



Advanced manufacturing of multifunctional aerostructures for zero-emission aircraft – DOZE

AEROTECNIC leads the DOZE project, which encompasses advanced research in: 1) New functional materials that allow the integration of lightweighting and thermal management functionalities in aerostructures, 2) simulation tools that facilitate the design of new functional and multi-material aerostructures concepts, and 3) highly sustainable manufacturing strategies that facilitate the production of multi-material/multi-functional structures.

The main objective of the DOZE project is to investigate **new concepts for integrated and efficient manufacturing of multi-material (TP/TS) and multi-functional aerostructures** by combining the development of more efficient and sustainable manufacturing technologies, the development of functional materials and the use of simulation tools

The technical objectives of the DOZE project are the following::

OBJ 1. Develop advanced digital tools for the design of new multifunctional and multi-material aerostructures with optimised mechanical strength-to-weight ratio and thermal conductivity.

OBJ 2. Develop new functional materials optimised for the manufacture of aerostructures with thermal management capacity.

OBJ 3. To optimise the manufacturing processes of multifunctional and multi-material structures by means of highly sustainable and efficient OoA technologies

OBJ 4. Design and validate a scale demonstrator, representative of the new multifunctional and multi-material aerostructure concept, combining thermoplastic and thermoset elements

The DOZE project consortium is led by the company AEROTECNIC and is completed by the following entities: SMART MATERIALS3D, IDAERO and NASIKA..

This project has been subsidised by the CDTI and supported by the Ministry of Science and Innovation.



Plan de Recuperación,
Transformación y Resiliencia



Financiado por la
Unión Europea

NextGenerationEU



@CDTIoficial