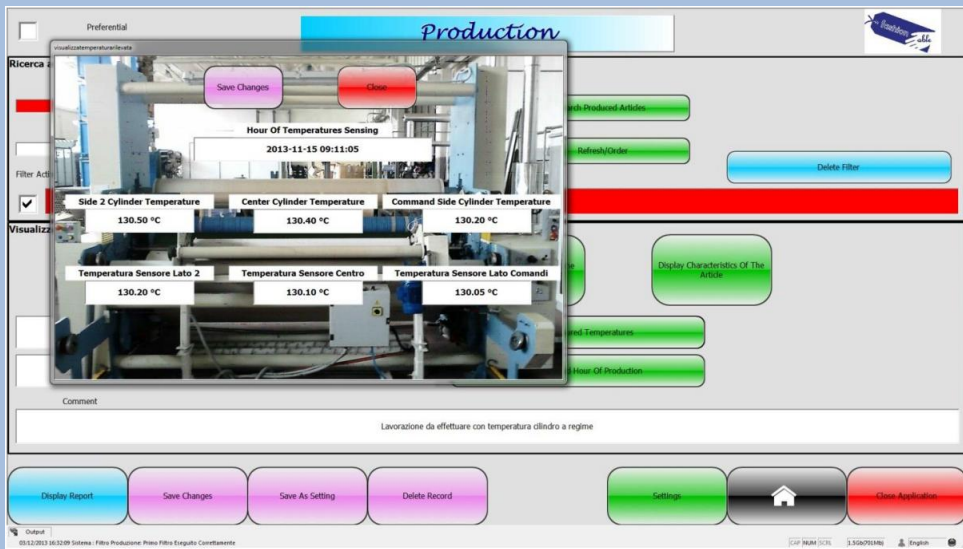
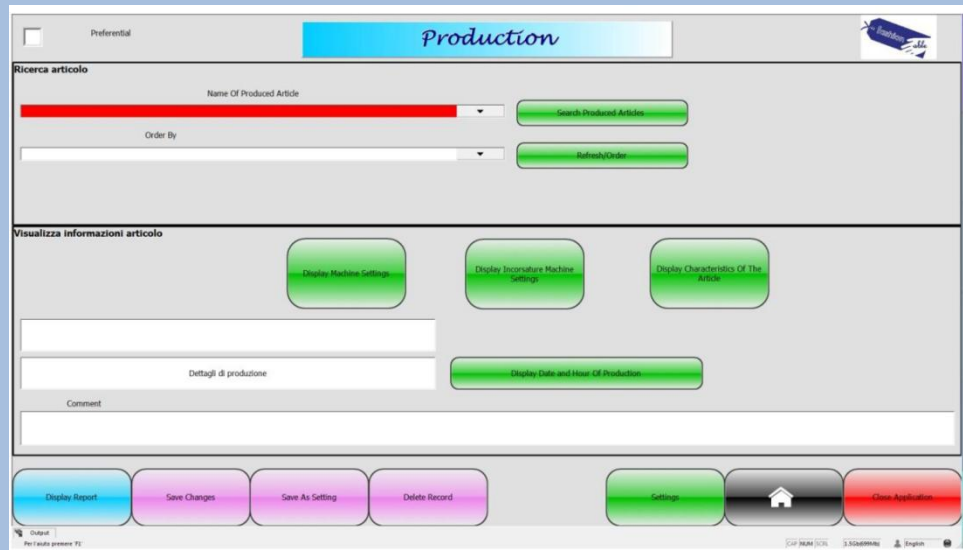


Result name	Fashionable : supervisor control system
Brief description	<p>Main objective</p> <p>A new flexible manufacturing process has been implemented in order to produce bounded fabrics with customized properties. A stretch-leather is the target with customized properties to be developed through a continuous bounding, thermal treatment and chemical treatment.</p> <p>Flexibility has been exploited in terms of customizable textile materials and fabrics to bound with leather (substitution of traditional Lycra and latex for bounding process), changing of mechanical stretch and enlargement of working area.</p> <p>The SCADA software developed within the project, aimed at supervising the machine behavior and controlling main parameters allowing the customization of mechanical properties (elasticity, resiliency, surface resistance, thickness) functional properties (breathability, absorption, softness, thermal regulation) and productivity.</p> <p>Short Description</p> <p>The developed solution consists of a SCADA system, providing the following sections and functionalities over the discussed flexible manufacturing machine for stretch leather production:</p> <ul style="list-style-type: none"> • <u>Settings</u> – this section defines the setting, i.e. the best recipe(s) to be used for a specific article. Recipe can undergo through <i>Full definition, searching and sorting, Status definition</i> as preferential recipe for specific article, as well as <i>Machine settings</i>: visualization and modification of parameters • <u>Production</u> – this section contains the history of the productions made on the whole material portfolio. The proposed scheme moves from the basics of setting, by offering more insight and control on specific production run. A view on machine settings offers the real registered parameters used for processing the article. Logs for statistics on production are kept, as well as connection with order related information about single production lot. • <u>Operation on databases</u> - customization of options and value ranges of variables handled in the program takes place. In particular, the important feature related to the “incorsature” scheme is considered. Based on the capabilities on the machine, the user can define – by composing it - the specific path according to which the material will be worked out. • <u>Application closing</u> – safe application an DB updating and shut down of the application <p>Innovation</p> <p>The innovation of the developed solutions is twofold:</p> <ul style="list-style-type: none"> • Existing machines – which are far from the new developed concept – are normally manually operated and controlled. The software provides a new strong base for automatically managing both single parameters and overall machine asset. • Further to this, logging and performance evaluation across article type and/or production cycle is enabled.
Software features	<p>License: No license (Art. 4 WCT 1996 - Berne Convention)</p> <p>TRL : 6 – Technology demonstrated in industrial relevant environment</p>

Picture/screenshot



Research lines/ Project	<p>PROJECT FULL TITLE: Development of new technologies for the flexible and eco-efficient production of customized healthy clothing, footwear and orthotics for consumers with highly individualised needs</p> <p>DURATION: 36 months</p> <p>STARTING DATE: 01 november 2011</p> <p>PROJECT NUMBER: 284871</p> <p>STRATEGIC OBJECTIVE: Theme FoF.NMP.2011-4 [High tech solutions in the production processes for customised green, safe and healthy consumer products</p> <p>Total Budget: 4.920.155 €</p> <p>EU Contribution: 3.578.977€</p> <p>WEBSITE: http://www.fashionable-project.eu/</p>
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References/ Related documents	<p>Papers:</p> <p>Reports:</p> <p>[ID: 311877] Andrea Ballarino, Emilio Bertani (2013)</p> <p>D4.2 - Flexible manufacturing processes & machines prototypes for the production of stretch leather/textile</p>