

Burbach, 06.10.2026

IPG Photonics to Showcase Laser Technologies for Automotive Manufacturing at IZB 2026

At the International Suppliers Fair (IZB) in Wolfsburg, IPG Photonics will present solutions for laser welding, laser cleaning, and reliable processing of battery and automotive components. The focus will be on on-the-fly laser welding, the high-power CL 1000iF laser system from cleanLASER, and a live demonstration of the SYS-3000-EV.

Visitors will gain technical insights into processes for productive joining, targeted surface preparation, and the development of stable battery welding processes for the automotive and e-mobility industries.

“In automotive manufacturing, quality, speed, and process reliability must be considered together. At IZB, we will demonstrate how surface preparation, automated laser welding, and in-process quality assessment work together in specific manufacturing solutions,” explains Daniel Lück, Business Development Director at IPG Photonics.

On-the-Fly Laser Welding for High Productivity

One focus of IPG Photonics' presence at the trade fair will be on-the-fly laser welding. In this automated process, numerous consecutive welding tasks are performed within a very short time. Scanning optics and real-time calculations guide the laser beam precisely along the respective welding positions. This helps reduce downtime and enables welding tasks involving numerous individual seams to be carried out efficiently. Battery and e-mobility manufacturing in particular place high demands on speed and reproducible weld quality. Typical applications include welding battery cells to busbars, lid-to-can joints on battery cells, battery cold plates, and fuel cell components. The coordinated integration of laser optics, motion control, and process monitoring can improve throughput and process stability.

Automated Laser Cleaning with the CL 1000iF from cleanLASER

Together with cleanLASER, IPG Photonics will present the CL 1000iF for automated laser cleaning. The system is designed for high area rates and uniform material removal. Its homogeneous top-hat beam profile and highly dynamic scanners enable wide or narrow processing lines, high feed rates, and large working areas, depending on the application. The CL 1000iF is suitable for automated manufacturing environments in which surfaces need to be specifically prepared before welding, brazing, bonding, or coating. As neither chemicals nor blasting media are required, laser cleaning provides a reliable and resource-efficient alternative to conventional cleaning methods.

Live Demonstration of the SYS-3000-EV for Battery Welding Processes

At IZB, IPG Photonics will provide a live demonstration of the SYS-3000-EV. The compact laser processing platform is designed for manufacturers of batteries and electric vehicle components looking to produce proof-of-concept parts and rapidly develop laser processes. With a working area of 600 × 400 mm and a motion system with up to five axes, it provides a flexible environment for evaluating battery welding processes. Because the platform uses components and processes that can also be implemented in larger production lines, it supports the transition from application development to near-production manufacturing conditions. Different laser parameters, motion strategies, and beam delivery configurations can be evaluated under defined conditions. The SYS-3000-EV can optionally be combined with real-time

weld measurement to assess weld dimensions, process stability, and emerging deviations directly during welding.

Process Expertise for Automotive and E-Mobility

At IZB, IPG Photonics will focus on discussing specific manufacturing challenges with visitors. Attendees can discuss requirements relating to components, materials, cycle times, and quality targets directly with IPG experts and obtain further information about the technologies on display. “Which technology makes sense always depends on the specific application. That is why we discuss suitable process and technology approaches directly with visitors at the event,” adds Daniel Lück. IPG Photonics will be exhibiting at IZB in Wolfsburg from October 27–29, 2026. Visitors can find the company in Hall 1, Booth 1214.

About IPG Photonics GmbH & Co. KG

Since 1990, IPG Photonics has been using light to change the world. Today, IPG offers a broad range of high-power lasers and laser systems used worldwide in materials processing, medical technology, and other demanding applications. IPG is proud to develop some of the most productive, reliable, and energy-efficient laser solutions on the market. In addition, the company provides comprehensive laser process and application development expertise to deliver high-performance solutions for virtually any industry and application. Clean-Lasersysteme GmbH (cleanLASER) is part of the IPG Photonics Group and is a market leader in industrial laser cleaning. Further information:

<https://www.ipgphotonics.com>

Images:



Caption:

Laser technologies from IPG Photonics specifically designed for welding and cleaning processes in the automotive industry

Deeplink:

<https://www.ipgphotonics.com/de/technology/on-the-fly-laser-welding>

<https://www.ipgphotonics.com/de/products/laser-systems/sys-3000-ev>

[The new CL1000iF - high power, high speed, high quality](#)

Press Release



Press Office

BUTTER AND SALT tech marketing GmbH

Contact: Florian Schildein

Hessenallee 12 · 14052 Berlin

Phone: +49 30 585 846 011

Email: fs@butter-and-salt.de