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TE@CH

additive manufacturing academy
TO BOOST TRAINERS' COMPETENCES IN INDUSTRY

Summary

Selection of Parts

Project Number: 2021-1-IT01-KA220-VET-000033365



Course Content

The online course outlines some factors/questions to consider and explores a business case selection exercise which can be used to aid in the selection process of whether a part is suitable to be manufactured using an additive manufacturing process.



Process of Selection

Short Description

There are a wide range of products that can be made and are being made using AM, leading to possible consideration that this is how companies should proceed. However, the inherent and sometimes hidden costs and other considerations of producing parts by AM need to be considered, while knowing how to identify products that are suitable to be printed. Considering the material already covered in the associated modules to date, you should have an understanding of such considerations.

Identify Candidate Parts for AM

Introducing factors that should be considered in the selection process.

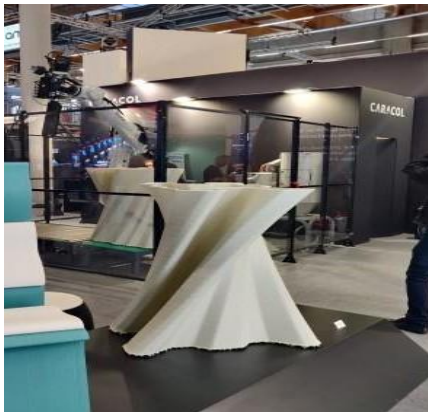
Identify Candidate Parts for AM

- Size- Does the component you want to print fit?
- Economics- Is the additive process going to add value?
- Qualification- Does the part qualify to be 3D printed?
- Design- Will the product function as per its specifications after the additive process?
- Post-processing- What completion processes are required and what's involved?

AM Build Volume

Introducing limitations associated with the build size of standard AM equipment. However, equipment size and configurations including gantry modes and robotic 3D printing are enabling much larger prints.

AM Build Volume



CaracolRobotic 3D Printe-rFormnext2022

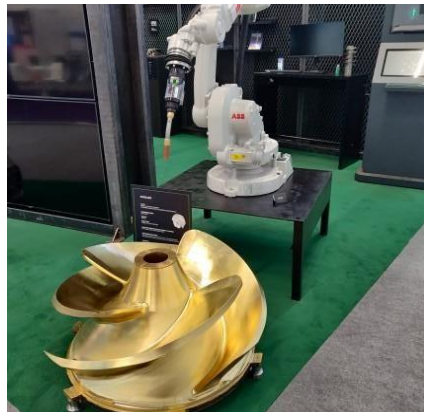


ABB Robotic 3D PrinteFormnext2022

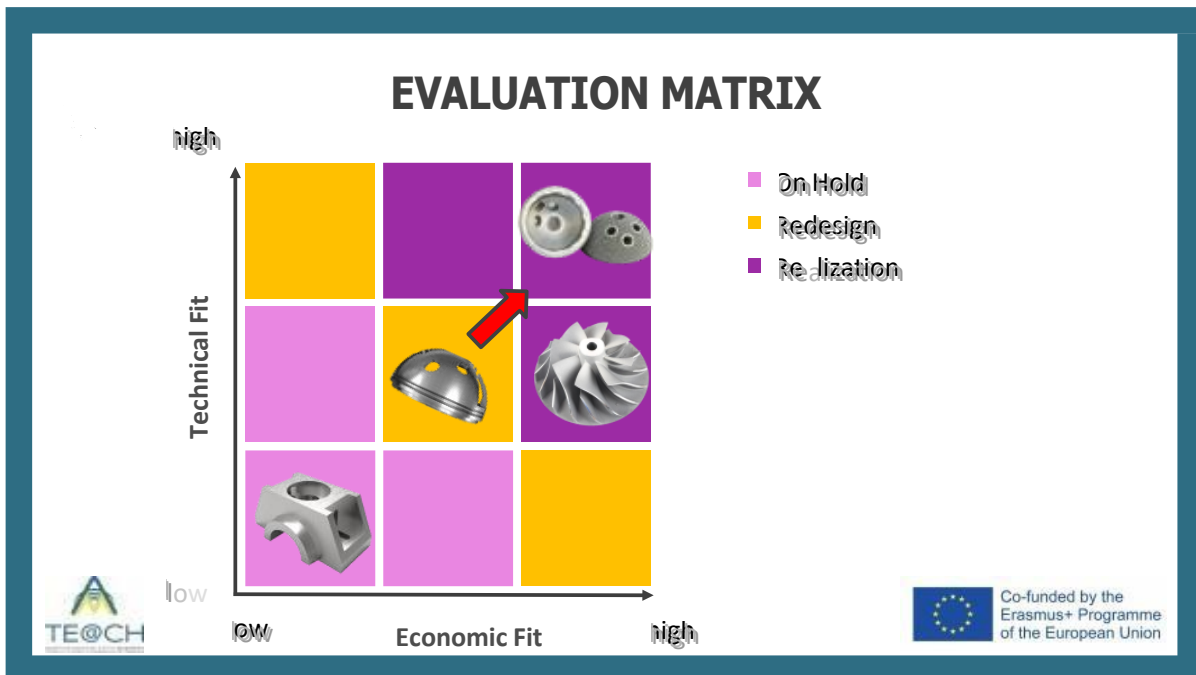


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Notes

Business Case Assessment

Exercise which can be adopted for evaluating any parts that may want to be considered for 3D printing.



Involving an evaluation based on a number of important factors using this basic matrix.

Notes



For further information please

Contact us via the Faculty of Engineering &
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