

# Special Track on "Design of Production Systems" for INCOM2009

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## **Track Chairs:**

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The aim of this Track is to present new approaches and methods for the design of production systems, especially in machining and assembly environments. A particular attention will be made to reconfigurable manufacturing systems and transformable factories.

The design of production systems has always been a crucial problem in industrial engineering. It becomes more important because of the worldwide competition and due to the rapid progress of manufacturing technologies. Nowadays, production systems are characterized by short product lifecycle time, high levels of automation, emergence of new manufacturing equipment and technologies, and high investment. These attributes lead to new design problems and more frequent design needs, and hence to the demand for new methods and decision -aid tools.

#### **Track topics:**

The design of manufacturing systems is a wide open area for development and application of decision making and decision support technologies. This domain is characterized by the necessity to combine the standard decision making methods and some specific rules based on expert knowledge to take into account principal technological constraints and criteria. The list of suggested applications, which is not exhaustive, is as follows:

Modern design techniques, strategies for organizing physical resources, lean manufacturing approach. Factory organization: machining systems, assembly and transfer lines, manufacturing cells, cell design methodology, facility layout. Quantitative modelling of facilities design, assembly and transfer line balancing, process planning/equipment selection. Machine failures, capacity analysis, buffer allocation. Reconfigurable Manufacturing Systems (RMS).

## **Submission**

Submitted papers (6 pages in IFAC double column format) will be reviewed by at least two referees, see submission site <a href="http://ifac.papercept.net/">http://ifac.papercept.net/</a> Both academic and industrial oriented communications will be considered. All papers accepted for presentation will appear in the Preprints and will be distributed to the participants. Papers duly presented at the Symposium will be archived in the form of Proceedings published at IFAC-PapersOnline.net by Elsevier. Further submission instructions are available on the IFAC website <a href="https://www.ifac-control.org">www.ifac-control.org</a>. Several international journals are associated with the symposium for publication of special issues.

## **Important dates**:

November 15, 2008: deadline for paper submission January 6, 2009: notification of acceptance/reject

March 15, 2009: deadline for final paper.