

About this organisation

We are experts in Titanium Injection Molding and Additive Manufacturing.

Powder Metallurgy based manufacturing methods like Metal Injection Molding (MIM) or 3D Printing (3DP) are excellent candidates for processing Titanium, but require Know-How and specialized equipment. In metal 3DP about 50% of the products manufactured are made of Titanium due to its excellent material properties. The extremely fast expanding 3DP and Powder Metallurgy industry has generated a new industry sector for manufacturing spherical Titanium powder with a rapidly growing number of providers and capacity. Titanium is one of the strongest and lightweight metals on earth. It has the best strength to weight ratio, the so-called specific strength of all materials readily available. It combines superior material properties: it is strong, lightweight, corrosion resistant, biocompatible and has an excellent fatigue life. That combination makes it an ideal choice for many demanding applications.

Wischhofstr. 1-3, Geb. 13
24148 Kiel
Schleswig-Holstein
Germany
www.element22.com



Organisation type

Small or medium-sized enterprise

Sectors

No specific sector

Employees

10 up to 49

Turnover

€2m - €10m

Funding

n/a



Main areas covered

Infrastructure

Certifications

Keywords

Memberships

Overview of lightweighting expertise

	Research	Development	Manufacturing & Supply
Offer			
<i>Products</i>			
<i>Services & consulting</i>			
Field of technology			
<i>Design & layout</i>			
<i>Functional integration</i>			
<i>Measuring and testing technology</i>			
Modelling and simulation Life-cycle analysis, Multiphysics simulation, Processes		✓	✓
<i>Plant construction & automation</i>			
<i>Recycling technologies</i>			
Manufacturing process			
Additive manufacturing 3D printing, Others		✓	✓
<i>Coating (surface engineering)</i>			
<i>Fibre composite technology</i>			
<i>Forming</i>			
<i>Joining</i>			
<i>Material property alteration</i>			
Primary forming Extrusion, Sintering, Injection moulding		✓	✓
<i>Processing and separating</i>			
<i>Textile technology</i>			

Overview of lightweighting expertise

	Research	Development	Manufacturing & Supply
Material			
<i>Biogenic materials</i>			
<i>Cellular materials (foam materials)</i>			
<i>Composites</i>			
<i>Fibres</i>			
<i>Functional materials</i>			
Metals			
Titanium			✓
<i>Plastics</i>			
<i>Structural ceramics</i>			
<i>(Technical) textiles</i>			

Contacts

Mr Florian Gerdts, M.Sc.

florian.gerdts@element22.com

Mr Matthias Scharvogel

matthias.scharvogel@element22.com