



Sistemas automáticos de trazabilidad y análisis termográfico en la fabricación de composite - NIDO

The NIDO project aims to develop automatic and continuous energy monitoring technologies for specific processes in the composites industry. By integrating real-time data monitoring systems, it will be possible to establish complete energy traceability, creating a framework that not only optimises energy use but also provides companies with a key tool for reducing costs and improving their competitiveness in an increasingly demanding global market.

The main objective of the project is **to develop a system for generating the energy footprint at the component level in the manufacture of aeronautical composites**, with the aim of monitoring energy consumption and ensuring traceability from raw material to finished product.

The technical objectives of the NIDO project are as follows:

OBJ 1. Automated monitoring system for refrigerated material using RFID, to control the shelf life of composites, both inside the freezing chamber and at the access points, and the preparation of kits for manufacturing.

OBJ 2. Research and thermographic study of a heating system during hand layup in parts with complex geometry, allowing for the optimisation of energy consumption.

OBJ 3. Generation of an energy footprint at the part level through continuous and autonomous monitoring of energy consumption data in composite manufacturing processes.

OBJ 4. Development of traceability software to control the energy footprint of products, from the monitoring of raw materials to composite manufacturing processes.

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