





Project Coordinator

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EXTREMELY HIGH-SPEED LASER PROCESSES FOR SUSTAINABLE AND FLEXIBLE MANUFACTURING



LaserWay's main objective is to develop a laser machine and process that can operate at extremely high-speed while still delivering the photons at the right place and at the right time, fostering a flexible and sustainable production.

The developed laser machines and processes will be used in three applications of high industrial interest. **Laser micro-drilling** that targets two different use-cases: the Hybrid Laminar Flow Control (HLFC) that can reduce the CO2 emissions in the aerospace sector, and the liquid filtering applications to reduce pollution due to chemical filtering. **Laser blanking on moving coil** to substitute the rigid press blanking by more flexible and eco-friendly laser production systems. **EHLA 2D** (Extremely High-speed Laser Applications) for coating and repairing applications.







To develop laser machines for extremely high-speed 2D applications.



To maintain the gap between the laser nozzle and the metallic part at extremely high-speed.



To program smoother tool paths for high-speed movements.



To avoid downtime related to quality issues with in-process control at high speeds.



To provide a sustainable alternative to conventional processes.



To demonstrate and validate the project solutions.





3 Case Studies



Laser Blanking



Micro Drilling



EHLA

Extremely High-Speed Laser Processes for Sustainable and Flexible Manufacturing