ParAM ID22160 param

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PROBLEM/ISSUE ADDRESSED

Exploiting the full potential of Additive Manufacturing (AM) requires high part design optimization, which typically includes the design and simulation of the 3D-part from scratch. However, most final end-users do not have the required internal design skills, even if having manufacturing capabilities. This is very common and crosses several industrial sectors. It affects mostly those leading with the provision of low series, single units or prototypes, but also customized parts.

SOLUTION

ParAM is structured to develop an all-in-one design solution integrating technical-environmental-supply-chain analysis, enabling to efficiently and consciously adopt more sustainable and resources-saving design solutions. The tool is integrated into a design software platform widely spread within the target market at global scale. The models libraries will be co-created with the end-users and continuously updated at software maintenance.

WHY IT IS IMPORTANT FOR SOCIETY

- Reduces design time, material consumption, and stocks;
- Reduces environmental impacts of transport (local supply chain);
- Avoids the need of highly skilled workforce or re-skilling on Design for AM;
- Benefits the local communities / innovation eco-systems.

eit Manufacturing · Co-funded by the European Union

> " *Thanks to EIT we are able to combine skills from different partners to develop an all-in-one solution that exploits the full potential of Additive Manufacturing* "

MAIN RESULTS & INSIGHTS

Simplifies the designing process of metallic parts manufactured using AM and combines DfAM concepts with eco-scoring and supply-chain key functionalities;

Allows untrained designers to exploit the full potential of metallic AM technologies;

Improves manufacturing flexibility and overall efficiency considering cost, lead time, and resources.

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ParAM project
AIM: Design tool to simplify the design of parts to be processed by Additive Manufacturing (AM)

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