MULTI-FUN

ENABLING MULTI-FUNCTIONAL PERFORMANCE
THROUGH MULTI-MATERIAL ADDITIVE MANUFACTURING

SCAN ME
for more information
regarding the project

OBJECTIVES

DEVELOPMENT OF MORE THAN 5 NEW MATERIALS CUSTOMIZED FOR ADDITIVE MANUFACTURING (AM). 3 OF THEM USING NANOTECHNOLOGY

DEVELOPMENT OF AM EQUIPMENT AND AM SOFTWARE BEING ABLE TO REALIZE 10 DIFFERENT MULTI-MATERIAL DESIGNS BY 5 NEW TECHNOLOGIES

SUPERVISING THE SIGNIFICANT REDUCTION OF ENVIRONMENTAL IMPACT AND COSTS BY LCA

KEY-RESULTS

KR 1

ADVANCED METALLIC MATERIALS

Advanced structural metals & corresponding active material solutions for innovative multiple functionalities

KR 2

NOVEL AM EQUIPMENT

Hard-& software for multi-material processing & in-situ alloying, toolpath planning & process control for several AM technologies working in parallel

KR 3

MULTI-MATERIAL DESIGN-KNOWLEDGE

New knowledge on increased efficiency of parts & moulds due to integrated, multi-material based functions

KR 4

STANDARDISATION KNOWLEDGE

Enhanced knowledge to contribute to standards and support regulatory bodies adapting to multi-material AM

DEMONSTRATORS

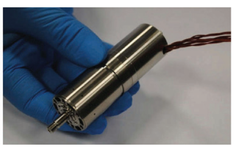
KR1 (≥ 5 MATERIALS) and **KR2** (≥ 5 TECHNOLOGIES) will be applied in

10 different combinations in 7 demonstrators, belonging to 3 use cases

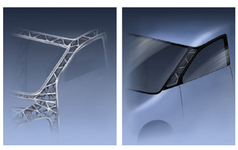
(structural parts, moulds, test equipment),

addressing 4 different markets

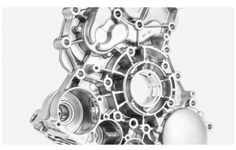
(automotive, aviation, space and production industry)



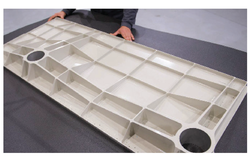
Actuator Housing



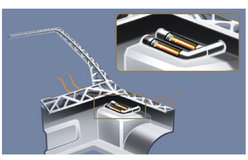
See-through A-Pillar



Mould for Alu Casting

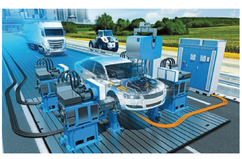


Bulkhead Panel



Dashboard Carrier

Mould for CFRP Parts



Automotive Testing

PARTNERS

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www.multi-fun.eu