

ORAM | Certified Recyclates for Aviation – Overhaul and Recycling of Interior Parts with Additive Manufacturing of High Performance Polymers



Motivation and Relevance

- High disposal costs and low resource efficiency in maintenance and repair processes in aviation
- High demand for a more environmentally friendly and resource-efficient aviation

Approach

- Recycling of used aircraft interior components
- Printing of components using pellet- and filament-based additive manufacturing processes
- Certification of production process and production cell for aviation

Results

- Aviation certified production cell @ RWTH Aachen (Part 21, Subpart G of the European aviation regulations)
- Flammability and tox-tests with printed test specimens
- Printed AM parts out of recycled aviation material

Research Area

- Aviation
- Production
- Sustainability
- Material Extrusion

Partners



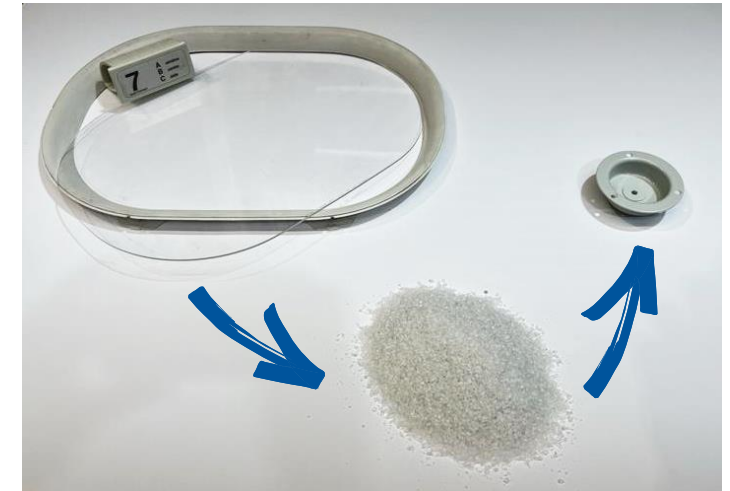
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Picture



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