ScalABLE4.0
Project ID: 723658
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H2020-EU.2.1.1. - INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies - Information and Communication Technologies (ICT)

Scalable automation for flexible production systems

From 2017-01-01 to 2020-06-30, ongoing project | ScalABLE4.0 Website

Project details

<table>
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<th>Total cost:</th>
<th>Topic(s):</th>
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<tr>
<td>EUR 4 005 550</td>
<td>FOF-11-2016 - Digital automation</td>
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<th>EU contribution:</th>
<th>Call for proposal:</th>
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<td>EUR 3 999 050</td>
<td>H2020-FOF-2016</td>
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<th>Coordinated in:</th>
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<td>Portugal</td>
<td>RIA - Research and Innovation action</td>
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Objective

The main objective of the ScalABLE 4.0 project is the development and demonstration of an open scalable production system framework (OSPS) that can be used efficiently and effectively to visualize, virtualize, construct, control, maintain and optimize production lines. The OSPS aims to provide this through a) a tight integration of the enterprise information systems with transformable automation equipment paired up with b) the necessary open APIs for optimized solutions on all hierarchy levels. The development of this OSPS framework is an answer to the growing demand of manufacturing companies to have efficient tools enabling them to optimize the organization of their production lines ‘on the fly’ and that have approached members of the consortium over the past few years. Two of these companies (PSA and Simoldes Plasticos) are part of the consortium and are at the center of this proposal. To assure full generality of the framework, they have defined two highly challenging use-cases against which the OSPS will be verified, tested and demonstrated on site and under industrial conditions. This will be achieved by a tight integration between (a) advanced robots production devices, (b) a highly advanced model for the plant, (c) decision support technologies (d) advanced networked interfaces and plug and produce technologies.

The expected economic impact is considerable and easily measurable in the demonstrator: by dynamically scaling the production resources to the current production volume and variant, both end-users will demonstrate substantial savings generated by the adaptable production capacity. For instance, the pilot engine production plant at PSA would be able to save approx 10 M€ just for the ramp-up of a single line.

Related information

Report Summaries

Periodic Reporting for period 1 - ScalABLE4.0 (Scalable automation for flexible production systems)
Coordinator

INESC TEC - INSTITUTO DE ENGENHARIA DE SISTEMAS E COMPUTADORES, TECNOLOGIA E CIENCIA
RUA DR ROBERTO FRIAS CAMPUS DA FEUP
4200 465 PORTO
Portugal

See on map

Activity type: Research Organisations
Contact the organisation

Participants

PSA AUTOMOBILES SA
2/10 BOULEVARD DE L’EUROPE
78300 POISSY
France

See on map

Activity type: Private for-profit entities (excluding Higher or Secondary Education Establishments)
Contact the organisation

SIMOLDES PLASTICOS SA
RUA COMENDADOR ANTONIO DA SILVA RODRIGUES 165
3721-902 OLIVEIRA DE AZEMEIS
Portugal

See on map

Activity type: Private for-profit entities (excluding Higher or Secondary Education Establishments)
Contact the organisation

FRAUNHOFER GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V.
HANSASTRASSE 27C
80686 MUNCHEN
Germany

See on map

Activity type: Research Organisations
Contact the organisation

AALBORG UNIVERSITET
FREDRIK BAJERS VEJ 5
9220 AALBORG
Denmark

See on map

Activity type: Higher or Secondary Education Establishments
Contact the organisation
SARKIS - ROBOTICS LDA
Rua Júlio de Matos, nº 828/882, Sala 0.03
4200-355 Porto
Portugal
See on map

**Activity type:** Private for-profit entities (excluding Higher or Secondary Education Establishments)

Contact the organisation

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CRITICAL MANUFACTURING SA
RUA ENG FREDERICO ULRICH 2650
4470-605 MOREIRA DA MAIA PORTO
Portugal
See on map

**Activity type:** Private for-profit entities (excluding Higher or Secondary Education Establishments)

Contact the organisation

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LUNDS UNIVERSITET
Paradisgatan 5c
22100 LUND
Sweden
See on map

**Activity type:** Higher or Secondary Education Establishments

Contact the organisation

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