Applied research: Modular multifunctional robot-cell design (sub-project PR2.2.1)

**Period of the sub-project:** 01.07.16.-31.12.19.

**Amount of support:** 48000 EUR

**Description of the sub-project**
A reconfigurable robot-based manufacturing is designed for rapid change its structure and modifying the functionality in order to quick respond to the changes in production capacity and sudden market changes. The core of the sub-project is development of the integrated modular multifunctional robot-cell that includes development of the models and their functionality for robot cell optimal design, development of the cost-effective robot-cell solutions and development of new challenge for robot-based manufacturing increasing the flexibility and productivity of production and simplifying the usage of robot-based solutions in SMEs.

**The objective and result of the sub-project**
The main objective of the sub-project is to develop the integrated modular for smart robot-cells and these effective implementation in different manufacturing process of SME-s. The results of the sub-project:

- Methodology and analysis of the smart robot-cell suitability for SMEs;
- Description of functionalities and operational rules for integrated utilisation of robot-based workplace in reconfigurable manufacturing;
- Methodology for development of the conceptual solution of the robot-cell platform.

**Supporting fund:** EU Regional Development Fund

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