Freiberg University of Mining and Technology

Institute for Processing Machines and Recycling Systems Technology

About this organisation

Machine translation

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

At the IART, we are researching more efficient machines and processes for processing raw materials. We develop ideas and solutions for improved or completely new machine concepts on the basis of in-depth analyses of material properties down to the microscopic level. Energy efficiency and the sustainable use of resources are not at odds with cost-effectiveness and performance.

The IART's Recycling working group deals with processes that serve to return lightweight materials, in particular fibre-reinforced plastics, to the material cycle. The focus here is on mechanical preparation processes for the manufacture of defined recycling products or sub-processes for the manufacture of semi-finished products within more complex preparation processes.

Lampadiusstraße 4
09599 Freiberg
Saxony
Germany
tu-freiberg.de/fakult4/iart

Organisation type
University or higher education institution

Sectors

Employees
10 up to 49

Turnover
n/a

Funding

Freiberg University of Mining and Technology

Institute for Processing Machines and Recycling Systems Technology

About this organisation

Main areas covered	Machines, recycling, sorting, Comminution, compound digestion
Infrastructure	Technical centre
Certifications	
Keywords	Hybrid lightweight structures, CFRP
Memberships	Platform FOREL

Overview of lightweighting expertise

Machine translation

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

	Research	Development	Manufacturing & Supply
Offer			
Products			
Services & consulting Training, Consulting, Testing and trials, Validation, Simulation	✓	✓	✓
Field of technology			
Design & layout Hybrid structures	✓		
Functional integration			
Measuring and testing technology			
Modelling and simulation			
Plant construction & automation			
Recycling technologies Downcycling, Material separation, Recycling, Upcycling	✓	✓	✓

Freiberg University of Mining and Technology

Institute for Processing Machines and Recycling Systems Technology

Overview of lightweighting expertise

Machine translation

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

	Research	Development	Manufacturing & Supply
Manufacturing process			
Additive manufacturing 3D printing	✓		
Coating (surface engineering)			
Fibre composite technology			
Forming			
Joining			
Material property alteration			
Primary forming			
Processing and separating			
Textile technology			

Freiberg University of Mining and Technology

Institute for Processing Machines and Recycling Systems Technology

Overview of lightweighting expertise

Machine translation

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

	Research	Development	Manufacturing & Supply
Material			
Biogenic materials			
Cellular materials (foam materials)			
Composites Basalt fibre-reinforced plastic, Glass-fiber reinforced plastics (GFRP), Carbon-fiber reinforced plastics (CFRP), Metal-fibre-polymer composite, Laminates, Textile-reinforced concrete	✓	✓	
Fibres			
Functional materials			
Metals			
Plastics			
Structural ceramics			
(Technical) textiles			

Contacts

Machine translation

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

Freiberg University of Mining and Technology
Institute for Processing Machines and Recycling Systems Technology

Contacts

Mr Dr.-Ing Thomas Krampitz
Research assistant
Thomas.Krampitz@iart.tu-freiberg.de

Mr Prof. Dr.-Ing. Holger Lieberwirth
Institute Director
Holger.Lieberwirth@iart.tu-freiberg.de