Manufacturing Engineering Division

The Manufacturing Engineering Division is concerned with the knowledge base of manufacturing sciences and technology and its applications for improved production performance that is economically viable and meets industrial health, safety, and resource conservation legislation. It also promotes the art, science, and practice of mechanical engineering through manufacturing engineering and its entire field of manufacturing engineering such as Machine Tools, Materials Processing, Sensors and Controllers, Computer Integrated Manufacturing and Robotics, Manufacturing Systems Management and Optimization, and Emerging Areas of Manufacturing Engineering.

Approximately 3000 Primary Members

Technical Committees

- Quality/Reliability
- Life Cycle Engineering
- Manufacturing Equipment
- Manufacturing Systems
- Manufacturing Processes
- Nanomanufacturing

Conferences

- International Mechanical Engineering Congress and R&D Expo
  - MED sponsored or co-sponsored 23 sessions at the 2003 Congress.
  - 80 papers were presented in 17 traditional paper sessions and one poster session.
  - Panel sessions, a round table, and several “laboratory fresh sessions” for breaking research results.

MED will participate in Congress 2004 with 14 symposia, but is planning for a stand-alone conference in 2005.

- National Manufacturing Week 2003
  - The MED organized a total of 16 sessions within NMW 2003 - largely in two tracks: Manufacturing and Industrial Automation; and Enterprise IT, Supply Chain and Logistics Management

MED will participate in NMW 2004 & 2005

Publications

- Journal of Manufacturing Science and Engineering
  (1,126 paid subscriptions)
  Contains cutting-edge research in the multi-disciplinary area of manufacturing science and engineering, this journal presents technical papers, discussions, technical briefs, and more. Specific topics of interest are: computer-integrated manufacturing; design for manufacturing; expert systems in manufacturing; grinding and abrasive machining; inspection and quality control; removal by machining; nontraditional manufacturing processes; process simulation; production systems optimization; rail transportation; robotics and flexible tooling; sensors; textile production; and welding.
- Proceedings of the ASME Manufacturing Engineering Division
- MED Newsletter

Awards

- Society Level Awards
  - Blackall Machine Tool and Gage Award
    Presented for the best current original paper or papers (not published elsewhere) which has/have been presented before ASME and/or published by ASME during the two calendar years immediately preceding the year of the award. The paper(s) should be clearly concerned with or related to the design or application of machine tools, gages, or dimensional measuring instruments, submitted to ASME for presentation and publication. Papers by multiple authors are eligible. The award shall be made annually if warranted. The award was established in 1954 by Frederick S. Blackall, Jr., Fellow and Seventy-second President of the Society.
  - M. Eugene Merchant Manufacturing Medal of ASME/SME
    Awarded to an individual who has had significant, direct influence and responsibility for improving the productivity and efficiency (either by research or by implementation of research) of manufacturing operation(s). This award was established in 1986 in honor of M. Eugene Merchant.
  - William T. Ennor Manufacturing Technology Award
    Presented to an individual or team of individuals for developing or contributing significantly to an innovative manufacturing technology, the implementation of which has resulted in substantial economic and/or societal benefits. The award was established by the Production Engineering Division (now the Manufacturing Engineering Division) in conjunction with the Alcoa Company in 1990.
- Division Level Awards
  - Best Organizer of Symposium & Sessions Award (BOSS Award)
  - Best Paper Award
  - Outstanding Service Award
  - Student Manufacturing Design Competition Award

Student Manufacturing Design Competition

- Purpose - to foster interest in manufacturing, to provide the manufacturing engineering community with fresh new perspectives on design, and to create a forum for students to share their new and innovative ideas.
- Competition - Original student designs that focus on manufacturing engineering and science are sought. Any design of a system, component, or process that can be used to promote the art, science and practice of manufacturing engineering is acceptable. Technical design areas include, but are not limited to: computer integrated manufacturing and robotics; machine tools, sensors and controllers; manufacturing systems management and optimization; materials processing; and new areas of manufacturing engineering.
- Venue/Prizes - This competition is held each year at the ASME Congress. Cash prizes and awards are presented at the MED Banquet, and complimentary banquet tickets are provided to the finalists.