



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

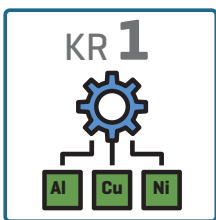


DEVELOPMENT OF AM EQUIPMENT AND AM SOFTWARE BEING ABLE TO REALIZE 10 DIFFERENT MULTI-MATERIAL DESIGNS BY 5 NEW TECHNOLOGIES

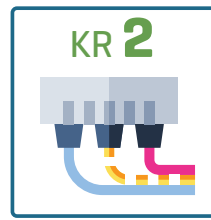


SUPERVISING THE SIGNIFICANT REDUCTION OF ENVIRONMENTAL IMPACT AND COSTS BY LCA

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



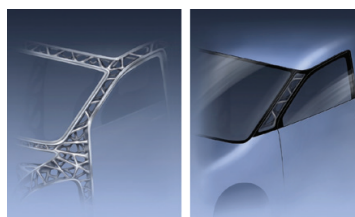
KR 4
STANDARDISATION KNOWLEDGE
Enhanced knowledge to contribute to standards and support regulatory bodies adapting to multi-material AM

DEMONSTRATORS

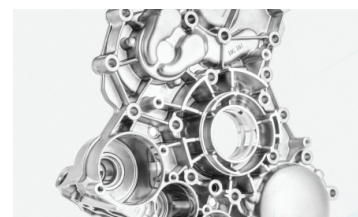
KR1 (≥ 5 MATERIALS) and KR2 (≥ 5 TECHNOLOGIES) will be applied in 10 different combinations in 7 demonstrators, belonging to 3 use cases (structural parts, moulds, test equipment), addressing 4 different markets (automotive, aviation, space and production industry)



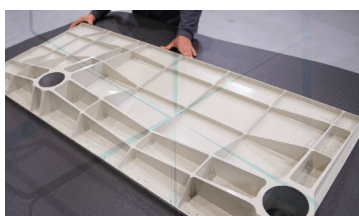
Actuator Housing



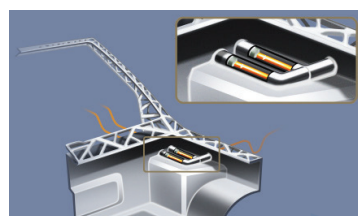
See-through A-Pillar



Mould for Alu Casting



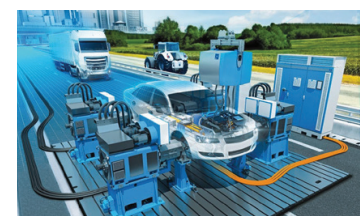
Bulkhead Panel



Dashboard Carrier



Mould for CFRP Parts



Automotive Testing

PARTNERS



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www.multi-fun.eu