EDAG Engineering GmbH

Competence Centre Lightweight Construction, Materials & Technologies

About this organisation

Machine translation

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

EDAG is the leading independent development company in the automotive industry and develops on behalf of leading vehicle manufacturers. Its core business is the development of vehicles, bodies and modules, model and prototype construction, testing and trials. With our Competence Centres CC Lightweight Construction, Materials & Technologies, CC Electromobility, CC Integral Safety and CC Lighting Technology, we are recognised in the field of innovation.

In addition to technology scouting and carrying out feasibility studies, our lightweight construction expertise lies in the development and testing of new lightweight construction methods, from concept to demonstrator on behalf of customers. Our innovation division is a sparring partner for well-known technology companies and research institutions. Promising technological approaches are identified in order to bring them into series production through innovative pilot projects. Our regular concept studies communicate future potential and encourage dialogue. The EDAG team has many years of experience in steel-intensive lightweight construction, light metal construction methods and FRP technologies. We also have expertise in additive manufacturing. We have access to process and production planners as well as our own materials testing laboratory with various accreditations. This enables us to integrate new material concepts into the CAx process chain and realise lightweight construction methods from the idea to the demonstrator.

Reesbergstraße 1
36039 Fulda
Hesse
Germany
www.edag.de/de/edag.html

Organisation type
Large enterprises

Sectors
Others: Engineering Automobil

Employees
500 and more

Turnover
More than €50m

Funding

Technology Transfer Program Leichtbau

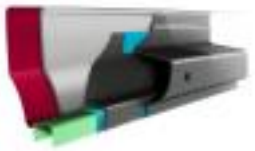
Projects in the funding catalogue

EDAG Engineering GmbH

Competence Centre Lightweight Construction, Materials & Technologies

About this organisation





Main areas covered	Innovation Technology management, Conception, design, calculation, Technology planning, Test laboratory, DAR accreditation, Model and prototype construction
Infrastructure	CAD/CAE, Laboratory areas, Competition analysis, Innovation management
Certifications	available, see website
Keywords	Lightweight steel construction, Light metals, Fibre composite, Additive manufacturing, Research co-operations
Memberships	

EDAG Engineering GmbH

Competence Centre Lightweight Construction, Materials & Technologies

Overview of lightweighting expertise

Machine translation

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

	Research	Development	Manufacturing & Supply
Offer			
Products Parts and components, Machines and plants, Tools and moulds, Others: null	✓	✓	
Services & consulting Consulting, Testing and trials, Funding, Engineering, Prototyping, Validation, Simulation, Technology transfer, Others: null	✓	✓	✓
Field of technology			
Design & layout Lightweight manufacturing, Lightweight design, Hybrid structures, Lightweight construction concepts, Others: null	✓	✓	✓
Functional integration Actuator technology, Media conductivity, Sensor technology, Material functionalisation	✓	✓	
Measuring and testing technology Component and part analysis, Visual analysis (e.g. microscopy, metallography), System analysis, Environmental simulation, Materials analysis, Destructive analysis, Non-destructive analysis		✓	✓
Modelling and simulation Crash behaviour, Loads & stress, Life-cycle analysis, Optimisation, Processes, Structural mechanics, Materials, Reliability validation, Others: null	✓	✓	✓
Plant construction & factory automation Plant construction, Automation technology, Handling technology, Robotics		✓	
Recycling technologies			

EDAG Engineering GmbH

Competence Centre Lightweight Construction, Materials & Technologies

Overview of lightweighting expertise

Machine translation

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

	Research	Development	Manufacturing & Supply
Manufacturing process			
Additive manufacturing 3D printing, Deposition welding, Electron beam melting, Laminated object manufacturing (LOM), Fused deposition modeling, Selective laser melting (SLM, LPBF, ...), Selective laser sintering (SLS), Stereolithography, Others: null	✓	✓	
Coating (surface engineering)			
Fibre composite technology Manual lamination, Resin infusion process, Resin transfer moulding, Pre-preg processing, Vacuum infusion, Others: null	✓	✓	✓
Forming Bending, Impact extrusion, Compression moulding, Forging, Extrusion moulding, Stretch forming, Thermal converting, Deep-drawing, Fluid active media based forming, Others: null		✓	
Joining Clinching, Hybrid joining, Adhesive bonding, Soldering, Riveting, Screwing, Welding, Others: null	✓	✓	✓
Material property alteration			
Primary forming Casting, Pultrusion, Injection moulding , Others: null		✓	
Processing and separating			
Textile technology			

EDAG Engineering GmbH

Competence Centre Lightweight Construction, Materials & Technologies

Overview of lightweighting expertise

Machine translation

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

	Research	Development	Manufacturing & Supply
Material			
Biogenic materials			
Cellular materials (foam materials) Closed-pore, Open-pore, Others: null	✓	✓	
Composites Aramid fibre composites, Basalt fibre-reinforced plastic, Glass-fiber reinforced plastics (GFRP), Carbon-fiber reinforced plastics (CFRP), Metal-fibre-polymer composite, Metal-ceramic composite, Nanocomposites, Natural fibre reinforced plastics (NFRP), Laminates, Others: null	✓	✓	
Fibres			
Functional materials Others: null	✓	✓	
Metals Aluminium, Magnesium, Steel, Others: null	✓	✓	
Plastics Thermoset plastics, Elastomers, Thermoplastics, Others: null		✓	
Structural ceramics			
(Technical) textiles			

Contacts

Machine translation

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

EDAG Engineering GmbH

Competence Centre Lightweight Construction, Materials & Technologies

Contacts

Mr Dr.-Ing. Martin Hillebrecht

Head of Competence Centre

martin.hillebrecht@edag.de