

Robotics forms an alliance with the shoe

- *The Robofoot European project with a budget of € 3.7 M aims to introduce robotics into the footwear industry*
- *The European footwear sector has a turnover of 30,300 million euros a year and employs 368,000 people directly*

(19 January 2011). Introducing robotics into the footwear industry. That is what Robofoot is setting out to do; it is a European project in which about ten European organisations are participating and which has a budget of 3.7 million euros, partly funded by the European Union's 7th Framework Programme.

Unlike other important sectors of the economy, like the automobile sector, metallurgy or the food industry that are already heavily robotised, the footwear industry today still uses mostly cottage industry techniques in some of its processes. This is due to the large quantity of product variants, and to the complex manufacturing and assembly process.

Nevertheless, the consortium that Robofoot is part of considers that robotics will contribute to a great extent towards overcoming the manufacturing complexities in this sector and towards significantly increasing its productivity. To demonstrate this, in the course of the coming two years and a half the project is anticipating incorporating robotised solutions into a group of operations currently done manually.

According to data for 2007 of the European Commission, the European footwear sector comprises 26,100 companies, has a turnover of 30,300 million euros per year and directly employs 368,000 people. Two thirds of the EU's total footwear production is concentrated in three countries: Italy, Spain and Portugal.

Robofoot is made up of a consortium of organisations from Spain, Italy and Germany and includes four technology centres (Tekniker-IK4, Inescop, CNR-ITIA and DFKI), four industrial companies (COMAU, Robotnik, QDesign and AYCN) and two footwear manufacturing companies (Pikolinos and Rotta). The project is being led by the Tekniker-IK4 technology centre located in the Basque Country.

Specifically, the consortium will be conducting research into new ways of handling non-rigid products, control strategies and the most usable robot programming methods based on the use of information provided by sensors, and finally it will be working on the redesign of some of the footwear production processes.

Work on the Robofoot project, with a overall budget of 3.7 million euros, of which 2.56 are funded by the European Union's 7th Framework Programme, began last



September and is expected to be completed in February 2013 after two and a half years.