

PUBLIC SELECTION BASED ON QUALIFICATIONS AND INTERVIEW FOR THE AWARDING OF NO. 1 EARLY STAGE GRANT LASTING 12 MONTHS FOR CONDUCTING RESEARCH PURSUANT TO ART. 22 OF LAW NO. 240/2010 AT THE GITT (CENTRE ON INNOVATION MANAGEMENT AND TECHNOLOGY TRANSFER) A.R.F. 09/B2 - INDUSTRIAL MECHANICAL SYSTEMS ENGINEERING A.D. ING-IND/17 - INDUSTRIAL MECHANICAL SYSTEMS ENGINEERING (TYPE B) IN PROJECT "INTEGRAZIONE DI PRODOTTO E PROCESSO PER LA REALIZZAZIONE DI MOTORI ELETTRICI PER VEICOLI STRADALI" FINANZIATO DA REGIONE LOMBARDIA - LINEA ACCORDI PER LA RICERCA E L'INNOVAZIONE COFINANZIATA DAL POR FESR 2014-2020 (CUP E36D17000090009)

announced with decree of the Chancellor Rep. no. 360/2019 of 01.07.2019 and posted on the official registry of the University on 01.07.2019

RESEARCH PROJECT

Methodologies and reference models for the design and control of the production and logistics systems in the smart manufacturing context

Research structure: GITT (Centre on innovation management and technology transfer)

Duration of the grant: 12 months

Scientific Area: 09 - Industrial and information engineering

Academic recruitment field: 09/B2 - Industrial mechanical systems engineering

Academic discipline: ING-IND/17 - Industrial mechanical systems engineering

Scientific Director: Prof. Roberto Pinto

The research project aims to study the use and exploitation of the technologies that characterize the Smart Manufacturing context - with particular reference to the Internet of Things - for monitoring and controlling both the production processes and the product in operation, exploiting the potential of the complete digitalization of the production process and of the product itself. The research project is mainly developed with reference to the INPROVES project, which envisages the creation of a specially designed prototype production line based on the Industry 4.0 paradigms for monitoring and managing facilities, processes and logistics flows.

-some macro-research questions currently defined are:

-what are the main impacts of digital technologies and the smart manufacturing model on logistics-production systems?

-how can the integration between the logistics system and the production system be improved with respect to visibility and efficiency?

-which are the most promising development and implementation directions, also in relation to the technological evolution of products and process?

- what methodological and operational supports can be provided to companies in order to rethink and manage their logistic-production system from a smart manufacturing perspective?