

# AeroMC2

2022



A project by



Digital manufacturing of optimised multimaterial conformal channel solution for thermal management of aeronautic electric propulsion systems

Digital Manufacturing

Innovation

Project consortium



Summary

The AeroMC2 project will manufacture the next generation of optimised thermal management solutions for battery modules and high-power density electric motors in electric aircraft propulsion systems. The solution enables dedicated material optimisation for low weight and cost, with high corrosion resistance and structural stiffness, while providing superior heat transfer efficiency and fast response time of 3D panels, in a large range of dimensions.

The digital solution is supported by a new and disruptive manufacturing technology that involves addition of materials allowing full flexible design: Hybrid Channelling. The digitalisation of this novel manufacturing process will create a platform for digital value network across Europe and subsequently around the world, for the manufacture of optimised thermal management system to assist the incremental development of electric aircraft propulsion technologies.

