

1. Record Nr.	UNINA9910416527303321
Titolo	Integrated Design Engineering : Interdisciplinary and Holistic Product Development // edited by Sándor Vajna
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer , 2020
ISBN	3-030-19357-8
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (806 pages)
Disciplina	658.5752 620.0042
Soggetti	Engineering design Quality control Reliability Industrial safety Production management Engineering economics Engineering economy Manufactures Computer-aided engineering Engineering Design Quality Control, Reliability, Safety and Risk Production Engineering Economics, Organization, Logistics, Marketing Manufacturing, Machines, Tools, Processes Computer-Aided Engineering (CAD, CAE) and Design
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Part I: Basics -- Procedures and Models of Integrated Product Development (IPD) -- Basics of Integrated Design Engineering (IDE) -- Part II: Attributes in IDE -- Attributes and their Context -- Product Attributes -- Fulfilment Attributes -- Economic Attributes -- Part III: Integrations within IDE -- Area Integration -- Integration of Organisations and Processes -- IDE Holistic Procedure Model --

Knowledge Integration -- Application and Information Integration --
Part IV: Trans-sectional Functions -- Scenario Techniques -- Marketing
-- Methods for IDE -- Mechatronics -- Value Creation and Business
Planning -- Economical Aspects in IDE.

Sommario/riassunto

This book addresses Integrated Design Engineering (IDE), which represents a further development of Integrated Product Development (IPD) into an interdisciplinary model for both a human-centred and holistic product development. The book covers the systematic use of integrated, interdisciplinary, holistic and computer-aided strategies, methods and tools for the development of products and services, taking into account the entire product lifecycle. Being applicable to various kinds of products (manufactured, software, services, etc.), it helps readers to approach product development in a synthesised and integrated way. The book explains the basic principles of IDE and its practical application. IDE's usefulness has been demonstrated in case studies on actual industrial projects carried out by all book authors. A neutral methodology is supplied that allows the reader to choose the appropriate working practices and performance assessment techniques to develop their product quickly and efficiently. Given its manifold topics, the book offers a valuable reference guide for students in engineering, industrial design, economics and computer science, product developers and managers in industry, as well as industrial engineers and technicians.
