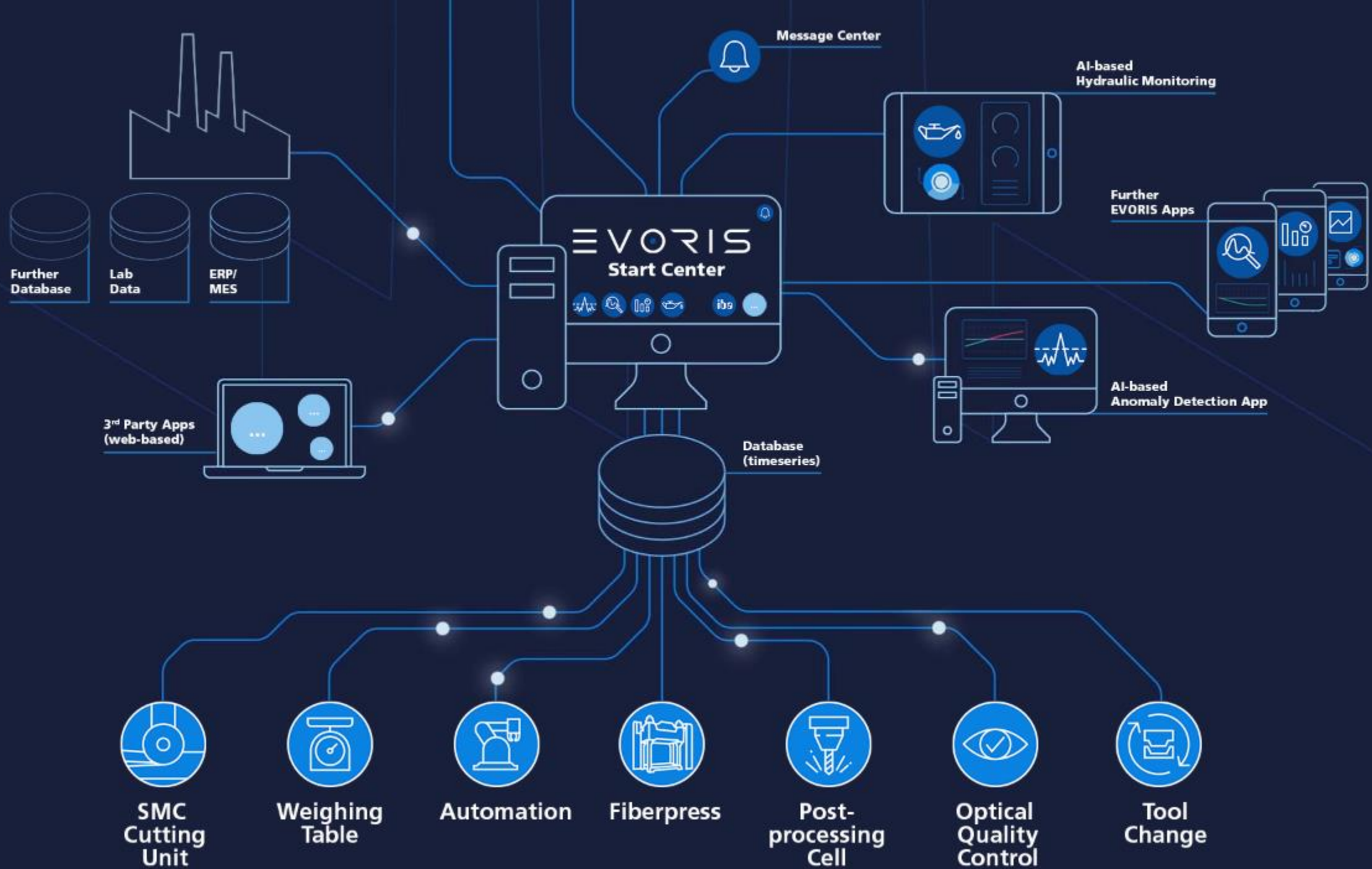




Your Benefits

- Better insights into production to make better decisions
- Higher Efficiency
- Increased production output
- Increased plant availability and less downtime
- Reduced scrap rate and costs
- Better component quality





A photograph of two men in business suits standing in a factory, looking towards the right. The man on the left is older with grey hair, and the man on the right is younger with a beard and glasses. They are both smiling and have their hands clasped in front of them. The background shows industrial machinery and a bright, open factory space.

WHAT CAN
WE DO FOR YOU?

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—

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