



**Extremely High-Speed Laser Processes For Sustainable
And Flexible Manufacturing**

Kick-off of the HORIZON EUROPE project LASERWAY

Press release



















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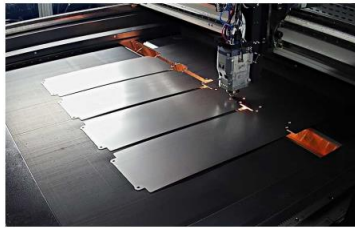
PRECITEC is pleased to announce the kick-off of the European collaborative project LASERWAY.

The project gathers a consortium of 16 partners and is coordinated by IDEKO in Spain:

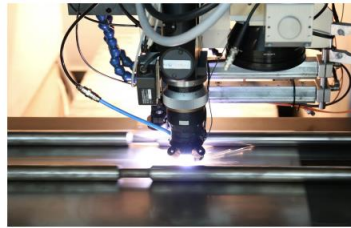
Participant No	Participant organisation name	Country
1 (Coordinator)	IDEKO S COOP	
2	FAGOR ARRASATE S COOP	
3	PRECITEC GMBH & CO KG	
4	FRAUNHOFER GESELLSCHAFT ZUR FORDERUNG DER ANGEWANDTEN FORSCHUNG EV	
5	FUNDACION TEKNIKER	
6	COMPO TECH PLUS SPOL SRO	
7	CESKE VYSOKE UCENI TECHNICKE V PRAZE	
8	ModuleWorks GmbH	
9	VIDEO SYSTEMS SRL	
10	SISTEMA AZUD SA	
11	ECOMATTERS B.V.	
12	FAGOR AUTOMATION S COOP	
13	ACUNITY GMBH	
14	TEMATYS	
15	AERNNOVA ENGINEERING DIVISION SAU	
16	CEDRAT TECHNOLOGIES SA	

The LaserWay project aims to revolutionize the manufacturing industry by replacing conventional, inefficient, and environmentally harmful methods with highly flexible production lines based on high-speed laser technology. Laser blanking, laser micro-drilling, and extreme high-speed laser material deposition (EHLA) are the three laser manufacturing technologies selected for their potential to create more sustainable manufacturing processes and products.

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Laser Blanking



Micro Drilling



EHLA

The project focuses on developing WayFASTER machines to improve the performance of the laser technologies through lightweight designs, vibration control techniques, and program optimizations tailored for high-speed laser applications. WayBETTER Photonics aims to ensure precise delivery of the laser beam at extreme speeds, targeting three laser technologies with unique demands. The WaySTRONGER integration concept aims to enhance the sustainability, resilience, and flexibility of current manufacturing processes by integrating new technologies mechanically and digitally.

The project's success will provide a competitive edge for industries, such as automotive and aerospace, by reducing processing times, improving material usage, and enhancing end-product quality. The advancements made through the LaserWay project will drive innovation in high-speed laser processing, solidifying Europe's position as a global leader in advanced manufacturing technologies.



The LaserWay project is an European project funded under Horizon Europe Framework Programme (HORIZON)

1 About Precitec GmbH & Co. KG

Precitec GmbH & Co. KG is a leading supplier of processing optics for laser cutting and laser welding as well as sensor systems for process monitoring and control. Since the company was founded in 1971, Precitec has been driving innovation in laser material processing in order to offer its customers the best possible solutions. Precitec currently employs around 370 people at its Gaggenau site and generated a turnover of around 91 million euros in 2022. This location also includes an incubator at the University of Karlsruhe. State-of-the-art IT such as the Industrial Internet of Things (IoT), machine learning (ML), artificial intelligence (AI) and cloud computing form the cornerstones of the incubator's work.

The expertise in the implementation of sensors for condition and process monitoring covers both the field of cutting and welding technology and the field of additive manufacturing technology. All integrated sensors increase the efficiency and robustness of the systems themselves and the reliability of the laser processing applications in which the components are installed.

In this project, two main areas of work are in demand: experience in the development, design and manufacture of processing heads for robust laser cutting processes, in particular laser blanking, and sensor technology, in particular in the area of process monitoring and quality control of additive processes, in particular the EHLA process. Inevitably, this also includes the overlap between these two areas, the functional integration of suitable sensor technology in processing heads.

The results from LaserWay are essential pieces in the mosaic for the successful implementation of the products in the industries important to Precitec in order to remain the technological and innovation market leader.

LASERWAY's website: <https://LASERWAY.eu>

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