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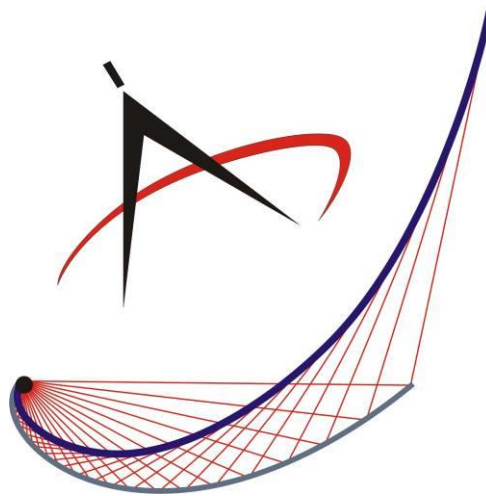
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Manufacturing Engineering as Vital Part of Industrial Engineering

Topics:

- ✓ Micro and Nanotechnologies; ✓ Rapid Prototyping Technologies; ✓ High Speed Manufacturing Processes; ✓ Ecological Technologies in Machine Manufacturing; ✓ Manufacturing and Automation; ✓ Flexible Manufacturing; ✓ New Manufacturing Processes: Design, Control and Exploitation; ✓ Assembly and Disassembly; ✓ Cold Forming Technologies; ✓ Optimization of Experimental Research and Manufacturing Processes; ✓ Maintenance, Reliability, Life Cycle, Time and Cost; ✓ CAD/CAM/CAE/CAX Integrated Systems; ✓ Composite Materials Technologies; ✓ Concurrent Engineering; ✓ Non-conventional Technologies; ✓ Virtual Manufacturing; ✓ Innovation, Creativity and Industrial Development; ✓ Manufacturing Systems; ✓ Welding Technologies; ✓ Industrial Design; ✓ Gear Design and Technologies.



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Special Issue (Vol. XVI, No. 3 / 2024)
Manufacturing Engineering as Vital Part of Industrial Engineering

Manufacturing engineering places greater emphasis on the actual production process. It entails creating, putting into practice, and refining systems and processes for production. Manufacturing engineers are responsible for creating production systems, choosing the appropriate tools and equipment, maintaining quality control, and streamlining manufacturing procedures. Expertise in fields like materials science, machine design, automation, and process optimization is frequently possessed by manufacturing engineers. Ensuring the efficient, economical, and high-quality manufacturing of products is the main objective of manufacturing engineering.

Industrial engineering is focused on the optimization of intricate systems, procedures, and structures. It examines the broad picture of how to raise productivity and efficiency in a range of industries. Processes including supply chain management, quality assurance, production scheduling, and overall system design are all improved by the efforts of industrial engineers. To enhance systems and processes, industrial engineers frequently employ technologies like project management, simulation, statistical analysis, and optimization strategies. Increasing production across a variety of industries, cutting waste, and increasing efficiency are the main objectives of industrial engineering. Manufacturing engineering is more specialised and concentrates solely on the production process, whereas industrial engineering has a wider focus on optimising systems and processes across industries. In actuality, there can be a great deal of overlap between the two disciplines, and experts from each may collaborate to increase the general effectiveness and calibre of output.

The theme of this Special Issue, *Manufacturing Engineering as Vital Part of Industrial Engineering*, is how firms can overcome obstacles by utilizing applied research in manufacturing and industrial engineering. Submissions of manuscripts pertaining to a wide range of topics across multiple disciplines are highly encouraged, including robotics and computer integrated manufacturing; micro- and nanotechnologies; characterization, modelling, and simulation of mechanical processes; engineering of manufacturing processes and advances in composite materials and technologies.

Topics: Micro and Nanotechnologies; Rapid Prototyping Technologies; High Speed Manufacturing Processes; Manufacturing and Automation; Flexible Manufacturing; Cold Forming Technologies; CAD/CAM/CAE/CAX Integrated Systems; Concurrent Engineering; Non-conventional Technologies; Virtual Manufacturing; Welding Technologies;

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