

1. Record Nr.	UNINA9910437761603321
Titolo	Green Manufacturing : Fundamentals and Applications // edited by David A. Dornfeld
Pubbl/distr/stampa	New York, NY : , : Springer US : , : Imprint : Springer, , 2013
ISBN	1-4419-6016-3
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (290 p.)
Collana	Green energy and technology
Disciplina	670.286
Soggetti	Energy systems Manufactures Sustainable development Environmental engineering Biotechnology Energy Systems Manufacturing, Machines, Tools, Processes Sustainable Development Environmental Engineering/Biotechnology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction to Green Manufacturing -- The Social, Business & Policy Environment for Green Manufacturing -- Metrics for Green Manufacturing -- Green Supply Chain -- Principles of Green Manufacturing -- Closed-Loop Production Systems -- Semiconductor Manufacturing -- Environmental Implications of Nano-manufacturing -- Green Manufacturing through Clean Energy Supply -- Packaging and the Supply Chain: A Look at Transportation -- Enabling Technologies for Assuring Green Manufacturing.-Concluding Remarks and Observations about the Future.
Sommario/riassunto	Green Manufacturing: Fundamentals and Applications introduces the basic definitions and issues surrounding green manufacturing at the process, machine and system (including supply chain) levels. It also shows, by way of several examples from different industry sectors, the potential for substantial improvement and the paths to achieve the

improvement. Additionally, this book discusses regulatory and government motivations for green manufacturing and outlines the path for making manufacturing more green as well as making production more sustainable. This book also:

- Discusses new engineering approaches for manufacturing and provides a path from traditional manufacturing to green manufacturing
- Addresses regulatory and economic issues surrounding green manufacturing
- Details new supply chains that need to be in place before going green
- Includes state-of-the-art case studies in the areas of automotive, semiconductor and medical areas as well as in the supply chain and packaging areas

Green Manufacturing: Fundamentals and Applications is an ideal book for graduate students, academic researchers, practicing engineers and scientists in the fields of mechanical engineering and industrial engineering interested in sustainable manufacturing and its applications.
