FESR MARCHE
PROGRAMMA OPERATIVO REGIONALE
POR 2014-2020

THE "HERCULES" PROJECT

The HERCULES project, funded by the call for tenders *“POR MARCHE 2014-2020 Asse 1 - Os 1 - Azione 1.1 - Promotion of research and development in the areas of smart specialisation",* aims to study, develop and implement a new high-efficiency, configurable, multi-function, compact LGV (Laser Guided Vehicle) prototype, equipped with a fast inductive charge system that can also be managed by ICT software. This new prototype will be tested in an industrial environment for sole moulding, at the partner company IPR SpA, where such vehicle prototype will automatically transport the aluminum moulds from a new automated warehouse to the moulding rides.

Trough LGV transportation, the moulds will be heated directly on the plane of the vehicle, thus excluding the use of furnaces from the production process.

This functionality is innovative because there are no commercially available LGV-type industrial vehicles equipped with Mould Heating function.

Furthermore, the use of LGVs in an artisanal sector such as the Marche footwear industry is groundbreaking.

HERCULES technological supply chain is made up of IPR SpA, a world leader in the production of shoe soles, MIDAC SpA, a world leader in the production of industrial batteries, ITACA SRL (ICT solutions) and SIA SpA (industrial automation).

Moreover, Marche Polytechnic University (UNIVPM), as a partner research organization, will be involved in researching and studying solutions to support the design of the mechanical and electronic components of the vehicle.

Within this project, ITACA SRL will thus study and develop software capable of integrating the management of LGV tasks and reloads into the production planning.