

COGEA - COMPOSITE CERTIFICATION IN GENERAL AVIATION

Partners: Blackshape Spa, VVN Srl, SRB Costruzioni Srl, Novotech Srl, CETMA Scarl

IMAST members involved: CNR (Department of Chemical Sciences and Materials Technologies and Institute of Nanoscience), Polytechnique of Bari.

OBJECTIVES

The COGEA project aims to develop specific innovative design solutions for **composite components of the primary structures for Very Light Aircraft (VLA)**. The optimization will be achieved through a reduction of time and costs of qualification and an increase of performance by weight reduction. The project leads to the definition of "best practices", standardized and useful for "Acceptable Means of Compliance" for the approval processes of VLA composite, with benefits for the entire production chain.



IMAST ACTIVITIES

Within the project, IMAST is involved in the **analysis of the critical aspects of the behavior of composite components** in order to **reduce time and costs of the qualification process**.

The research proceeds through the **identification of structural prepreg materials**, already certified, **suitable for light aviation applications** and the **optimization of production processes** (preferably Out Of Autoclave) through chemical and physical analysis performed by experimental tests on composite components realized by industrial partners.

