Trexel GmbH

MuCell - Microcellular foam technology for injection moulding

About this organisation

Machine translation

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

Trexel is the sole developer of MuCell® microcellular foaming technology and supplies MuCell® systems for foam injection moulding production. Trexel offers engineering support, including training and education activities. On request, projects are supervised from the selection of suitable components, planning and realisation of sampling through to the start of series production. MuCell® support centres are located in the USA, Germany and Asia.

The MuCell® foam injection moulding process for thermoplastics offers unique design flexibility and cost-saving potential compared to conventional injection moulding. The process makes it possible to produce the plastic part with a wall thickness that accommodates the functionality of the components and does not have to be subject to the design requirements of the conventional injection moulding process. The combination of reducing the material density and designing for functionality often results in weight savings of over 20%. The replacement of holding pressure by cell growth results in the production of low-stress moulded parts. Dimensional manufacturing tolerances and warpage are reduced and sink marks are also eliminated. - Lower costs (less material consumption; faster cycle time) - Freedom of design (design for function, not for process) - Faster to market (fewer mould adaptations) - Sustainable

Schlossblick 73
57074 Siegen
North Rhine-Westphalia
Germany
www.trexel.com/de

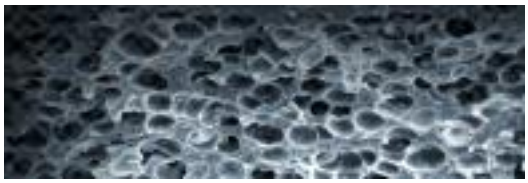
Organisation type
Small or medium-sized enterprise

Sectors

Employees
10 up to 49

Turnover
n/a

Funding
n/a



Trexel GmbH

MuCell - Microcellular foam technology for injection moulding

About this organisation

Main areas covered	Automotive interior parts, Under the hood applications, functional black parts, Lightweight injection moulded parts
Infrastructure	MuCell injection moulding technology centre, MuCell Engineering Network, Process support & service
Certifications	
Keywords	Foam injection moulding, TSG, Physical foaming, Component design - component optimisation
Memberships	

Overview of lightweighting expertise

Machine translation

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

	Research	Development	Manufacturing & Supply
Offer			
Products Machines and plants, Tools and moulds	✓	✓	✓
Services & consulting Training, Consulting, Testing and trials, Engineering, Prototyping, Simulation, Technology transfer, Maintenance and repair		✓	✓

Trexel GmbH

MuCell - Microcellular foam technology for injection moulding

Overview of lightweighting expertise

Machine translation

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

	Research	Development	Manufacturing & Supply
Field of technology			
Design & layout Lightweight manufacturing, Lightweight design, Lightweight material construction	✓	✓	✓
Functional integration Media conductivity, Others (Fastening elements, functional elements)		✓	✓
Measuring and testing technology			
Modelling and simulation Loads & stress, Processes, Structural mechanics, Materials		✓	
Plant construction & automation			
Recycling technologies			
Manufacturing process			
Additive manufacturing			
Coating (surface engineering)			
Fibre composite technology			
Forming			
Joining			
Material property alteration			
Primary forming Injection moulding	✓	✓	✓
Processing and separating			
Textile technology			

Trexel GmbH

MuCell - Microcellular foam technology for injection moulding

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) Others (MuCell microcellular thermoplastic foams)		✓	✓
Composites Glass-fiber reinforced plastics (GFRP), Carbon-fiber reinforced plastics (CFRP), Natural fibre reinforced plastics (NFRP)		✓	✓
Fibres			
Functional materials			
Metals			
Plastics Thermoplastics		✓	✓
Structural ceramics			
(Technical) textiles			

Contacts

Machine translation

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

Trexel GmbH

MuCell - Microcellular foam technology for injection moulding

Contacts

Mr Dr. Hartmut Traut

h.traut@trexel.com