PROJECT NEWSLETTER

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LaserWay

Wednesday, January 28, 2026

LaserWay entering its final year

LaserWay started its last year with a General Meeting at the brand-new facilities of Precitec, our worldwide renowned expert in laser heads. The LaserWay consortium gathered in a hybrid format to fine-tune the latest details to assemble its three systems:

🚗 LaserWay blanking to serve the automotive industry more sustainably.

🚰 LaserWay microdrilling for water filters in agriculture and reducing fuel consumption in aircraft.

✈️ LaserWay EHLA 3D to repair airplane parts for a less wasteful aviation.

Top News

LaserWay dedicated session at the 18th International Conference on High Speed Machining (HSM 2025)

LaserWay publication on process planning for high-speed coil-fed laser cutting with two laser heads

LaserWay and the LIMES Cluster at the EFFRA's Manufacturing Partnership Days 2025

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Newsletter Highlight

At the 18th International Conference on High Speed Machining - HSM 2025, the LASERWAY consortium showcased innovation in high-speed laser #cutting, #drilling, and #coating, with leading research partners presenting their latest breakthroughs.

🔹 IDEKO Research Center, RCMT FME CTU in Prague, and Compo Tech PLUS introduced a highly dynamic crossed linear rail gantry design that enhances machine precision and responsiveness for next-generation laser systems.

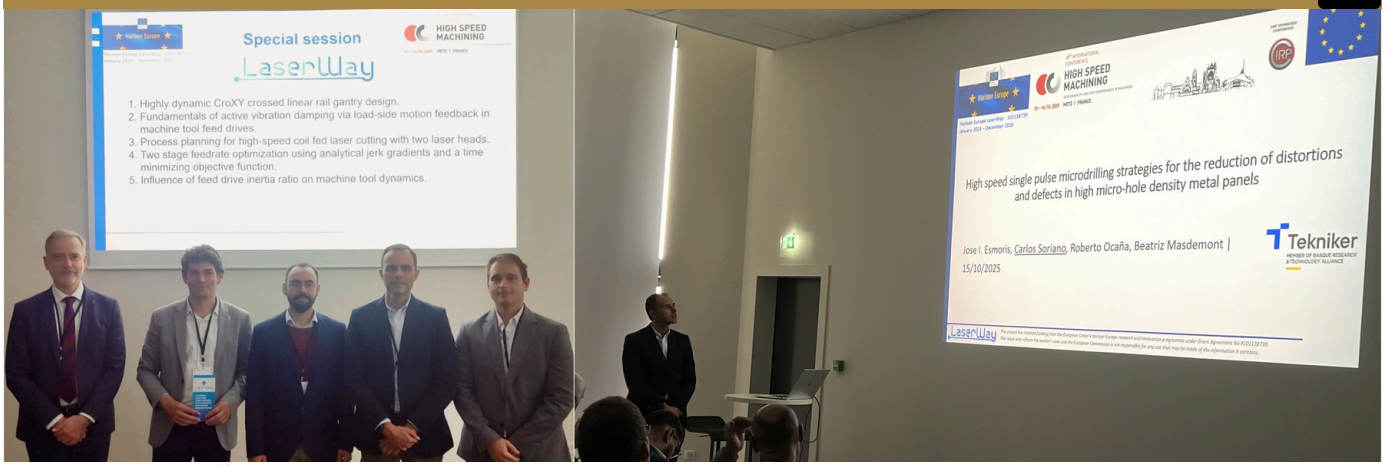
🔹 IDEKO also shared insights into active vibration damping via load-side motion feedback, enabling greater stability and accuracy in machine tool feed drives.

🔹 Tekniker presented high-speed single-pulse microdrilling strategies to minimize defects in dense metallic panels, improving both quality and efficiency.

🔹 ModuleWorks showcased process planning for dual-head coil-fed laser cutting, a step toward more flexible and productive manufacturing lines.

🔹 RCMT highlighted two-stage feedrate optimization using analytical jerk gradients for faster, smoother motion control.

These results demonstrate how #European #collaboration is pushing the boundaries of #laser-based #manufacturing, integrating advanced mechanics, control systems, and process optimization to achieve unprecedented #productivity and #precision.



18th INTERNATIONAL CONFERENCE
HIGH SPEED MACHINING
SUSTAINABILITY AND HIGH PERFORMANCE IN MACHINING
15—16/10, 2025 METZ | FRANCE

CIRP SPONSORED CONFERENCE

Process planning for high-speed coil-fed laser cutting with two laser heads

Coil-fed laser cutting is widely used for mass production, offering streamlined material feeding and virtually unlimited workpiece length. However, machine designs with multiple laser heads operating sequentially on the full coil width introduce significant process planning challenges. Cutting patterns must be coordinated with the moving coil to ensure sufficient processing time.

This publication from LaserWay partner ModuleWorks considers a high-speed, high-dynamic two-head laser cutting machine and presents an integrated workflow that automates nesting and dynamics-aware toolpath generation, enabling optimized throughput without manual partitioning or sequencing.

Fig. 10: Benchmark sample - nesting without rotation

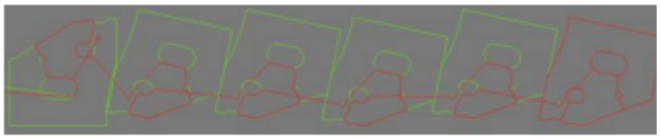


Fig. 11: Benchmark sample – nesting with rotation

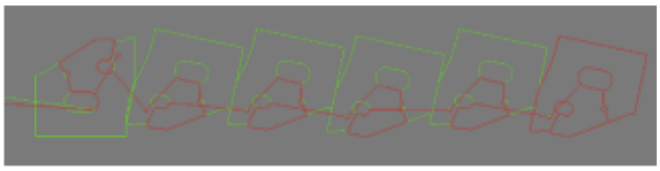


Fig. 12: Benchmark sample – multiple start-end points

Tab. 1: Comparison of metrics for different toolpath generation strategies.

Strategy	Relative machining time estimate
Nesting without rotation	100%
Nesting with rotation (NR)	55%
Multiple start-end points (MP) +(NR)	44%
Inverted contours (IC) + (MP) + (NR)	39%
Corner smoothing + (IC) + (MP) + (NR)	37%

LaserWay at The Manufacturing Partnership Days 2025

Over three days, members of EFFRA gathered in Brussels to discuss the most pressing topics currently shaping the future of manufacturing technologies in Europe.
Experts from diverse application markets and European regulatory bodies engaged in lively panel discussions on AI and the digital transformation of SMEs, circularity and sustainability, productivity, and human-centric manufacturing.
LaserWay could not miss this opportunity! As a proud member of the LIMES Cluster of European projects, LaserWay was represented by Arturo Elías Llumbet, the project's DCE manager at Tematys. At the LIMES-dedicated booth, attendees were shown how LaserWay is contributing to tackling Europe's manufacturing challenges by boosting digitalization in laser processes while prioritizing sustainability.

Hope to see you in our next newsletter