

PFI Research Project

ADDFactor

The ADDFactor project has the aim of setting up a system of “mini factories” for manufacturing customised footwear in the immediate proximity of the consumer. The project is based on a need-driven approach where an on-demand-production system is able to manufacture shoes which are adapted to the individual needs and the biometric data of each customer. ADDFactor has the potential to completely redefine the relationship between the retail and the manufacturing sectors. The research consortium working on this project, which includes PFI, will present its final results in the second half of 2016.

In 2012, PFI Group launched its European-scale research development initiative. The Technical and Research Department, PFI Biotechnology, and ISC Germany are collaborating in order to promote the expertise of the PFI Group on a European level and to acquire research projects.



The initiative bore its first fruits at the beginning of 2013 when PFI Biotechnology became a member of several powerful project consortia within CORNET – ‘COLlective REsearch NETworking’, which aims to interlink national and regional research programmes. The results are made available to the SMEs working in the respective industries of the research projects.

Also in 2013, PFI’s Technical and Research Department became a member of a research project known as ADDFactor (“ADvanced Digital technologies and virtual engineering for mini-Factories”), which is coordinated by an organization called Synesis. The project consortium is made up of 16 members from nine EU Member States.

The goal of the ADDFactor project is to develop an innovative manufacturing framework for customised shoes based on agile small production units – “mini-factories” – that are able to perform technologically advanced manufacturing operations in order to respond very quickly to customers’ demands. Such customisation should address functional, bio-medical, and safety- and wellness-related aspects (preventing injuries while allowing for optimal motion) and should guarantee comfortable, functional, safe, and “healthy” products for different applications (e. g. orthopaedic, sport and leisure, fashion) and different consumers.

In order to build such a framework, it is necessary to develop new digital tools to collect, analyse, and further process customer data and to develop industrial technologies for manufacturing customised footwear and footwear components. Once in place, the concept of mini-factories will allow for instant

product realisation and personalisation services, either locally (i.e. directly in the retail outlet or close to retail) or on a district level.

ADDFactor started in September 2013. The project duration is 3 years.

PFI's role within the ADDFactor project is to provide testing and research expertise. The research activities focus on materials and process definition for future products. Product samples will be tested by PFI's experienced staff in our physical and chemical laboratories.

Please visit addfactor.eu for more information on this project.



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