

ipolog Success Story at Graz Automotive Plant: Optimal Material Provisioning with Shorter Employee Walking Distances

The ipolog software significantly enhances the holistic planning of logistics and assembly at Magna in Graz, a worldwide leading brand-independent manufacturing partner for the automotive industry. With over 120 years of experience in complete vehicle manufacturing, Magna in Graz provides a comprehensive range of services from complete vehicle engineering—including systems and modules—to complete vehicle production.

- Industry: Automotive
- Company Size: Over 10,000 employees
- Products: Complete vehicle engineering and manufacturing
- Use Case: Optimization of material provisioning and logistics

„True to our ‚Forward. For all.‘ principle of ‚never settle,‘ we are constantly on the move and and evolving with the times. We aim to keep moving for our customers and ourselves, to become faster, more economical, but also more sustainable throughout the entire value chain.“

*Philipp Rucker, Sr. Director, Manufacturing Engineering and Logistics,
Complete Vehicle Manufacturing, Magna in Graz*





INITIAL SITUATION AND CHALLENGES AT MAGNA

- ✘ The large product diversity and high variance (models from different customers on a single production line) make planning complex and require a flexible response.
- ✘ Competitive advantages are expected to be achieved through efficient planning of assembly and logistic processes.
- ✘ Visualization of production lines and assembly or logistics processes is not possible with the existing planning software.
- ✘ There is no suitable standard tool available that supports the complex planning tasks.

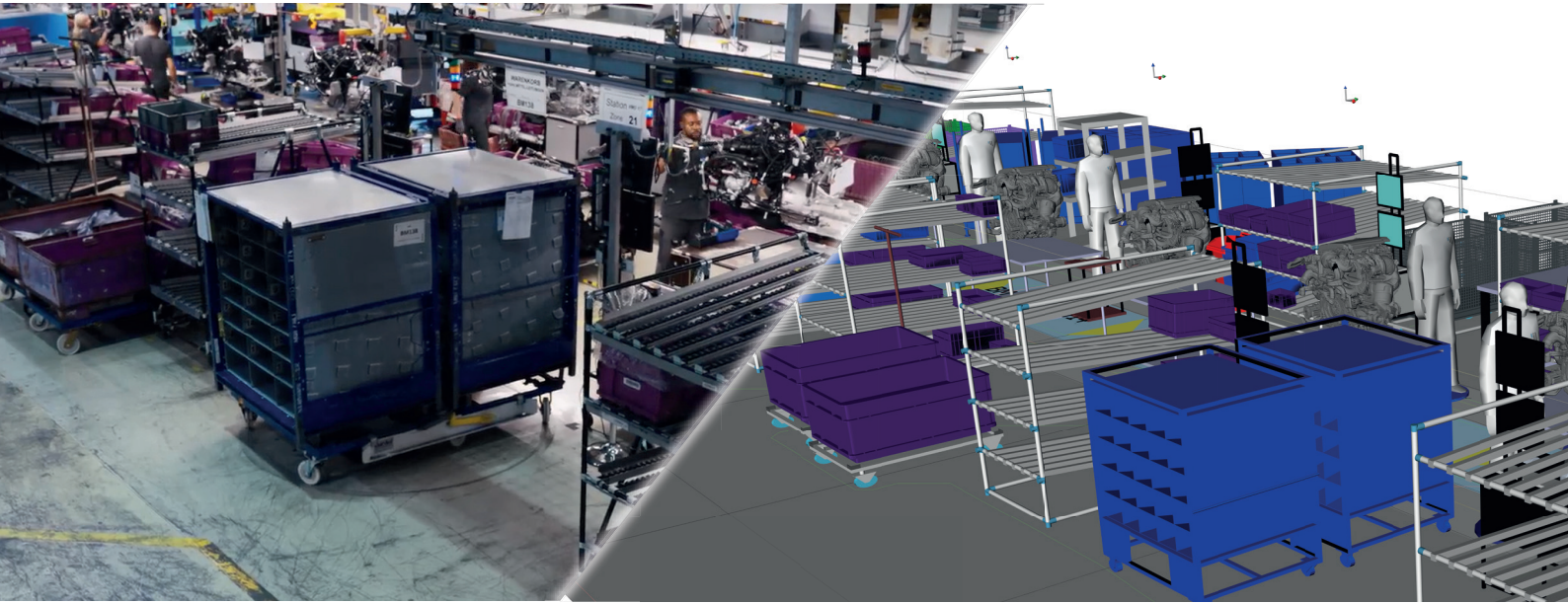
SOLUTION

With the adoption of ipolog as a digital planning and simulation tool, material provisioning and employee walking distances are visualized, simulated, and optimized from the early stages of planning using a digital twin. This enables a more precisely timed assembly process, sequence by sequence.

„We have improved material provisioning and reduced employee walking distances. Coordination processes between production, logistics, and process planning become more efficient through visualization, as changes can be represented without significant effort.“

Franz Schinnerl, Manager Process Planning, General Assembly, Magna in Graz








IMPLEMENTATION AT MAGNA

- ✓ Automated data imports into the ipolog planning software
- ✓ Simulation of assembly and logistics processes using real-time data from the master system
- ✓ Provision of planning and simulation outcomes as a comprehensive report
- ✓ Comparison of different scenarios through KPI analysis
- ✓ Real situation replicated as a digital twin: showcasing the hall, assembly line, material staging areas, material supply, and warehouse planning with walking routes in 3D

ACHIEVEMENTS

-  Optimized material provisioning
-  Reduced employee walking distances
-  More efficient coordination processes
- ✓ Established a perfect foundation for future logistics planning

„When the material is in the right place, walking paths and value-adding process flows are simulated at the push of a button. Changes in employee utilization are immediately visible in the simulation.“

Matthias Kellermann, CEO and Co-Founder, ipolog

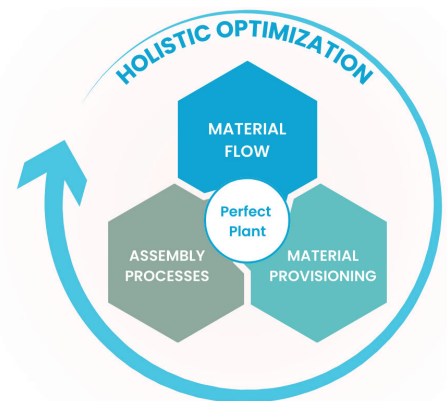




NEXT STEPS WITH MAGNA AND IPOLOG

Continued enhancement of assembly and logistics planning includes:

- A unified data base for assembly and logistics
- More efficient use of resources contributing to CO2 neutrality
- Clear interfaces between departments, ensuring that assembly and logistics planners work synergistically



SHAPE YOUR FUTURE WITH IPOLOG



Holistic Planning:

A holistic data model enables the planning and simulation of assembly processes, material provisioning, and employee walking paths directly within the factory layout.



Error Prevention:

With ipolog, planning errors in the digital twin are detected and corrected before they lead to additional costs.



Seamless Collaboration:

Assembly planners and logistics planners work towards a common goal through cross-site simulations.

„Your future starts NOW!“

Contact us and let's discuss the next steps.“

