

# LPKF Expands Thin-Film Solar Module Scribing Portfolio with Cost-Optimized Allegro® Essential

- New laser scribing system delivers proven LPKF laser precision and reliability
- Reduced investment costs
- Addressing evolving market demands

**SUHL/ GARBSEN, 20th of AUGUST 2025** – LPKF SolarQuipment GmbH, the leading provider of laser systems for the photovoltaic industry, announced the launch of Allegro® Essential, an economically optimized laser scribing system for thin-film solar module production. The new system complements LPKF's industry-leading Allegro® series, providing customers with tailored solutions that match different production requirements.

Allegro® Essential addresses specific customer needs in cost-sensitive market segments while maintaining LPKF's renowned laser precision and reliability standards. Developing a system with comprehensive capabilities for this price-conscious customer segment involved considerable engineering challenges, which LPKF addressed through its pioneering spirit and expertise in laser-based thin-film solar module structuring.

## Engineered for Economic Efficiency Without Compromise

For thin-film solar module manufacturers, the laser-based system delivers clear advantages: cost-effective production with throughput precisely tailored to specific requirements, combined with economical manufacturing even when production quantities vary.

"Allegro® Essential represents our commitment to making advanced laser scribing technology accessible to a broader range of manufacturers," said Christian Krieg, Product Manager SolarQuipment at LPKF. "By focusing on essential functions while maintaining our core competencies, we've created a solution that enables maximum precision at significantly reduced production costs, pushing forward the green energy revolution worldwide."

Both systems of the Allegro® series share decisive core competencies that define the success and reliability of LPKF's thin-film laser scribing solutions:

- Minimal dead zones smaller than 100 µm
- Highest system accuracy and long-term stability
- Low-wear technology leading to high MTBF rates
- Proven software platform with intuitive operation
- Unique features including Dynamic Focus Tracking and Dynamic Path Tracking
- Global service and support network

## Market-Responsive Innovation

The introduction of Allegro® Essential demonstrates LPKF's responsiveness to evolving market dynamics in the photovoltaic industry. While Allegro® High Production continues to serve high-volume production facilities requiring 24/7 operation and maximum throughput rates, the Essential variant opens new opportunities for manufacturers seeking proven laser scribing technology within more constrained investment parameters.

## Pressinformation

More information:

<https://thinfilm-laserscribing.lpkf.com/en/products/allegro>

### ABOUT LPKF

LPKF SolarQuipment GmbH is a 100% subsidiary of LPKF Laser & Electronics SE a leading provider of laser-based solutions for the technology industry. LPKF laser systems are crucial for the production of printed circuit boards, microchips, automotive parts, solar modules, and many other components. Founded in 1976, the company is headquartered in Garbsen near Hanover and operates worldwide through subsidiaries and representative offices. The shares of LPKF Laser & Electronics SE are listed in the SDAX of the German Stock Exchange (ISIN 0006450000).

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