European Commission Funds Research into the Development of an Efficient Manufacturing Process for Composite parts based on Zero-Emission Fast Curing-Coatings and Heated Moulds

Ecogel Cronos, a three-year project funded by the European Commission (EC), will look to develop an innovative ecological coating for composites parts in order to help eliminate styrene emissions from the workplace.

In addition, this type of coating will deliver improved performance in terms of quality and reduction in operational costs, which is currently a major issue in the manufacture of composite materials worldwide.

The concept is to develop a powder gel coat suitable for use in the Resin-Transfer Moulding (RTM) process. To achieve this, the project will focus on the following development of an innovative and efficient RTM process.

- Fast curing "zero Volatile Organic Compounds (VOCs) emissions" via the development of new powder gel coats; and
- Electrically conductive hot-skin-mould technologies based on laminates of carbon fibre suitable for powder coating process.

Two automotive case studies will be used to demonstrate the advantages of the new technologies developed in the project. In addition, a fully automated process will be proposed to drastically improve the current production speed.

The Ecogel Cronos consortium plan to commit over €3 million to the project, which is comprised of thirteen European organisations including; AIMPLAS, ECOINNOVA and CIDETEC from Spain, Composite Integration, AXON and NetComposites from the UK, CLERIUM from the Netherlands, Indupol International N.V. from Belgium, e-Xstream engineering from Luxemborg, Dortmund University of Applied Sciences and Arts from Germany, KETEK from Finland, Megara from Greece and Steel Belt Systems Powder Coating Division (SBS) from Italy.

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