PREFACE

Manufacturing managers and engineers are ever concerned with improvement in quality, reduction in both manufacturing cost and delivery time. The globalization of economy requires introduction of new products with enhanced features at competitive costs. Another challenge is the reduction in product life span. This necessitates considerable time compression in product development cycle. Yet another significant trend is mass customization which calls for extreme flexibility in manufacturing. The massive outsourcing in manufacturing is another important development in recent years.

The new edition of CAD/CAM/CIM has been bought out to focus on the response of CIM technology to address to these challenges. Manufacturing in the new millennium is moving towards more and more sophistication in exploiting the capabilities of computer hardware and software. Robust design methodologies and integration of shape design and functional design are included in the present edition. Optimized manufacturing is a possibility now with the extensive use of FEA. Apart from design optimization, FEA is used to model and simulate complex manufacturing processes to evolve several iterations. This enables engineers to make right parts first time every time. An additional chapter on simulation softwares has been added in the present edition to introduce this powerful tool to the students.

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