

Founded in 1999, LASEA is the European leader in ultra-short laser micromachining machines for the luxury goods, medical and energy sectors. The company owes this pioneering position to its 120 patents, divided into 30 families, and to the 15-20% of its annual income reinvested in R&D.

Impressive Growth and Global Presence

Having grown from 12 to 190 FTEs between 2012 and 2023, LASEA proudly boasts consolidated sales of €32m in 2022 (€40m expected by 2023) and annual growth of 30% over the past 12 years. The company has 6 sites worldwide (2 in Belgium at Liège and Mons, 2 in France, one in Switzerland and one in the United States) and exports 95% of its sales to over 26 countries.



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The Key to Success: USP Laser Technology

The key to this success? Mastery of an ultra-short pulsed (USP) laser technology that produces pulses in the femtosecond range, i.e. one millionth of a billionth of a second. Developed in 2003, this automated laser-based technology does not heat up the materials being machined, such as polymers and metals, enabling a very high degree of precision to be achieved. This precision is highly sought after in LASEA's niche sectors, which include luxury goods (components and casings for prestige watches), the medical sector (cochlear, intraocular and cardiovascular implants), energy and electronics (micro-batteries, fuel cells, etc.).

Prestigious Clients and Global Reach

The company also supplies laser machines to the world's most prestigious R&D centers and universities. Demanding customers include leading eyewear manufacturer EssilorLuxottica, the top 5 Swiss prestige watches, 5 of the top 10 surgical implant manufacturers in the US and Japan, two of the GAFAMs, as well as numerous universities in China, Japan, Brazil, the UK, Taiwan, Europe and the US.

Collaborative Projects and Research Partnerships

LASEA is actively involved in 8 regional collaborative projects and 8 European projects. As part of the latter projects, the company is working with major clients in the aerospace, automotive and electronics industries, as well as leading universities such as the Fraunhofer Institute and the Universities of Stuttgart and Dresden in Germany, several R&D centers in Spain and France, and major players in Belgium such as Sirris, Multitel, the CRIBC (Research Centre of the Belgian Ceramic Industry), the CRM (Metallurgical Research Centre) and ULiège. LASEA's success rate for European projects is a remarkable 50%, well above the European average. This is a great accolade for the company, which has become a key player in everything to do with very high USP laser power, setting a world speed record in the process.

Future Ambitions and Innovation

LASEA intends to consolidate this lead by maintaining its high level of creativity and innovation. Its primary ambition is to develop increasingly efficient, productive, fast, flexible and precise machines. LASEA also aims to apply its surface treatment solutions to larger components, particularly in the aerospace sector. LASEA is relying on biomimicry to design a sharkskin texture that can be applied to the leading edge of aircraft wings to make them more aerodynamic. In the same vein, there are plans to prevent ice from forming on turbines or wind turbines and to make certain surfaces hydrophobic by taking inspiration from the texture of lotus leaves.

Global Leadership and Market Expansion

Being European leader is not enough for LASEA: the company is now aiming for world leadership in the supply of its technologies, of which laser machines are the first ambassadors. Another objective for LASEA is to increase its presence in the North American and Asian markets. Two stimulating challenges indeed!





LASEA Ultra-short laser micromachining for high-precision components



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