

S-MC-S

Sustainable mass customisation - mass customisation for sustainability

The S-MC-S project aims to help European manufacturing businesses adapt to global pressures by developing methods and innovative enabling technologies for personalised, customer-oriented, eco-efficient manufacturing.

START	May 2010
DURATION	36 months
COST	€5.0 million
EU FUNDING	69%
PROJECT LEADER	Claudio Roberto Boer (SUPSI)

To this end, S-MC-S aims to define and research a new production process called sustainable mass customisation. This is an emerging paradigm which combines the efficiency of mass production with the benefits of customisation. Mass customisation also brings several advantages in terms of sustainability, as goods are produced only as and when necessary and according to precise customer specifications. This reduces waste, thereby significantly reducing energy consumption and cutting manufacturing costs.

There are several reasons why mass customisation is not fully utilised at present. Firstly, there is no real networked environment based on a common strategy or appropriate supply chain to enable mass customisation to take place, nor the specific methodologies and tools to handle its implementation. Secondly, the evaluation of mass customisation must move beyond assessment of economic factors towards environmental and social considerations, which means incorporating the dimension of sustainability.

S-MC-S will promote four research pillars in response to this:

- The design and definition of

methodologies and tools to manage the growing complexity of products, production and supply chain configurations imposed by mass customisation in networked environments.

- Creation of an assessment model to evaluate the impact of production systems and different supply chain configurations when dealing with customisation.
- The drawing up of a business model and definition of the framework and strategies for creating economic, social and ecological values through the systematic implementation of S-MC-S.
- The development of new specific mass-customisation technology, with enhanced on-demand manufacturing capabilities, greater flexibility and faster overall response times. S-MC-S

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Sustainable Mass Customization
Mass Customization for Sustainability



<http://smcs.ttsnetwork.net>

will research pilot mass customisation technologies in three different sectors to support the transition of manufacturing towards sustainable mass customisation production thanks to new developments in rapid small series production.

Project Number 025

