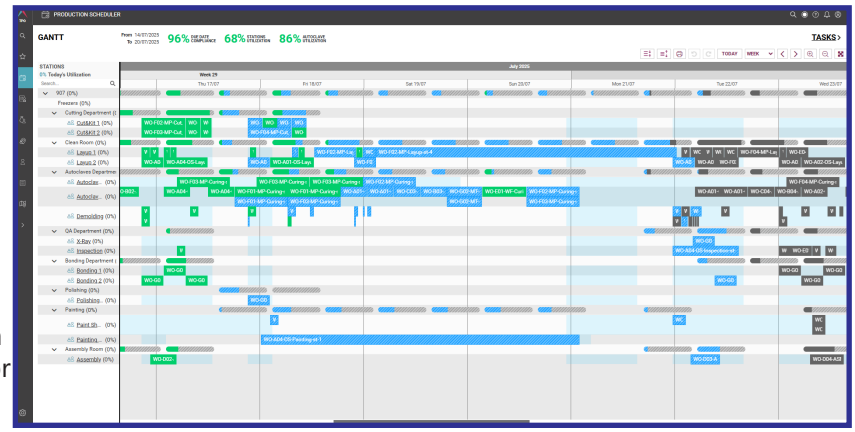
Composites UK Trade Association

PLATAINE people-smart automation

INNOVATION IN COMPOSITE MANUFACTURE

FINALIST: Plataine

Plataine's AI-powered Production Scheduler revolutionises composite manufacturing by automating and optimising production planning through advanced artificial intelligence. Traditional scheduling methods, often manual, spreadsheet-based, and error-prone, struggle to manage the complexity of high-mix, high-precision environments. Plataine's solution automatically generates optimized production plans in minutes, dynamically adapting to real-time factory data such as machine breakdowns, supply delays, or task updates from operators.



At its core is Plataine's proprietary Practimum-Optimum™ algorithm, which balances ideal KPIs with practical, achievable production outcomes. The system integrates seamlessly with ERP software like SAP, ensuring automated, bi-directional data flow without human intervention. Beyond daily optimisation, its advanced simulation capabilities allow users to run "what-if" scenarios for strategic planning, resource allocation, and investment justification, bridging operational execution with long-term decision-making.

The innovation was co-developed with composite manufacturing partners over 24 months to ensure relevance to real-world processes such as lay-up, mold preparation, and autoclave scheduling. It combines AI, operations research, and industrial engineering expertise to create a scalable, user-friendly platform tailored for complex manufacturing.

End-users - production planners, engineers, and managers - report dramatic efficiency gains: planning time reduced by over 90%, autoclave utilisation improved from 55% to 85%, and throughput increased by 5–10%. With measurable ROI achieved in as little as six months, Plataine's scheduler delivers cost reductions of up to 15% and labor savings of up to 20%.

As Industry 4.0 adoption accelerates, Plataine's innovation sets a new benchmark for smart, sustainable, and data-driven manufacturing planning worldwide.

Learn more at: www.plataine.com