



Element22

<https://www.element22.de/>

Serial production of titanium components with metallurgical powder materials, experts in Titanium Injection Molding and Additive Manufacturing

A client can come with a titanium part idea, ideally a 3D file and a drawing and Element 22 will review it, analyze the drawing and put everything into place to bring it to serial production. This includes:

- Design review
- Molding and sintering simulations
- Feasibility studies
- Production of First Article Samples
- Serial Production with powder-based Methods like Cold Metal Fusion, Metal Injection Molding, Tape Casting, Extrusion, and more Industries

Application fields:

Element 22 caters to:

- Medical: equipment and implants, external fixators, active implant housings, bone plates etc.
- Aerospace: Parts for airplanes, e.g. fasteners
- Luxury consumer goods, e.g. watch cases, wearable devices, jewelry, high end electronics, AR/VR/MR glasses
- Mobility (high-end sporting): bicycles, motorized recreational vehicles

Hydrogen: components for electrolysers and fuel cells

Interests for Tech Demonstration:

- Electrochemistry applications
- Anode components for hydrogen production
- Any application for chemically aggressive environments
- New aerospace applications
- Expand tapecasting capabilities

Acquire ASTM standards / certifications for new materials – E22 developed aluminium materials with high oxygen content