

A German start-up company offers a new pixel-based laser beam steering technology that enables higher production speeds for various industrial applications

Summary

Profile type

Business Offer

Company's country

Germany

POD reference

BODE20240422011

Profile status

PUBLISHED

Type of partnership

Commercial agreement
Supplier agreement
Investment agreement

Targeted countries

• **World**

Contact Person

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Term of validity

24 May 2024
24 May 2025

Last update

19 Jun 2024

General Information

Short summary

A German start-up has developed a new pixel-based laser beam steering technology that steers laser using pixels instead of moving parts. The result: a 2500 times faster jumping speed compared to traditional systems and a 6-10 times increase in process speed, offering both economic and technological advantages. The system can be easily combined into existing facilities and with commercially available laser sources. Its modular design allows for adjustments for various industrial applications

Full description

Founded in May 2023, the startup develops and distributes innovative laser beam steering systems that are 2500 times faster than current solutions. Their innovative pixel-based laser beam steering technology enables their B2B customers to achieve production processes 6-10 times faster.

The innovation lies in steering the laser beam via pixels instead of moving components like mirrors. This approach is unique and allows steering speeds of up to 200000 m/s, facilitating faster and more resource-efficient laser-based production processes and unlocking untapped potentials regarding output and efficiency in laser-based manufacturing. The system is based on a modular design concept, allowing the system to be adapted to various industrial requirements and applications.

The company offers comprehensive consultancy services and preliminary studies to identify the most effective solutions for customers' workflows and guides them through the implementation process from start to finish.

Advantages and innovations

PRODUCT

The product can be implemented into machines similar to a galvanometer scanner allowing up to 2500 times faster steering speeds. This technology enhances the output of laser-based production processes.

Key features:

- Pixel based solid-state-technology
- Up to 1000 pixel
- Sequential switching of pixel
- Flexible power modalities per pixel
- Easy connection to commercially available laser sources

Advantages:

- Laser beam jumps 2500 times faster
- Increase in process speed by a factor of 6-10
- Increase in production capacity
- Reduction of resource requirements
- Lower production costs

Technical specification or expertise sought

Stage of development

Sustainable Development goals

- **Goal 9: Industry, Innovation and Infrastructure**
- **Goal 7: Affordable and Clean Energy**
- **Goal 12: Responsible Consumption and Production**

IPR Status

Partner Sought

Expected role of the partner

The start-up is looking for partners who want to implement the technology into their production processes under a commercial agreement or a Research and Development Cooperation Agreement.

Type of partnership

Commercial agreement**Supplier agreement****Investment agreement**

Type and size of the partner

• Big company**• University****• SME <=10****• SME 50 - 249****• SME 11-49****• R&D Institution**

Dissemination

Technology keywords

• 02003001 - Process automation

Market keywords

• 03005 - Laser Related

Targeted countries

• World

Sector groups involved

• Electronics

Media

Images

[Bilderleiste EEN-ppt.jpg](#)