Cleaning and structuring with laser radiation

About this organisation

Machine translation

This organisation has been machine-translated based on data provided in German.

cleanLASER develops and produces high-precision laser systems for laser cleaning and industrial surface treatment.

Clean-Lasersysteme GmbH (cleanLASER) specialises in the precise joining pre-treatment of lightweight materials using laser light. Automobile manufacturers, aviation companies and numerous suppliers in Germany and abroad have been using cleanLASER in series production for many years. Optimum results have been achieved with aluminium, copper and magnesium, for example. The flexibility and market maturity make this sustainable technology accessible to a wide range of users. In addition to industrial applications, the focus is also on continuous research and development. For example, the 3KLANK research project is developing a 3 µm beam source for use in the pre-treatment of fibre composite materials for bonding and painting.

Dornkaulstraße 6-8 52134 Herzogenrath North Rhine-Westphalia Germany

☑ www.cleanlaser.de/de/



Small or medium-sized enterprise

Sectors













Employees

50 up to 249

Turnover

€10m - €50m

Funding



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About this org	anisation
Main areas covered	Surface treatment, Laser beam source development, Measurement and process analysis technology, Feasibility studies
Infrastructure	Laser systems from 20 W to 1.6 kW, Optics development, Automation systems, Training and education centre
Certifications	ISO 9001, ISO 14001
Keywords	Laser process, Environmental friendliness, Structuring, Paint stripping and decoating, Pre-treatment
Memberships	LASER.region.AACHEN, AiF SME Research Network

Overview of lightweighting expertise

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	Manufacturii Research Development & Supply		
Offer	Research	Development	и зирріў
Products Parts and components, Machines and plants, Software & databases, Systems and end products	✓	✓	✓
Services & consulting Training, Consulting, Testing and trials, Engineering, HR services, Validation, Maintenance and repair	✓	✓	✓

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Overview of lightweighting expertise				
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	Research	N Development	Manufacturing & Supply	
Field of technology				
Design & layout Others (Design & layout of laser-compatible components and assemblies)	✓	✓	✓	
Functional integration Sensor technology, Thermal activation, Material functionalisation		✓	✓	
Measuring and testing technology Component and part analysis, Visual analysis (e.g. microscopy, metallography), System analysis, Materials analysis, Destructive analysis, Non-destructive analysis	✓	✓	✓	
Modelling and simulation Life-cycle analysis, Optimisation, Processes, Materials, Reliability validation		✓	✓	
Plant construction & automation Plant construction, Automation technology, Handling technology		~	✓	
Recycling technologies Material separation, Recycling	✓	✓	✓	

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Overview of lightweighting expertise			
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	Research	Development	Manufacturing & Supply
Manufacturing process			
Additive manufacturing			
Coating (surface engineering)			
Fibre composite technology			
Forming			
Joining			
Material property alteration Heat treatment	✓	✓	✓
Primary forming			
Processing and separating Others (Paint stripping, decoating, mould cleaning, pre-treatment, structuring)	✓	~	~
Textile technology			

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Overview of lightweighting expertise **Machine translation** This organisation has been machine-translated based on data provided in German. Manufacturing **Development** & Supply Research Material Biogenic materials Cellular materials (foam materials) Composites Glass-fiber reinforced plastics (GFRP), Carbonfiber reinforced plastics (CFRP) **Fibres** Functional materials Metals Aluminium, Magnesium, Steel **Plastics** Structural ceramics (Technical) textiles

Contacts

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