



ROTHBAUM
CONSULTING ENGINEERS

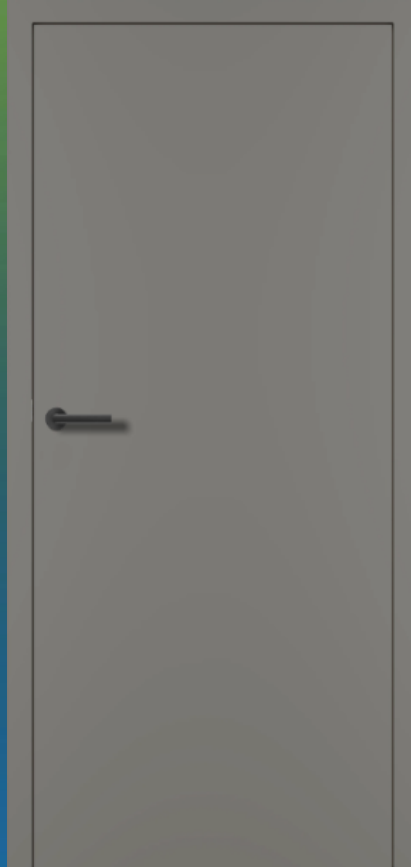
PRÜM

Türen die zu Ihnen passen

Process mining in the door factory

Supporting production through process transparency
and real-time information, and identifying opportunities





Process Transparency for More Efficient Production

Prüm Türenwerke GmbH, a subsidiary of the Swiss company Arbonia AG, manufactures interior doors and door frames, producing up to 25,000 doors per week at its facility in Weinsheim.

Due to the complex, multi-stage production process, the goal was to make better use of existing production data and create transparency regarding process flows.

To this end, Rothbaum Consulting developed a process mining pilot using Celonis and, in collaboration with production experts, created customized analyses and use cases. This made it possible, among other things, to transparently analyze equipment performance, scrap rates, and dwell and transport times, and to identify specific opportunities for optimization.

Uncovering Production Potential Through Process Mining

Challenge

The wide variety of products results in a complex, multi-stage production process in which downtime and transport times significantly exceed the actual processing times. Given the limited analyzability of the available machine data, the potential applications of process mining for creating process transparency should be investigated.

Implementation

Working closely with experts from the production department, we created a Celonis data model and built a digital representation of the production process. Through joint walkthroughs, we identified bottlenecks and developed appropriate use cases. Building on this, we analyzed, among other things, equipment performance, scrap, and idle and transport times.

Results

Using a digital representation of the production process, real-time analyses and production performance dashboards were developed. This made it possible to identify bottlenecks and highlight specific opportunities for optimization, including in areas such as downtime and scrap.

1

Digital representation of the entire
production process

3

Key Areas of Analysis

1

Celonis Data Model for the
Production Process

“

Thanks to Rothbaum's expertise in process mining and operations, we were quickly able to achieve the process transparency that helps us optimize wait times and turnaround times.

Harald Valentin

Head of Production Planning
Prüm Türenwerke GmbH

PRÜM
Türen die zu Ihnen passen



Detailed Results

- A valid digital representation of the production process was created based on the existing production data.
- Production performance dashboards and master data reconciliation provide transparency into relevant production data and enable quick answers to recurring questions.
- We analyzed plant performance, target-actual variance comparisons, and lead times in order to quickly and effectively address recurring issues.
- By analyzing dwell and transport times, a use case was also developed for the automatic prioritization of time-sensitive orders.
- Scrap monitoring provides transparency regarding scrap reports for each piece of equipment and also enables the automatic detection of increases in scrap.
- The insights gained will make it possible in the future to prioritize time-sensitive orders using rules or AI, in order to reduce dwell times and better meet delivery deadlines.

Process mining provides transparency into the complex production process and identifies specific opportunities to reduce downtime and scrap.



Your Contact Person

Dr. Clemen Wolf

Business Unit Manager Digital Operations

Office Frankfurt

clemens.wolf@rothbaum-consulting.com