

1. Record Nr.	UNINA9910163882403321
Autore	Wang John X.
Titolo	Industrial design engineering : inventive problem solving // by John X. Wang
Pubbl/distr/stampa	Boca Raton, FL : , : CRC Press, , 2017
ISBN	1-315-16366-7 1-4987-0960-5
Edizione	[First edition.]
Descrizione fisica	1 online resource (338 pages) : illustrations
Disciplina	620/.0042
Soggetti	Engineering design Industrial engineering Problem solving
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	chapter 1 Enduring sonnet: Evolving industrial design engineering -- chapter 2 Monte Carlo simulation: Would an industrial engineer flip a coin like a poet? -- chapter 3 Safety, reliability, and risk management: All the astronauts landing on Mars are engineers -- we are bringing them home safely -- chapter 4 Design for environmental risk engineering -- chapter 5 Cellular manufacturing: Mitigating risk and uncertainty -- chapter 6 System risk engineering -- chapter 7 Contingency planning, logistics, and Lean manufacturing: Rolling out the storm -- chapter 8 Risk communications and continuous improvement: Poetic process engineering -- chapter 9 On the river of industrial design engineering: Flow of poetic thinking.
Sommario/riassunto	Designing new products and improving existing ones is a continual process. Industrial design engineering is an industrial engineering process applied to product designs that are to be manufactured through techniques of production operations. Excellent industrial design engineering programs are essential for the nation's industry to succeed in selling useful and ecologically justifiable and usable products on a market flooded with goods and services. This unique text on industrial design engineering integrates basic knowledge, insight, and working methods from industrial engineering and product

design subjects. Industrial Design Engineering: Inventive Problem Solving provides a combination of engineering thinking and design skills that give the researchers, practitioners, and students an excellent foundation for participation in product development projects and techniques for establishing and managing such projects. The design principles are presented around examples related to the designing of products, goods, and services. Case studies are developed around real problems and are based on the customer's needs.

---