

#### **PRESS RELEASE**

SurFunction awarded second place at the "Best Award 2025"

Saarbrücken, October 22, 2025 – SurFunction GmbH, a leading innovator in laser-based surface functionalization inspired by nature, has been awarded second place in the prestigious "Best Award 2025" in the category of Steel, Metal Services, and Surface Technology at Blechexpo 2025.

The company impressed with its fully industrialized ELIPSYS® technology platform and the world's first demonstration of Direct Laser Interference Patterning (DLIP) technology in real series production using the highly innovative laser machine E 960  $C_1$  — a revolutionary breakthrough for surface technology and a milestone on the path to mass production of functional micro- and nanostructures. The award recognized this highly innovative concept, which sets new standards in surface processing and was demonstrated with exceptional economic efficiency

### The jury particularly honored:

- Highest precision in structuring metallic surfaces
- Modular and scalable system design for industrial applications
- Energy-efficient processing with a focus on sustainability
- Use of AI-supported process monitoring for quality assurance
- Achieved industrialization and cost-effectiveness

The Best Award is the innovation prize for exhibitors at Blechexpo/Schweisstec and honors outstanding technological innovations in specific categories. It is considered a hallmark of technological excellence and innovation. To ensure the award's high quality, a distinguished expert jury was appointed and all submissions were carefully reviewed. The festive award ceremony took place in the atrium of Messe Stuttgart.



"We've proven that DLIP is no longer a vision of the future — DLIP is industrial reality," said Dr. Dominik Britz, co-founder and CEO of SurFunction GmbH. "This recognition at the 'Best Award 2025' highlights the full industrialization in real series production — the beginning of a new era of precise, economical, and sustainable surfaces. Special thanks also go to our strategic partner Noxon Automation, with whom we jointly realized this powerful solution."

#### Visit us at:

Blechexpo, Messe Stuttgart, October 21–24 Hall 6, Booth 6107 (Schroeder & Bauer)

# For inquiries please contact:

Nadja Schorr
SurFunction GmbH
Tel. +49/(0)681-30270540
info@surfunction.com

SurFunction GmbH
Campus A1.1
D-66123 Saarbrücken
www.surfunction.com



## **Background: The "Best Award"**

The "Best Award" is one of the most prestigious honors in the European sheet metal processing and joining technology industry. It serves as the official innovation award of the international trade fair Blechexpo/Schweisstec, which is recognized as a central platform for the sheet metal processing sector and brings together leading companies from around the world.

The award recognizes outstanding technological developments and innovative product solutions that set new benchmarks in industrial efficiency, sustainability, and future viability. Entries in each category are evaluated by an independent expert jury composed of industry professionals, scientists, and trade journalists. The judging criteria include the degree of technical innovation, economic significance, energy efficiency, and industrial applicability.

Winners and finalists are presented to an international audience through trade media and official trade fair communications. The award is presented by the trade fair organizer in cooperation with Vogel Communications Group (VCG) and the trade publications *MM Maschinenmarkt* and *blechnet*.

# **Background on DLIP and ELIPSYS®**

Surface structures play a crucial role in the performance of nearly all technical components, as generations of research have clearly demonstrated. Nature itself offers fascinating examples of the efficiency of surface structures: the lotus plant's non-stick properties or the iridescent color effects on butterfly wings are only possible due to complex micro- and nanostructures. However, replicating these natural phenomena on an industrial scale has long been a significant challenge due to the lack of technologies that allow for cost-effective production.

Groundbreaking research over the past decades and the invention of **Direct Laser**Interference Patterning (DLIP) by Prof. Dr. Frank Mücklich and Prof. Dr.

Andrés Lasagni have provided fundamental solutions. DLIP laid the foundation for revolutionizing how we design surfaces at the micro- and nanoscale. The principle is based on interference, similar to the interaction of colliding water waves. This analogy applies to light beams that are split and then superimposed in such a way



that they interfere on the material surface. The result is highly efficient and precise structures previously found only in nature.

Through the consistent advancement of DLIP technology, **SurFunction GmbH** has paved the way for broad industrial application. The company's **ELIPSYS®** (**Extended Laser Interference Patterning System**) represents the most advanced DLIP generation, enabling particularly fast and economical production of complex surface structures that enhance the properties of a wide range of products — such as non-stick, antibacterial, energy-efficient, low-friction, highly conductive, or tamper-proof surfaces.

DLIP and ELIPSYS® thus mark a turning point in the manufacturing and functionalization of material surfaces across diverse industries.

## **About SurFunction GmbH (www.surfunction.com)**

SurFunction is a leading system provider in the field of Deep-/Green-Tech with a focus on surface modification. Headquartered in Saarbrücken, Germany, the company specializes in various laser-based processes based on award-winning and patented interference technologies (DLIP). These enable cost-effective, cross-scale surface structures to be created in record time — inspired by patterns found in living nature. As a result, surfaces can be endowed with new, powerful, and particularly eco-friendly properties.

True to its guiding principle "NATURE KNOWS BEST," SurFunction unlocks innovation potential and offers companies across many industries significant competitive advantages. The company's mission is to improve its customers' products and processes while making active contributions to resource conservation. SurFunction provides comprehensive system expertise — from surface functionalization as a service to the integration of complete systems into industrial production environments.

In addition to its headquarters in Saarbrücken, SurFunction operates a development team in Dresden, which collaborates with the Technical University of Dresden (TUD) on new optical laser systems and beam guidance technologies — particularly for advancing the DLIP platform. The company also maintains close research partnerships with Saarland University and the Material Engineering Center Saarland (MECS) in the field of novel, structure-driven surface principles.



These collaborations enable a tight integration of fundamental research, materials science, and industrial application.