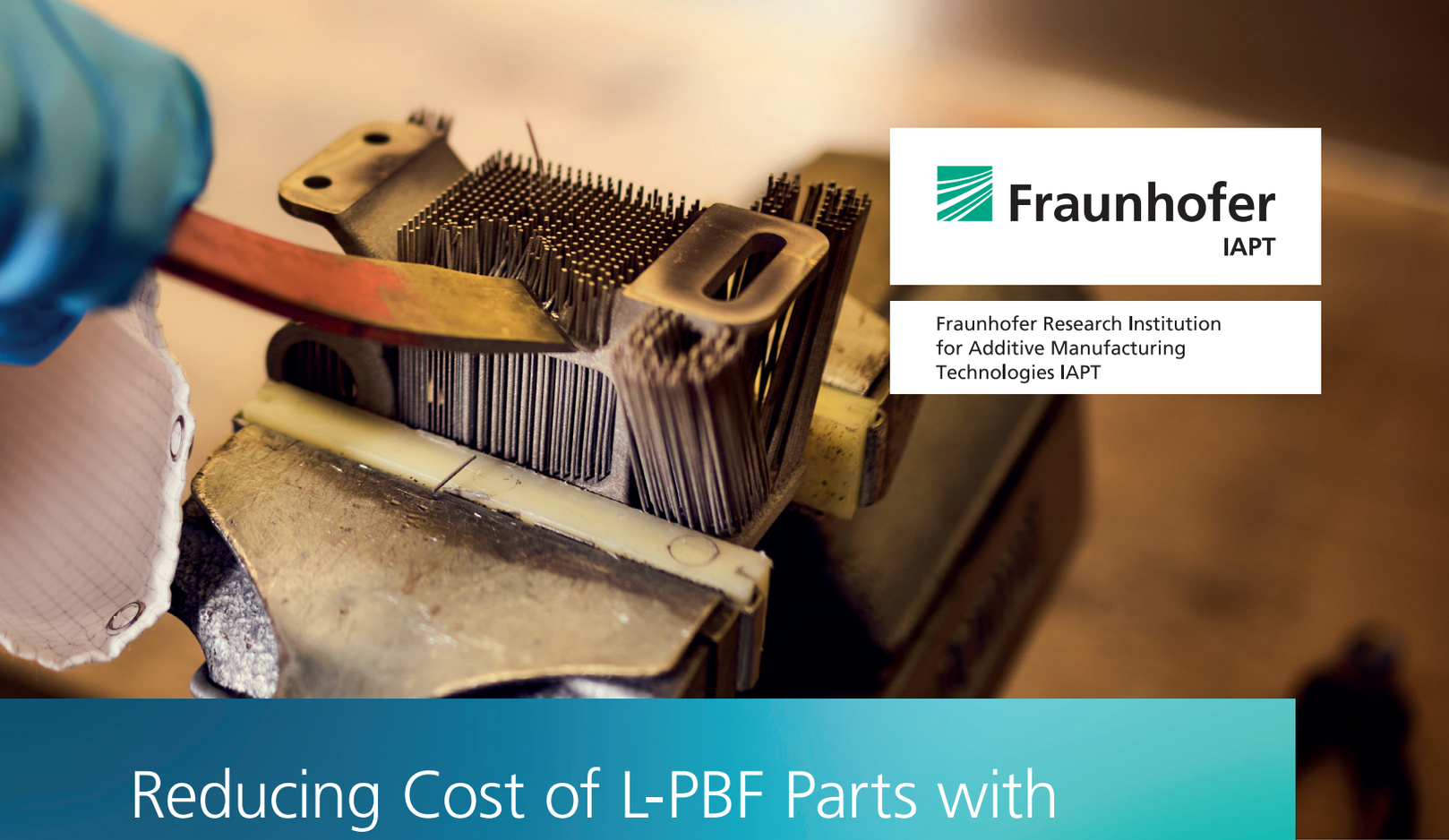

Fraunhofer IAPT

Fraunhofer Research Institution
for Additive Manufacturing
Technologies IAPT

Reducing Cost of L-PBF Parts with the Right Support Removal Strategies.

Would you like to scale your AM part production, but find post-processing too costly?

Fraunhofer IAPT is about to start a research study that will compare different approaches to support removal and offer technology-specific guidelines and designs to reduce the effort and cost of support removal.

Join us now!

Support removal study at a glance

- Study duration: 10 months
- Investigation of two materials and five removal strategies

Challenges of support removal

Post-processing contributes roughly 30 %* to the costs of metal AM parts, with some companies estimating it to account for around 60% of the final part's cost. Manual post-processing slows support removal, limits the ability to precisely reproduce parts, and requires highly qualified staff.

Currently, the reliance on manual post-processing of AM parts hinders mass or series production of L-PBF components. Regardless of whether post-processing represents 30 % or 60 % of the overall cost, the ability to cost-effectively post-process large series of prints is crucial for the industrial application of AM.

* According to "Wohlers Specialty Report on Post-Processing" (2023)

The study will enable you to

- assess different support removal strategies
- speed and simplify support structure removal
- automate the support removal process most effectively
- optimize support structures for your technologies

Early Bird Special
ends in March, 2025

Early access to results, right to vote on material selection and discounted price. Contact us for more information!

What to expect:

The study will provide an objective comparison of various techniques and approaches for support removal, focusing on specific removal technologies. It will offer both experts and non-specialized readers a concise overview of state-of-the-art support removal strategies, including innovative techniques and optimized post-processing designs.

Expected* materials for investigation:

- Ti6Al4V
- AlSi10Mg

Benchmark criteria:

- Cost (Post-processing costs, cost per part, scalability)
- Quality (Surface quality, dimensional accuracy)
- Time (Production time, post-processing time)

Five removal strategies:

- Manual Removal and Milling
- Chemical Removal
- Dry Ice Blasting
- Automated Chiseling
- Vibration-Based Removal

To sign up or to obtain further information please contact:

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*to be defined with Early Bird participants