

Title of the Project: TEXTRA Project Low-cost processes for high-performance composite components

Company name: CETMA Consortium – Engineering, Design & Materials Technologies Center

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Short description of the company (max 500 battute – spazi inclusi):

CETMA, founded in 1994, is a Research and Technology Organization (RTO) with expertises in the field of Materials Engineering, Information Technology and Industrial Design. CETMA is a multidisciplinary center and carries out applied research and experimental development activities for innovation of products, processes and services with the mission to promote the growth and development of the national productive system. CETMA is located at "Cittadella della Ricerca" in Brindisi and takes up a 5,000 square metres area with an equipped Materials Technologies Laboratory, a Prototyping Laboratory and one of the biggest Virtual Reality centres at European level.

Abstract of the research project:

The industry is looking more and more to Out-of-Autoclave (OoA) processing in order to fulfill the increase of the use of composites foreseen for the next years. CETMA is involved in the development of a design methodology for the optimization of cost-efficient-out of autoclave manufacturing processes of traditional prepregs. A low cost process to manufacture high performance composite structures of complex shape is developed using the different coefficients of thermal expansion of mould materials for the application of the consolidation pressure. Special components have been designed for the marine and aerospace industry.