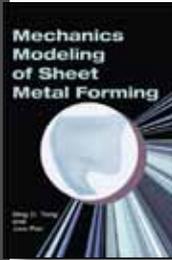


# Manufacturing



## Mechanics Modeling of Sheet Metal Forming

By Sing C. Tang, Jwo Pan

This book functions as an introduction to modern mechanics principles and various applications that deal with the science, mathematics and technical aspects of sheet metal forming.

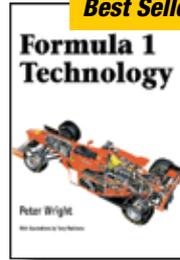
978-0-7680-0896-8, 322 pp., Hardbound 2007.

**\$99.95 List**

Product Code: R-321

ebook  
available

**Best Seller**



## Formula 1 Technology

By Peter Wright, Tony Matthews

This book offers an in-depth look at the engineering, design and production of Formula 1 cars. It focuses on the most technically challenging years, showing how the technology and engineering have evolved.

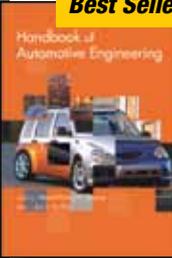
978-0-7680-0234-8, 454 pp., Hardbound 2001.

**\$49.95 List**

Product Code: R-230

ebook  
available

**Best Seller**



## Handbook of Automotive Engineering

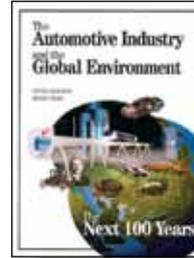
By Ulrich W. Seiffert, Hans Hermann Braess

One of the most comprehensive encyclopedias of vehicle systems and design, this book features 1600 pages packed with information on automotive design and applications from over 40 subject matter experts.

978-0-7680-0783-1, 638 pp., Hardbound 2005.

**\$139.95 List**

Product Code: R-312



## The Automotive Industry and the Global Environment

### The Next 100 Years

By William Glaze, Dennis Schuetzle

This book presents an analysis on the potential effects of globalization on the automotive industry and the environment. Energy challenges, market economy growth, and population dynamics are considered.

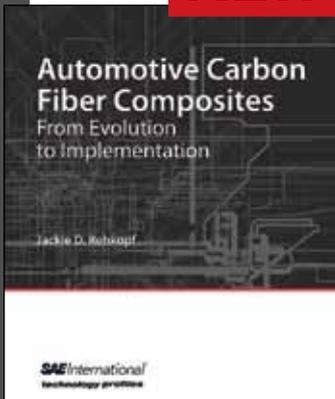
978-0-7680-0439-7, 72 pp., Paperbound 1999.

**\$19.99 List**

Product Code: R-263

ebook  
available

**NEW**



## Automotive Carbon Fiber Composites From Evolution to Implementation

By Jackie D. Rehkopf

The development of new materials that are technically and economically viable is no small endeavor. The risks, costs, and time involved in research are usually so high that only governments or private consortia can bear them.

And so it has been with the trajectory of carbon fiber reinforced composites, which are capable of providing the lightweighting needed for fuel efficiency, and the mechanical strength required for safety. After a long development cycle, this material is now being widely used by the military, in commercial aircraft, and in the automotive industry.

*Automotive Carbon Fiber Composites: From Evolution to Implementation*, written by Dr. Jackie Rehkopf, senior researcher at Plasan Carbon Composites, gives a high-level summary on carbon reinforced fiber composites specific to the automotive industry in today's market and its vision for the next 5 to 10 years. It begins with a comprehensive and easy-to-read overview of how composites started to be investigated as a possible alternative to metals, mostly driven by military demands, going on to cover:

- Fiber and resin types for automotive applications
- Composite constructions
- Manufacturing processes
- Machining and joining
- Reclaiming and recycling of these materials, among other topics.

The title approaches the future with the realistic optimism of those who work with the challenges of creating new solutions to problems that will stay with us for some time to come: the need to conserve energy and make transportation ever more affordable without the loss of safety.

Carbon fiber reinforced composites have demonstrated real value in positively addressing these issues.

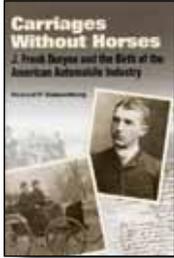
*Automotive Carbon Fiber Composites: From Evolution to Implementation* is an excellent guide for those involved in technical material strategy and research, as well as those who need to understand the basics of this subject to support better business decisions.

ISBN: 978-0-7680-3495-0, 128 pp., Paperbound 2011.

**\$99.00 List Price**

Product Code T-124

ebook  
available



**Carriages Without Horses**  
**J. Frank Duryea and the Birth of the American Automobile Industry**

By Richard P. Scharchburg  
 Scharchburg covers the design and development of the first Duryea car, culminating with its successful operation on the streets of Springfield, Massachusetts on September 21, 1893.

978-1-56091-380-1, 243 pp., Paperbound 1993.  
**\$39.95 List**  
 Product Code: R-127

ebook available



**Developments in Lightweight Aluminum Alloys for Automotive Applications: 2001-2005**

By James M Boileau  
 This book contains 50 technical papers that document the processes, guidelines and physical and mechanical properties that can be applied to the selection and design of lightweight components for current and future automotive applications.

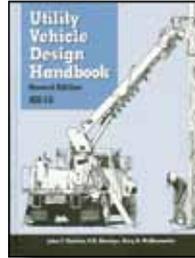
978-0-7680-1716-8, 552 pp., Paperbound 2006.  
**\$49.99 List**  
 Product Code: PT-130



**Lightweight Magnesium Technology 2001-2005**

By Thomas Ruden  
 The advancements and expanded usage of magnesium by the automotive industry are highlighted in this book which contains 45 SAE Technical Papers presented by technology experts at SAE events from 2001 -2005.

978-0-7680-1781-6, 366 pp., Paperbound 2006.  
**\$49.99 List**  
 Product Code: PT-131

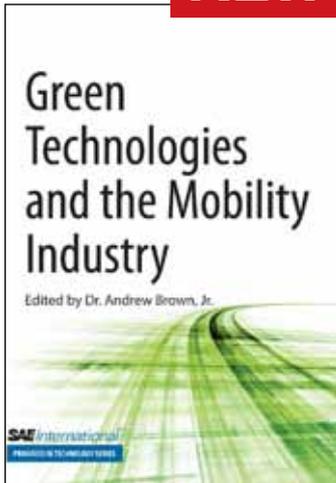


**Utility Vehicle Design Handbook, Second Edition**

This handbook provides practical, valuable information for anyone working with vehicles used in the utility and communications industries.

978-1-56091-134-0, 560 pp., Hardbound 1991.  
**\$119.95 List**  
 Product Code: AE-16

**NEW**



**Green Technologies and the Mobility Industry**

By Dr. Andrew Brown, Jr.

This book features 20 SAE technical papers, originally published in 2009 and 2010, which showcase how the mobility industry is developing greener products and staying responsive – if not ahead of – new standards and legal requirements. These papers were selected by SAE International's 2010 President Dr. Andrew Brown Jr., Executive Director and Chief Technologist for Delphi Corporation.

Authored by international experts from both industry and academia, they cover a wide range of cutting-edge subjects including powertrain electrification, alternative fuels, new emissions standards and remediation strategies, nanotechnology, sustainability, in-vehicle networking, and how various countries are also stepping up to the "green challenge".

*Green Technologies and the Mobility Industry* also offers additional useful information: the most recent Delphi Worldwide Emissions Standards booklets, which will be shipped with the print version of this title, or as part of the PDF download, if you purchase the ebook version.

**Exclusive Multimedia Package**

Watch Dr. Andrew Brown, Jr. describe the new trends in green mobility. Download a free SAE presentation on green technologies and the mobility industry. Challenging times: an interview with Dr. Andrew Brown, Jr.

This book is the first in the trilogy from SAE on "Safe, Green and Connected" vehicles in the mobility industry edited by Dr. Andrew Brown, Jr. The other two books in this trilogy are: *Active Safety in the Mobility Industry* and *Connectivity in the Mobility Industry*

**Buy a Combination of Books and Save!**

This trilogy can be purchased in a combination of two books as follows:  
*Green Technologies and Active Safety in the Mobility Industry*  
*Green Technologies and Connectivity in the Mobility Industry*  
*Active Safety and Connectivity in the Mobility Industry*

**Buy the Entire 3 Book Set and Save the Most!**

*Green, Safe & Connected: The Future of Mobility*

ISBN: 978-0-7680-3494-3, 283 pp., Paperbound 2010.

**\$119.95 List**  
 Product Code PT-146

**NEW**

## Green Technologies and Connectivity in the Mobility Industry SET

SAE International  
PROGRESS IN TECHNOLOGY SERIES

### Green Technologies and Connectivity in the Mobility Industry SET

By Dr. Andrew Brown, Jr.

This set includes two books, edited by Delphi's Chief Technology Officer Dr. Andrew Brown, Jr., which explore some of the most significant challenges currently facing the automotive industry—building greener and more connected vehicles. Both books each include 20 SAE technical papers on their respective topics, originally published from 2009 through 2011.

*Green Technologies and the Mobility Industry*

Showcases how the mobility industry is developing greener products and staying responsive – if not ahead of – new standards and legal requirements.

*Connectivity and the Mobility Industry*

Covers such topics as vehicle-to-vehicle communications, telematics, and autonomous driving. It also includes three original articles on automotive connectivity, written by various industry experts.

**Buy a Combination of Books and Save!**

These books are part of a trilogy that can be purchased in other two-book combinations as follows:

*Green Technologies and Active Safety in the Mobility Industry*

*Active Safety and Connectivity in the Mobility Industry*

**Buy the Entire Trilogy and Save the Most!**

*Green, Safe & Connected: The Future of Mobility*

ISBN: 978-0-7680-7379-9, Paperbound 2011.

**\$179.95 List**

Product Code PT-146\_148.SET

**NEW**

## Active Safety and Connectivity in the Mobility Industry SET

SAE International  
PROGRESS IN TECHNOLOGY SERIES

### Active Safety and Connectivity in the Mobility Industry

By Dr. Andrew Brown, Jr.

This set includes two books, edited by Delphi's Chief Technology Officer Dr. Andrew Brown, Jr., which explore some of the most significant challenges currently facing the automotive industry—building safer and more connected vehicles. These books each include 20 SAE technical papers on their respective topics, originally published from 2009 through 2011.

*Active Safety and the Mobility Industry*

Details the latest innovations and trends in active safety technology and driver distraction prevention techniques.

*Connectivity and the Mobility Industry*

Covers such topics as vehicle-to-vehicle communications, telematics, and autonomous driving. It also includes three original articles on automotive connectivity, written by various industry experts.

**Buy a Combination of Books and Save!**

These books are part of a trilogy that can be purchased in other two-book combinations as follows:

*Green Technologies and Active Safety in the Mobility Industry*

*Green Technologies and Connectivity in the Mobility Industry*

**Buy the Entire Trilogy and Save the Most!**

*Green, Safe & Connected: The Future of Mobility*

ISBN: 978-0-7680-7380-5, Paperbound 2011.

**\$179.95 List**

Product Code PT-147\_148.SET

**NEW**

**Green Technologies and Active Safety in the Mobility Industry SET**



**Green Technologies and Active Safety in the Mobility Industry**

*By Dr. Andrew Brown, Jr.*

This set includes two books, edited by Delphi's Chief Technology Officer Dr. Andrew Brown, Jr., which explore some of the most significant challenges currently facing the automotive industry—building green and safer vehicles. Both books each include 20 SAE technical papers on their respective topics, originally published from 2009 through 2011.

*Green Technologies and the Mobility Industry*

Covers a wide range of subjects showcasing how the industry is developing greener products and keeping up with—if not staying ahead of—new standards and regulations.

*Active Safety and the Mobility Industry*

Details the latest innovations and trends in active safety technology and driver distraction prevention techniques.

**Buy a Combination of Books and Save!**

These books are part of a trilogy that can be purchased in other two-book combinations as follows:

*Green Technologies and Connectivity in the Mobility Industry*

*Active Safety and Connectivity in the Mobility Industry*

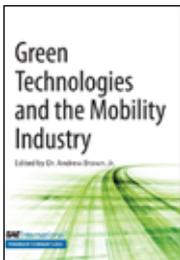
**Buy the Entire Trilogy and Save the Most!**

*Green, Safe & Connected: The Future of Mobility*

ISBN: 978-0-7680-7377-5, Paperbound 2011.

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**Green Technologies and the Mobility Industry**

*By Dr. Andrew Brown, Jr.*

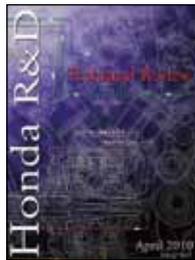
This book features 20 SAE technical papers, originally published in 2009 and 2010, which showcase how the mobility industry is developing greener products and staying responsive – if not ahead of – new standards and legal requirements.

978-0-7680-3494-3, 283 pp., Paperbound 2010.

**\$119.95 List**

Product Code: PT-146

ebook available



**Honda RD Technical Review: April 2010**

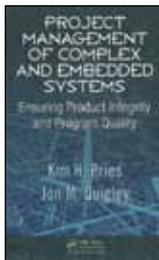
The 27 papers included in this volume chronicle the best of Honda's documented technical advancements from October 2009 through April 2010 and cover automotive, motorcycle, power products, and other fundamental technologies. Full-color diagrams complement the text.

978-0-7680-5730-0, 207 pp., PDF Only 2010.

**\$100.00 List**

Product Code: B-HON-002

ebook only



**Project Management of Complex and Embedded Systems**

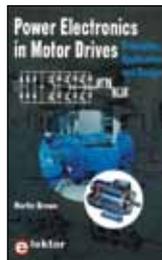
*By Jon M. Quigley, Kim H. Pries*

This book uses proven Project Management methods, as well as elements of IEEE embedded software development techniques, to explain how to deliver a reliable complex system to market.

978-1420072051, 376 pp., Hardbound 2010.

**\$84.00 List**

Product Code: B-875



**Power Electronics in Motor Drives**

*By Martin Brown*

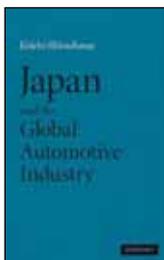
This book covers the practical design and application of drives rather than the mathematical principles behind them. Key principles of power electronics are described, as well as the basics of both DC and AC motors and the electronics of both drives.

978-0-905705-89-7, 240 pp., Paperbound 2010.

**\$47.60 List**

Product Code: B-886

ebook available



**Japan and the Global Automotive Industry**

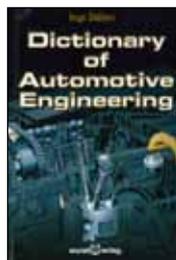
*By Koichi Shimokawa*

In this book, industry specialist Koichi Shimokawa draws on his thirty years of research and fieldwork with Japanese and American firms, to show how the Japanese automotive industry has managed to recover from the difficulties it suffered during the 1990s.

9780521866873, 352 pp., Hardbound 2010.

**\$95.00 List**

Product Code: B-892



**Dictionary of Automotive Engineering**

*By Ingo Stuben*

Unlike standard dictionaries, this specialized dictionary provides valuable aid to the expert (engineer or mechanic), student, and other interested parties who seek a better understanding of technical terms and precise definitions specific to automobiles.

978-3-8169-2941-3, 328 pp., Paperbound 2010.

**\$54.00 List**

Product Code: B-891

# Manufacturing



## Welding Aluminum - Questions and Answers, 2nd Edition A Practical Guide for Troubleshooting Aluminum Welding-Related Problems

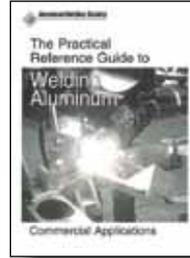
By Tony Anderson

This practical guide to troubleshooting aluminum welding-related problems is based on real-life questions and answers from author Tony Anderson's long-running column in the Welding Journal.

978-0-87171-085-7, 257 pp., Hardbound 2010.

**\$152.00 List**

Product Code: B-AWS-006



## The Practical Reference Guide to Welding Aluminum in Commercial Applications

By F. R. (Bob) Schneider

With an emphasis on common, effective practices in high volume situations, this reference guide covers mechanical properties of aluminum affected by welding alloy and temper designations filler metal selection prewelding preparation GTAW, GMAW, and SMAW defects and discontinuities and problems in qualifying welding procedures.

20 pp., Paperbound 2001.

**\$56.00 List**

Product Code: B-AWS-004



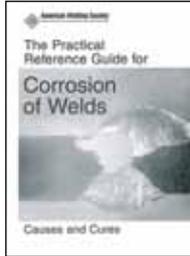
## Honda RD Technical Review: October 2009

The 25 papers included in this e-book chronicle the best of Honda's documented technical advancements from April through October 2009 and cover automotive, motorcycle, power products, and other fundamental technologies. Full-color diagrams complement the text.

978-0-7680-5728-7, 181 pp., PDF Only 2009.

**\$100.00 List**

Product Code: B-HON-001



## The Practical Reference Guide for Corrosion of Welds - Causes and Cures

By Ted V. Weber

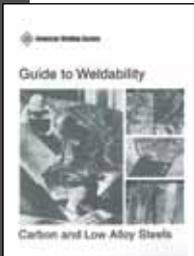
The objective of this practical reference guide is to review several common causes of weld corrosion, along with suggested cures. Additionally, several case histories are documented as examples of these solutions.

28 pp., Paperbound 1999.

**\$52.00 List**

Product Code: B-AWS-001

ebook  
only



## Guide to Weldability - Carbon and Low Alloy Steels

By Fritz Saenger

Aimed at those responsible for the operation of fabrication shops and maintenance/repair facilities, this guide helps the non-welding engineer in the selection of method, materials, and procedures to produce the "desired results and stay out of trouble."

0-87171-000-5, 60 pp., Paperbound 2005.

**\$60.00 List**

Product Code: B-AWS-007



## The Practical Reference Guide for Welding Titanium

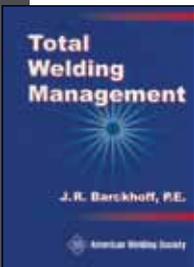
By Eugene G. Hornberger

This reference guide discusses the difficulties that originate from several basic sources when welding titanium and titanium alloys.

15 pp., Paperbound 1999.

**\$48.00 List**

Product Code: B-AWS-003



## Total Welding Management

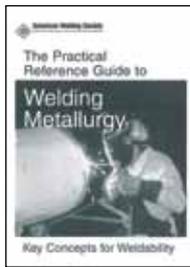
By Jack R. Barckhoff

This guide provides a systematic approach to welding excellence and cost reduction by explaining the management principles, structure, and details you need to transform your welding operation from a cost center into a profit center.

0-87171-743-3, 203 pp., Hardbound 2005.

**\$49.50 List**

Product Code: B-AWS-008



## The Practical Reference Guide to Welding Metallurgy - Key Concepts for Weldability

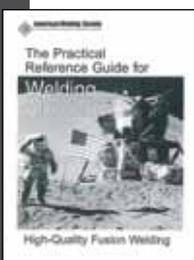
By Ted V. Weber

This guide offers some basics that will aid the non-metallurgist in understanding why problems occur, and how to avoid them.

34 pp., Paperbound 1999.

**\$56.00 List**

Product Code: B-AWS-005



## The Practical Reference Guide for Welding Aluminum - High-Quality Fusion Welding

By F. R. (Bob) Schneider

This guide concentrates on obtaining high quality aluminum weldments with the fusion process, in particular gas tungsten arc welding (GTAW), electron beam welding (EBW), and gas metal arc welding (GMAW).

20 pp., Paperbound 2001.

**\$52.00 List**

Product Code: B-AWS-002



## Assembly Localization of Foreign Passenger Cars in Russia

This report includes information on foreign car assembly and localization in Russia, the characteristics of market players and their local suppliers. The report also contains a list of global suppliers of components for car models assembled or planned to be assembled in the region.

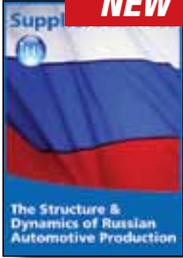
132 pp., PDF Only 2011.

**\$1830.00 List**

Product Code: MR-SB-108

ebook  
only

**NEW**



**The Structure Dynamics of Russian Automotive Production**

This brand new report examines the dynamics and structure of vehicle manufacturing in Russia. Covering cars, trucks and buses it profiles each of the vehicle manufacturers, as well as their plans and prospects for the future.

260 pp., PDF Only 2011.  
**\$2110.00 List**  
 Product Code: MR-SB-101

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**The Automotive Metalcasting Report**

This Report is a definitive market review, including a detailed survey of metalcasters views of the industry, and detailing the likely changes in the automotive industry and their implications right up to 2012.

288 pp., PDF Only 2008.  
**\$1830.00 List**  
 Product Code: MR-SB-015

ebook  
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**Automotive Logistics for Production Report**

This report, the first to be published taking into account the impact of the global financial crisis and the heightened economic volatility on the foot print of the international automotive industry and the vulnerability of its supply chain, provides a unique insight into the state of the industry in mature, developed markets in Europe, North America and Asia as well as offering a special focus on emerging market challenges of Russia, China and India.

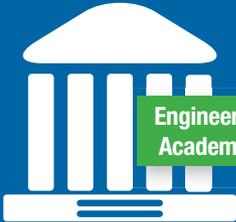
232 pp., PDF Only 2009.  
**\$2110.00 List**  
 Product Code: MR-SB-039

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