

# Manufacturing Engineering: An online reading list from the IET Library



These ebooks and ejournals, available via the [IET Virtual Library](https://theiet.org/virtual-library), focus on the topic of manufacturing engineering covering topics such as biomanufacturing, computer aided design and smart materials.

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## Ebooks (provided by EBSCO)

**Advances in Manufacturing Technology : Computational Materials Processing and Characterization, Singh, Singh Dhami and Pabla. (2022).** This book is helpful to those working on new developments in the field of product manufacturing and features case studies and solved numerical solutions.

**Nanotechnology for Smart Concrete, Huseien, Khalid and Mirza. (2022).** This book covers the advantages and applications of nanomaterials in the concrete industry, including high-strength performance, microstructural improvement, energy storage, and coatings.

**The Prospect of Industry 5.0 in Biomanufacturing, Show, Chew and Ling. (2022).** This book enables readers in industry and academia working in the biomanufacturing engineering sector to understand current trends and future directions in this field.

**Computer Aided Design and Manufacturing, Bi and Wang. (2020).** This book addresses the need to provide up-to-date coverage of current CAD/CAM usage and implementation and covers, in one source, the entire design-to-manufacture process.

**Additive Manufacturing Technologies From an Optimization Perspective, Kumar, Zindani and Davim. (2019).** This book is a critical reference source that provides a unified platform for the dissemination of basic and applied knowledge about additive manufacturing, highlighting topics such as bio-printing, tensile strength, and cell printing.

**Machinery's Handbook (31st Edition), Oberg et al. (2020).** This handbook is a popular engineering resource, considered the principal reference in the manufacturing and mechanical industries.

**Safety Critical Systems Handbook, Smith and Simpson. (2016).** Addresses the 2016 updates to IEC 61511 to help readers understand the processes required to apply safety critical systems standards and guidance

**Novel Design and Applications of Robotics Technologies, Dan and Bin. (2019).** This book provides innovative insights into the state-of-the-art technologies in the design and development of robotic technologies and their real-world applications.

**Design and Development of Aircraft Systems, Seabridge and Moir. (2020).** This book covers how industry develops the customer requirement for aircraft into a fully integrated, tested, and qualified product that is safe to fly and fit for purpose.

## Ejournals (provided by EBSCO)

**Electro Manufacturing.** Provides news and information on new computer and electronic technologies being developed and applied to all areas of manufacturing to increase efficiency and productivity.

**Manufacturing Today.** Shares best practice and success stories as well as spotlighting growth opportunities and explaining new tools in the manufacturing sector.

**Materials and manufacturing processes.** Deals with integration of design and manufacturing activities requiring the invention of suitable new manufacturing processes and techniques.

**Journal of Intelligent Manufacturing.** Includes papers on the application of artificial intelligence in manufacturing and features articles on new methodologies and developments.

**DEMM: Engineering & Manufacturing.** Covers a broad range of topics related to development and innovation in manufacturing and machinery.

**Automotive Manufacturing Solutions.** Features, reports, interviews, news and products/technologies related to vehicle manufacturing globally.

**Materials.** A leading journal of materials science and engineering covering theory and practice.

**Materials Science.** Discusses new research in areas such as corrosion, cracking, fatigue, fracture, friction, lubrication of polymer materials, and the development of new materials.

**Concrete Products.** Serves ready mixed and manufactured-concrete producers through news reports, monthly columns, feature stories, and electronic newsletters.

**Modern Machine Shop.** Feature articles, commentaries, interviews, legislation, new products and literature and equipment reviews aimed at personnel employed in manufacturing plants.

**International Journal of Rotating Machinery.** Presents research results on types of rotating machinery employing gas, vapor, particle, liquid, and their mixtures.

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