

success story

EU-Research Project

C A T T

HOLIWOOD - the development and market launch of products made of heat-treated hard woods

PROFACTOR[®]

Research for Success

Company portrait:

As the largest private research company for production technologies in Upper Austria, the Steyr-based PROFACTOR Produktionsforschungs GmbH is generally seen in a pioneering role. A team of over 80 people from a diversity of specialist areas works on innovative technological solutions for the production industry. The research focal points extend from production technologies, robots, image processing and nano-structures to innovative energy systems. Since its foundation in 1995, PROFACTOR has handled over 60 EU projects and some 400 assignments from industry.

Quote:

„HOLIWOOD turns innovative materials and technologies into sustainable and ecologically acceptable products, developed and positioned by SME, and allows their implementation and demonstration at EU level. In this context, PROFACTOR regards itself as a bridge between science and business. On the one hand, we maintain intensive contacts with international universities and research institutes, while on the other, we push our own technologies forward on this basis.“

Rainer Schöftner,
Head of functional surfaces and nano-structures
at PROFACTOR and the HOLIWOOD project co-ordinator

Information & Contact:

CATT Innovation Management GmbH
Hafenstrasse 47-51, A-4020 Linz
Tel.: ++43 / 732 / 9015-5420
info@catt.at, www.catt.at

Background

The EU project, HOLIWOOD, foresees the use of heat-treated hardwood as an alternative basic material in the construction sector. This is possible due to the outstanding characteristics of thermo-wood such as durability and sustainability. In future, thermo-wood could simply replace materials including concrete, aluminium and plastic that demand the extensive use of resources.

Implementation

The aim of HOLIWOOD is the development and market introduction of products using heat-treated hardwood. The fulcrum of the project is provided by the completion of three prototypes:

- An eco² building (industrial object in passive house quality)
- 1 km noise insulation wall
- Wood flooring with a click system

Technical process

In order to attain the special characteristics needed for these product groups, the hardwood is heated in an air-tight atmosphere at 180-220°C. Chemical changes create a tropical wood-like appearance, increased dimensional stability and greater durability, although the brittleness of the hardwood derived from the heating process represents a major challenge.

In addition to the development of the prototypes, innovations are also anticipated in the area of thermo-wood powder coatings and sol gel technology.

A European Research Project

Nineteen partners, including fourteen SMEs, from eleven countries are working on this integrated „IP for SME“ project. The Austrian companies involved consist of Messrs Mitteramskogler, the Laubholzsägewerk from Gafenz; Obermayr Holzkonstruktionen from Schwanenstadt; Tigerwerk, Lack- und Farbenfabrik from Wels and Poppe&Prähal Architekten from Steyr.

PROFACTOR Produktionsforschungs GmbH in Steyr is co-ordinating the project, which commenced in 2005 and will run until 2009. The total budget amounts to some EUR 11 million, EUR 6 million of which has been funded by the European Commission.

More information is available under www.holiwood.org



Examples of future applications
Source: www.holiwood.org

CATT Innovation Management GmbH ...

... is a one-stop-shop for innovation management and supports Upper Austrian companies and institutions during the search for and participation in regional, national and international funding programmes, the recruitment of highly qualified trainees and innovation assistants, and in matters relating to technological co-operation and intellectual property rights.