Monday 16 May 2022, from 13:30pm to 15:45pm

Parco Area delle Scienze 181/A, 43124 PARMA - Pad. 11, Room 7

SUPSI in streaming connection

MECHATRONICS EXPLAINED BY COMPANIES: PRESENT AND FUTURE OF MACHINE DESIGN

Mechatronics Group of ANIE Automazione in collaboration with SUPSI and University of Parma organize a workshop on the mechatronic design of industrial machines.

A mechatronic application is the result of a combination of different technological disciplines where mechanical, electrical, electronic systems and IT interact in order to increase production efficiency. During the planning phase this convergence of goals is not always respected and one of the difficulties that may arise is that of enhancing the mechatronics' interdisciplinary nature.

This webinar declines this general concept in a series of speeches by the manufacturers/providers of mechatronic components and an OEM who uses their basic technological solutions to build industrial machines.

The aim is to illustrate to students the prevailing aspects of the design of a machine, part of an industrial production plant. The approach is very operational and concrete, linked to the real needs of the machine manufacturer and the end-user, but also have to consider the economic and practices requirements. Today, in fact, all the phases that lead to the realization of an automatic machine for industrial production are characterized by the need of optimize costs and time of design and implementation, in the face of an increasing demand for performance and functionality.

OPENING SESSION

- Welcome greeting by **Prof. Marco Silvestri**, SUPSI and University of Parma
- **Sabina Cristini**, President Mechatronics Group of ANIE Automazione

SESSION BY TECHNOLOGIES PROVIDERS

TRANSMISSION AND MECHANICAL DESIGN

Kinematic chain and dimensioning, WITTENSTEIN

SAFETY AND SECURITY

Safety and Security, SCHMERSAL

AUTOMATION AND CONTROL

Key features of multi-robots application, OMRON ELECTRONICS

Robot guidance with vision system, SICK

Cables in dynamic applications, LAPP ITALIA

SIMULATION AND VIRTUALIZATION

Bridging Digitalisation and Automation, ROCKWELL AUTOMATION

Virtual Sensing: a closed loop digital twin to improve production performance, SIEMENS

LOGISTICS

Technology for Intelligent Transport Systems, BECKHOFF

Intralogistics: Mobile Assistance Systems and the Lean Smart Factory, SEW-EURODRIVE

OEM SESSION

- EMS Group

COMPANIES OF MECHATRONICS GROUP

For more information: anieautomazione@anie.it