

PROJECT PARTNERS



This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Grant Agreement number: 101007011



PROJECT COORDINATOR

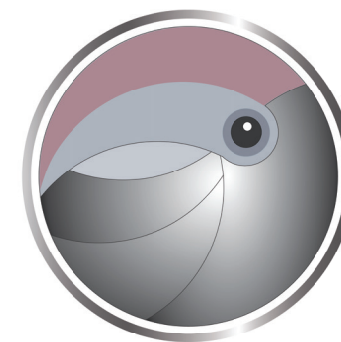
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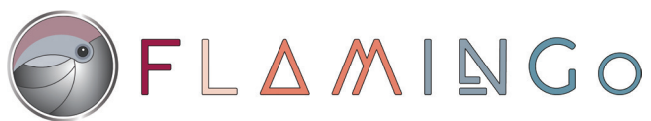
FLAMINGo

Advanced Solutions
and Lightweight Materials
in Electric Vehicles

PROJECT DETAILS

Start date:
1 February 2021
Duration: 4 years
EU contribution:
EUR 4.4M

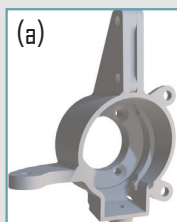




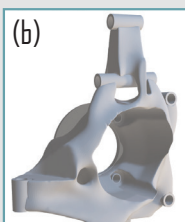
FLAMINGO PHASES

- Phase 1 : Identification of nanoparticles/alloy combination
- Phase 2 : Development of dispersion & casting technologies
- Phase 3 : Topology Optimisation of the component
- Phase 4 : Characterisation & use
- Phase 5 : Recycling of the Al-MMnC

OUR 1ST SUCCESS STORY



(a)



(b)



(c)

TOPOLOGY OPTIMISATION

Steering knuckle component for electric vehicles
a. conventional (design), b. new (design), c. new (real part)

PRELIMINARY RESULTS

AL-MMNC	ALLOY/ MASTERBATCH	YS (MPa)	UTS (MPa)	EL (%)	E (GPa)
LPDC & GREEN SAND CASTING	3XX SERIES +T6	+10 TO +30%	+12 TO +35%	~	-
EXTRUSION	6XXX SERIE	+8 TO +20%	+10%	-30%	+6%

SHORT TERM IMPACT AT VEHICLE LEVEL



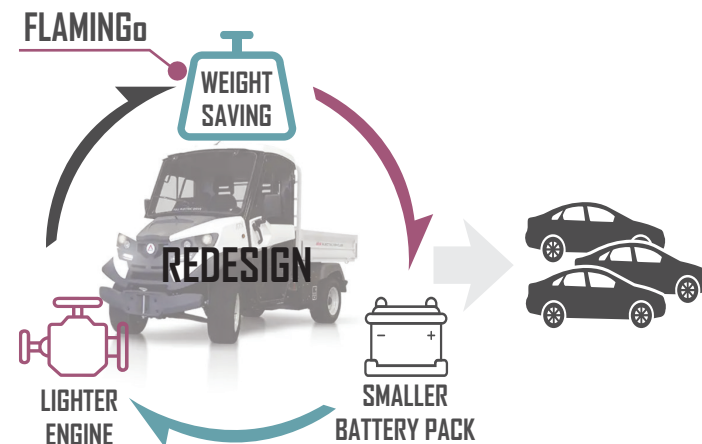
More Off-Road Capabilities

Enable more function
in Utility Vehicles

Increase the working area
of the fleet

Enable more flexibility
in vehicle configuration

MEDIUM TERM IMPACT AT VEHICLE LEVEL



TECHNOLOGIES INVOLVED

