

SA235

PRO SERIES



Advanced **Automotive** **WELDING**

**Covers Advanced
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- ALUMINUM
- STAINLESS STEEL
& MORE



Jerry Utrachi



Author: Jerry Utrachi, President of WA Technology
Produced by Leading Automotive Book Publisher
(*www.CarTechBooks.com*)

Book is 8 1/2 inch X 11 inch Printed on Quality Glossy Paper.
176 Pages, with 450 Colored Pictures with Detailed Captions

Independent Reviews



By Editors of Hemmings Motor News;
Advanced Automotive Welding
by Jerry Utrachi

Welding is a hot topic in the hobby these days. For less than \$500 a do-it-yourselfer can purchase a good quality welder and start laying beads or zapping in spot welds.

This kind of accessibility to a once specialized skill is excellent for the hobby, and we encourage everyone with an interest to learn to weld. Just as important as buying the gear, however, is getting versed in the many different processes, techniques and materials used in all types of welding. A class at a local welding school or a community college is a good place to start, as is the purchase of a book like *Advanced Automotive Welding*, part of Car Tech's SA Design series.

Despite the "Advanced" in the title, the book is a good resource for beginning and intermediate welders. The author, Jerry Utrachi, is a former American Welding Society President, with 40 years of welding experience, as well as a car enthusiast, and he writes in a clear, mostly jargon free style.

The book covers all welding processes, as well as cutting processes, and includes insight into some car related welding projects. *Advanced Automotive welding* is a good addition to any budding or experienced metal worker's shelf.

From Amazon (All 5 Star Rated) 

A Truly Practical Book on Welding for Performance Cars, June 2012

By Jeff Weber "Bookdog" (Miami, FL United States)

This new book by Jerry Utrachi is one of the best I have ever read about welding for the automotive hobbyist - whether builder of cars from scratch or automotive restorer. It effectively combines basic facts and techniques for welding with practical instructions for producing various types of welded joints. The illustrations and photographs showing step-by-step procedures are excellent and really give a feel for what the job requires. Common projects such as street rod roll bars, trailer hitches, floor pans, etc., are covered in detail and with spot-on accuracy. Thermal cutting, so often used on car projects, is also covered thoroughly, as are inspection, arc straightening and other tricks of the trade. This book should be in the library of every automotive enthusiast.

THIS IS THE BOOK! June 8, 2012

By Jim Harvey (New York United States) -

This review is from: *Advanced Automotive Welding (Pro Series) (Paperback)*

Having worked as a professional welder for over 40 years, having welded all over the world, above ground, underwater, in the field and every other place one could imagine, I've always been interested in learning as much as possible about my chosen field. Well written books on welding are few and far between. Keeping a technical subject interesting and entertaining, while still being informative is an art in itself. Gerry Utrachi is a master of that art in *ADVANCED AUTOMOTIVE WELDING*. The content of this book is possibly one of the best written and cogently assembled pieces of welding instruction that I've ever read.

I have literally dozens of books on welding that span a good 5 or 6 decades. Some of the better ones were written back in the 40's for training the wartime workers. It's amazing to me that it took over 60 years for a book to be published that is comprehensive and comprehensible, that explains in everyday language, the latest techniques in the welding arts and sciences. The coverage of the subject was more complete than I have ever seen. This is a classic, and sure to be a benchmark reference book for years to come.

I have recommended the book to my membership at our website and continue to promote it wherever I go.

If you are at all interested in improving your welding knowledge and skill set, *ADVANCED AUTOMOTIVE WELDING* is a must have book for your reference library.

Independent Reviews (continued) From Amazon (All 5 Star Rated)



Welding,

By **Mike** - June 2012

As a car buff, I've really been interested in restoration. This book was a fascinating read on the inside scoop of what it takes to bring one of these classics back to its prime. I learned a lot more than I knew about street rods and race cars and gained a lot of respect for the professionals in this field.

Inspiration for My Major in College!

By **dannyk**

I never thought about welding school even though I am really into learning everything I can about working on my car. But after reading this book, (I realize there is much more science in welding than I thought) I'm going to check out The Welding Technology Department on campus.

Welding

By **Darlene M. Petri** – September 26, 2012

This is a very informative book. the text is thorough and informative, yet very understandable and easy to follow. not only are principles and the science of welding discussed, but projects are included. the projects are the best way to put into practice what the text teaches. in welding, as in any manual art, practice is the only way to truly learn the lessons given in the text. that makes this an invaluable book for anyone wishing to learn welding. Invaluable!

A Great Resource

By **E. Mockingham** - October 10, 2012

Advanced Automotive Welding (Pro Series) is a must for all levels of welders to have in their resource library. This book explains various welding processes in an easy to understand language suitable for the beginner welder up to and including advanced welders. This book was written for an automotive application, but has tips for all welding applications as well.

My students enjoy reading this book and using the welding advice contained in it.

A Must Have Welding Book

By **Robert L. Weir** – October 2012

This book is titled "Advanced Automotive Welding" and it is that and more. It offers a beginner the details of what welding is and what it is capable of joining together. It provides a good reference for those individuals who use ARC welding as a refresher in MIG or TIG, or vice versa. In talking with a friend who teaches welding she commented that the book was an excellent book for teaching but she could not use it in her welding class only because the work Automotive was in the title and the college would not accept it for a beginners class. I think that this book is one that any welder should have and a definite requirement for anyone working on automobiles. This book gives answers to problems a person might run into while constructing or repairing vehicles. A must buy for any welders reference library.

Independent Reviews (continued) From Amazon (All 5 Star Rated)



Great Book, March 21, 2013

By **Nate Kamp**

After reading several reviews, this sounded like a well written book full of accurate information. I have to say that I agree. As an amateur / hobby welder, this book is full of information to help understand how and why processes work, and how to achieve better welds. I think this is a great book for anyone with an interest in welding.

Great Book for Any Welder! March 31, 2013

By **DIATONIC00**

Lots of detailed information on the subject matter. A must for any welder. Would recommend this book to others. Thank you!

Very Useful. December 28, 2013

By **Jess**

I choose this book because it dealt with all welding types. I've found it offers comprehensive coverage with clear illustrations. Has been very useful.

Really Interesting, February 6, 2014

By Amazon Customer (Cedar, MN United States) -

First of all: I'm not a welder. I have done some gas welding in the past, but that's it.

This book covers all of the major types of welding (MIG/TIG/oxy/stick) and talks about the advantages and disadvantages of subtypes (spray arc, short arc, pulse arc, etc.) He goes into detail about the power sources and types of power delivery. What kinds of filler metal get used. He even gets into detail about the hardening and annealing that goes on, and what's happening with the metal around the weld.

For all the types of welds he describes, he goes on to use an example of where you might want to use that kind of weld in real life, in an automotive setting. Examples include: repairing aluminum cylinder heads, roll bars, floor pans, and other projects.

I don't think you want this book if you're trying to learn to weld. But you do want this book if you're trying to decide on the best process to use for a particular project, and if you want to understand what's happening to the metal when you're welding it. Even if I never pick up a welding torch I am really glad I bought this book.

Great book for Any Type of Welding, February 17, 2014

By Diane Thrailkill

I got this for my son after reading the reviews that it is not just for automotive welding. My son told me it was a great book and he learned a lot of great techniques.

TIG Welder Manual, March 17, 2014

By John David York

I have read and reread this manual, very informative, good pictures, and diagrams, plus good examples of TIG welding applications, easy to picture and figure into my type projects.

Independent Reviews (continued) From Amazon (All 5 Star Rated)



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Great book on welding, April 27, 2014

By [Nelson R. Corcoran](#) (San Francisco, CA) -

The diagrams, illustrations, and photos are all first class. Very easy to see a lot of stuff. Of course, welding can't really be learned by reading a book; you have to practice but I think there is enough here to get started.

Maybe more time could be spent on using lead for car repairs - we don't always need to weld.

Also perhaps a little more high level advice in a few places would be helpful, for example, when you want to buy a MIG welder instead of a TIG welder. Perhaps also some more suggestions as to where to buy all the equipment you will need.

But really a well written book and easy to understand. A complete beginner might need to read it two or three times.

Five Stars, August 21, 2014

By [J. R. Slowinski "quikshift"](#) (Phx, AZ) -

Excellent book. Not just for automotive welding either, just a great welding primer.

Five Stars December 4, 2014

By [Richard McGovern](#) -

This is a mandatory book to have if you are doing any serious welding. If you do TIG or MIG it's a must.

“Advanced Automotive Welding” Book By Gerald “Jerry” Uttrachi Wins International Media Award Competition

The following was published in The American Welding Societies
December 2013 issue of their monthly Welding Journal



Member Milestone

Gerald D. Uttrachi



Gerald Uttrachi



Uttrachi's medal

Gerald D. Uttrachi has received international acclaim for his book, *Advanced Automotive Welding*, published by CarTech, Inc. His work earned the Bronze Medal in the 22nd International Automotive Media Award Competition, held under the auspices of the International Council for Press and Broadcasting, based in London, UK. Uttrachi is president of WA Technology, chairman of the AWS Foundation board of trustees, and a past AWS president. He said he “intended the book to stimulate interest in the science of welding and the possibility of the many young folks involved in the car hobby to consider welding as a profession.” Jeff Weber, publisher emeritus, *Welding Journal*, wrote, “The illustrations showing the step-by-step procedures are excellent and really give a feel for what the job requires. This book should be in the library of every automotive enthusiast.” Walter J. Sperko’s extensive review of Uttrachi’s book appeared in the April 2013 *Welding Journal*. The 176-page volume contains more than 450 pictures and offers some basic welding metallurgy and arc physics written on a level easily understood by all welders from beginners to advanced.

The Pictures in This Overview are Low Resolution to Fit the Format.
The Book Has All High Resolution Photos on Glossy Paper

Advanced

Automotive **WELDING**

Jerry Uttrachi



CarTech[®]

By: Jerry Utrachi, President of WA Technology

This Overview Provides Several Pictures From Each Chapter

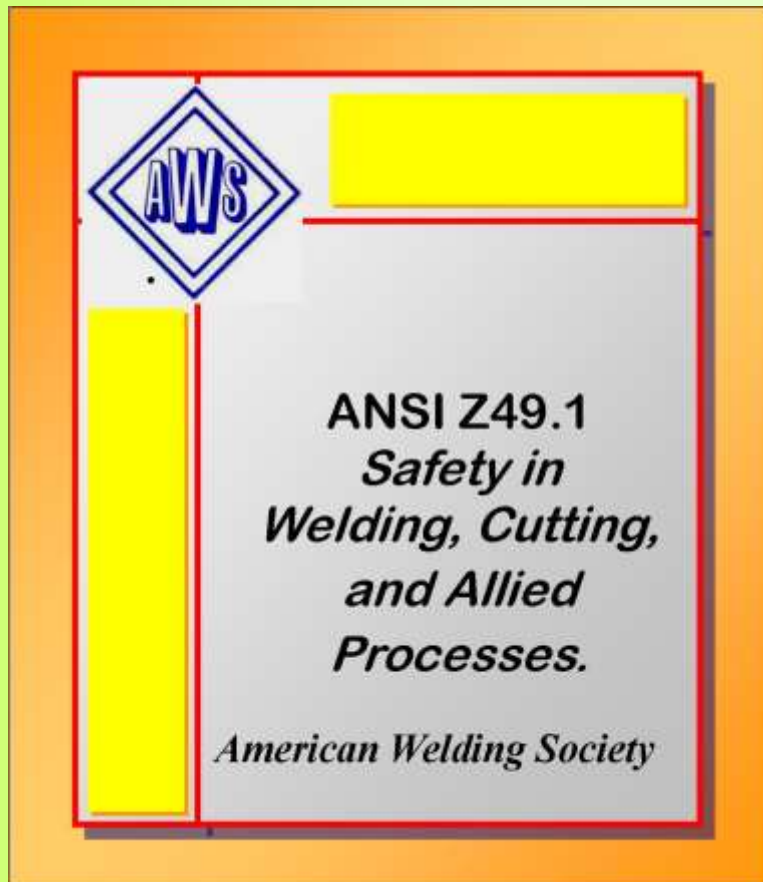
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By: Jerry Utrachi, President of WA Technology
(www.NetWelding.com)

INTRODUCTION: 3 PAGES, 7 PICTURES

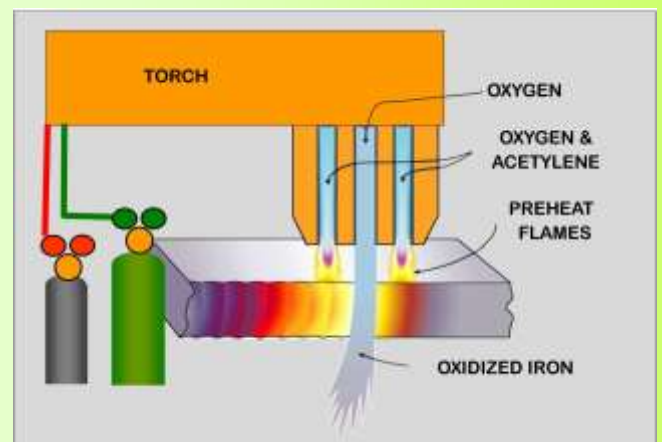
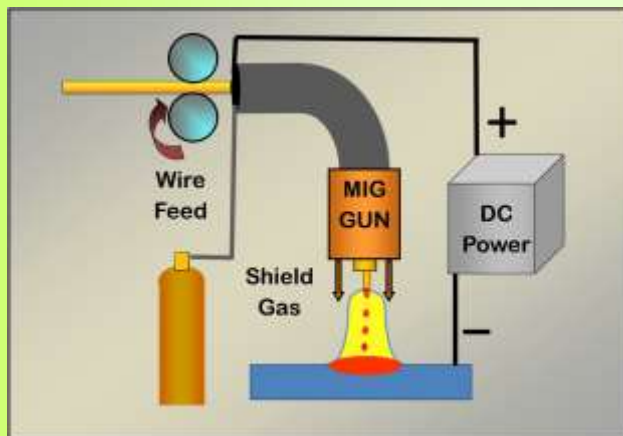
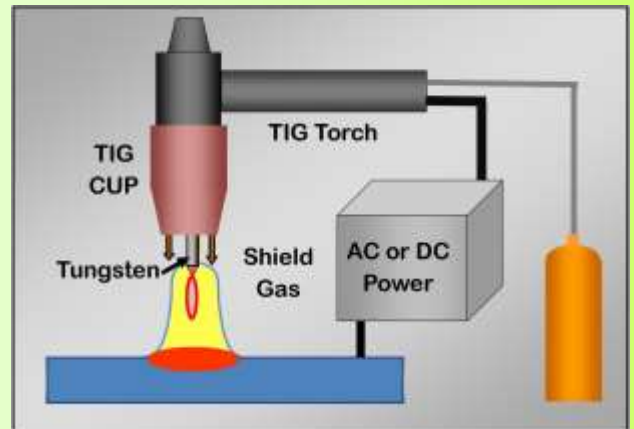
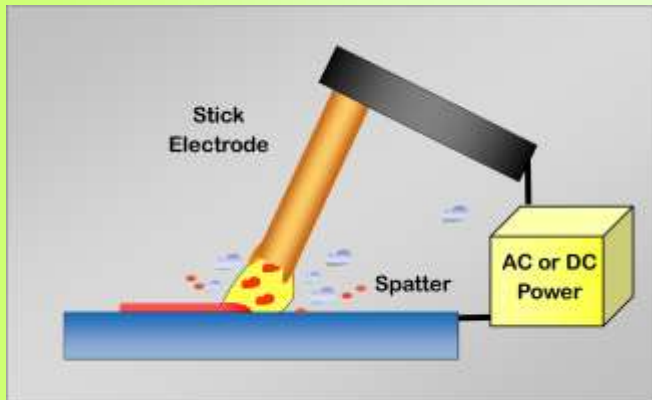
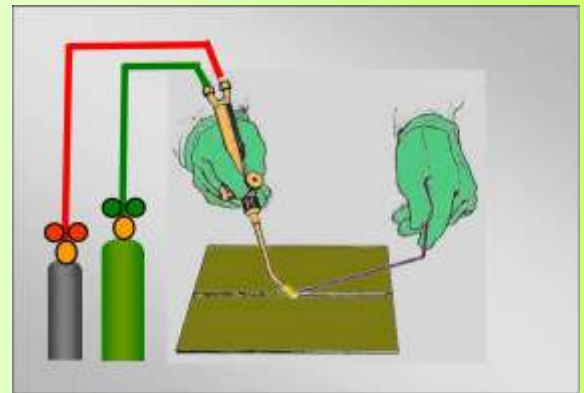
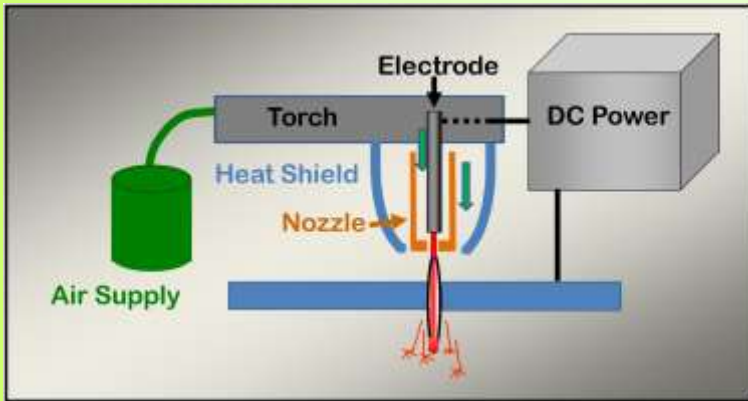


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Chapter 1: Welding Processes and Equipment:

3 PAGES, 9 PICTURES

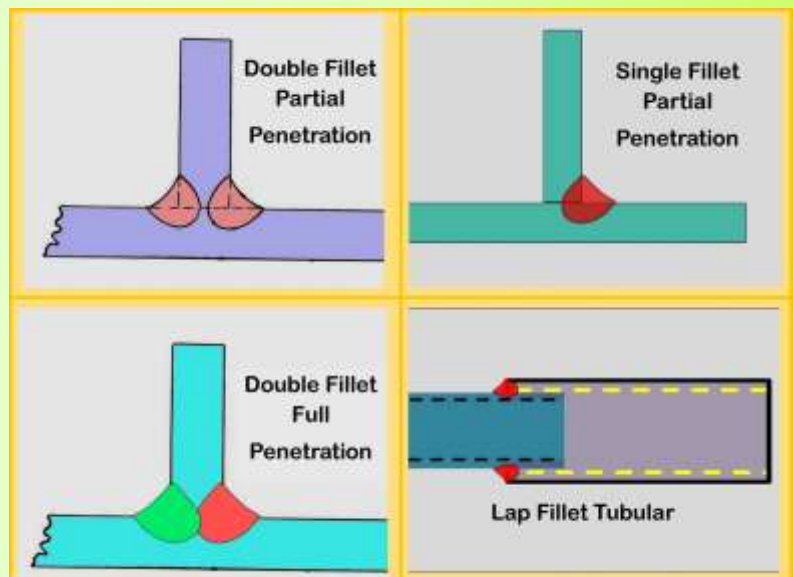
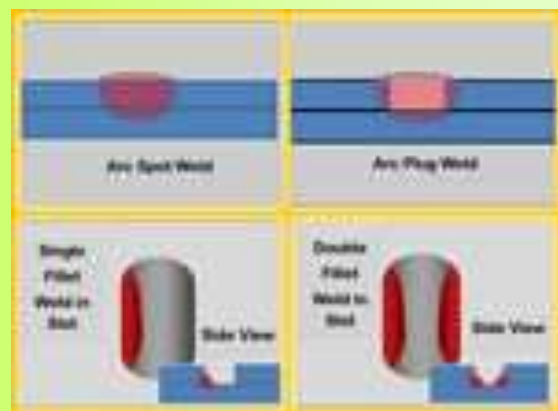
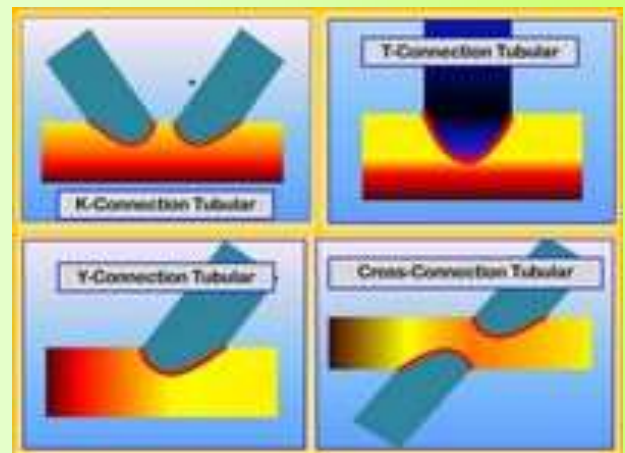
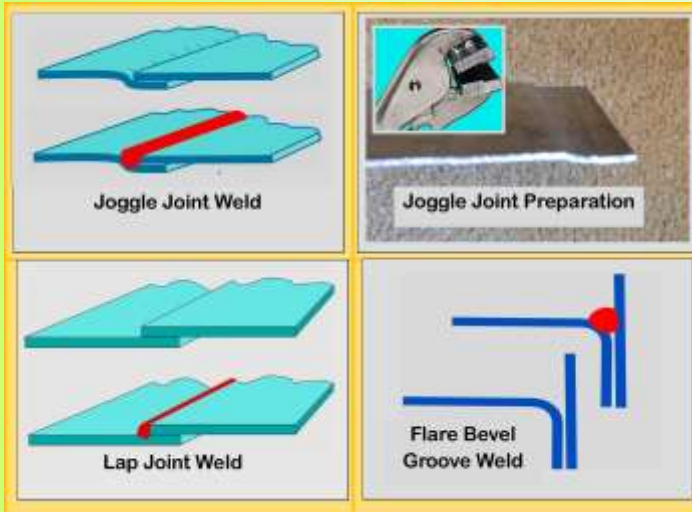


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Chapter 2: Joint Types:

5 PAGES, 8 PICTURES

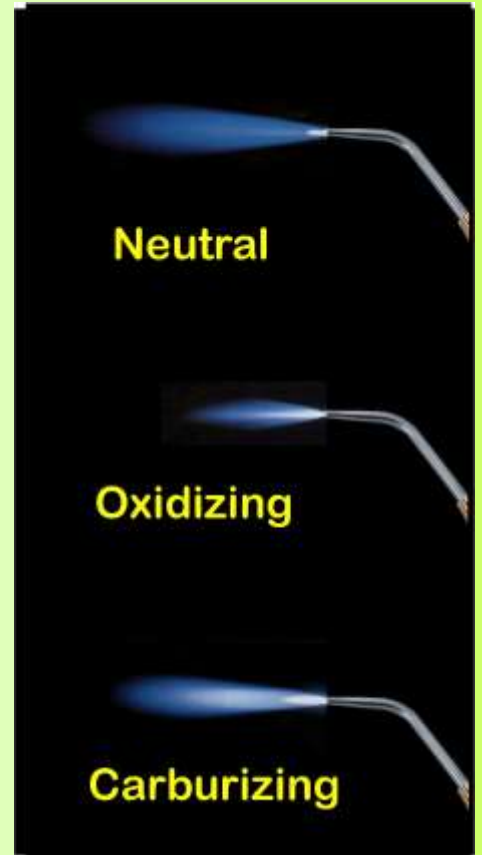
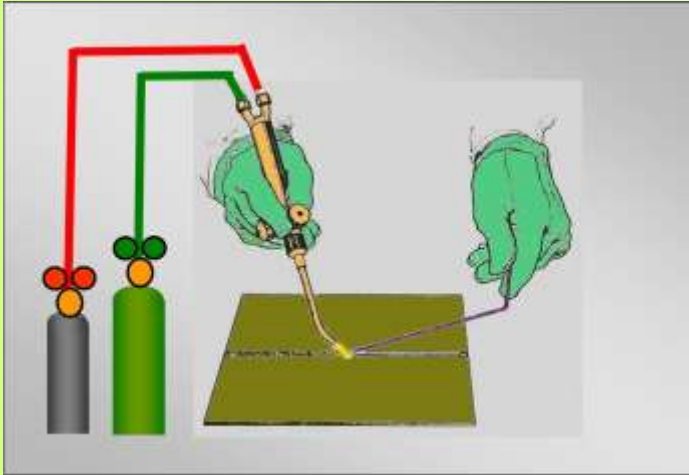


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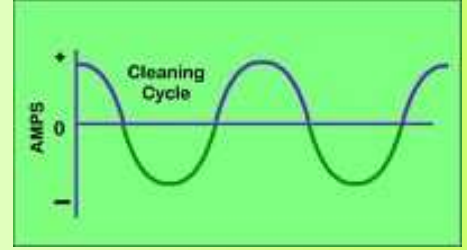
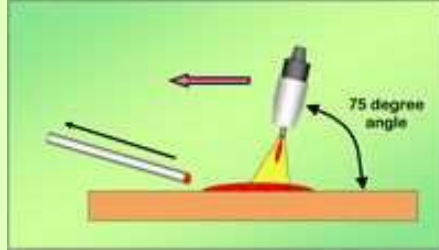
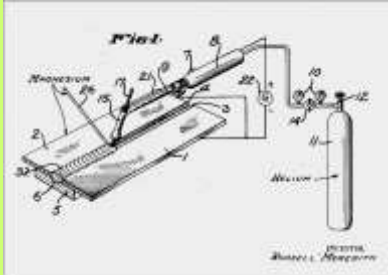
Chapter 3: Oxyacetylene Welding:

16 PAGES, 27 PICTURES



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Chapter 4: TIG Welding:
46 PAGES, 154 PICTURES

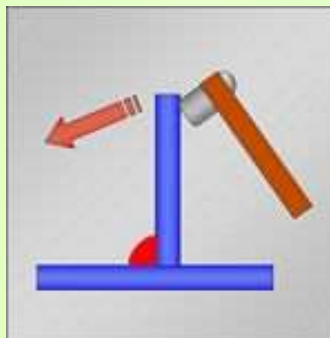
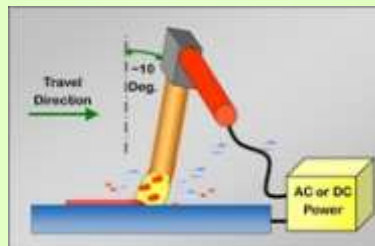
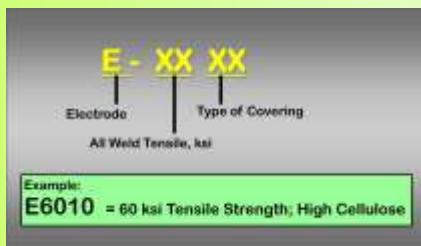


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Chapter 5: STICK Welding:

11 PAGES, 20 PICTURES

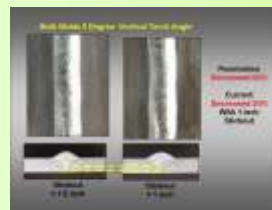
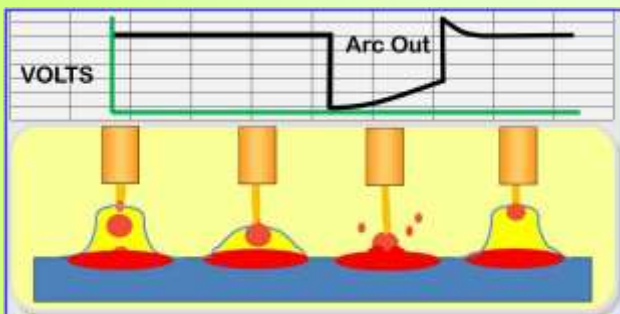
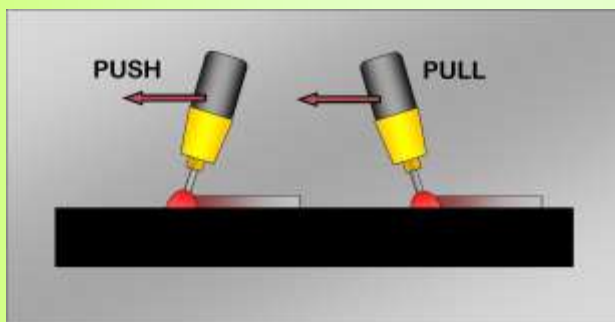


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Chapter 6: MIG Welding:

48 PAGES, 151 PICTURES



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Chapter 7: Thermal Cutting:
14 PAGES, 29 PICTURES

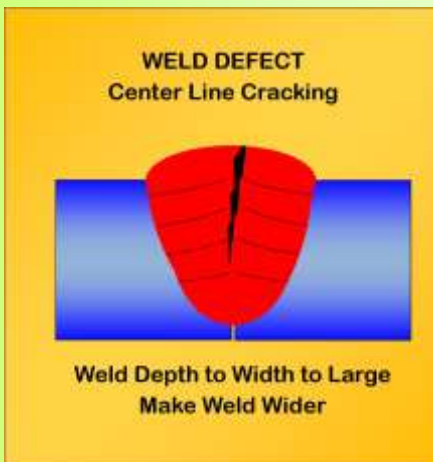
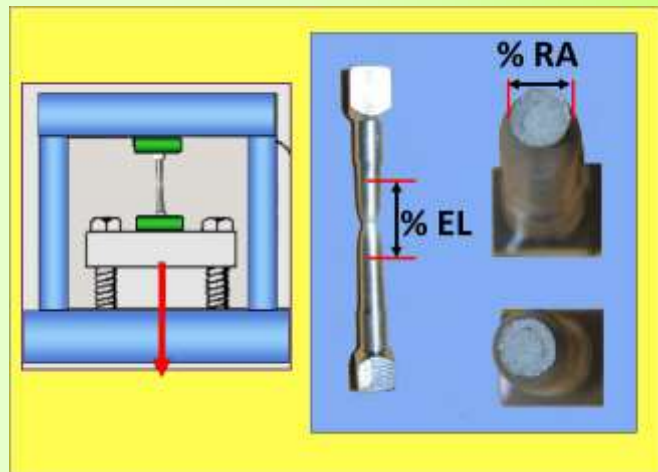
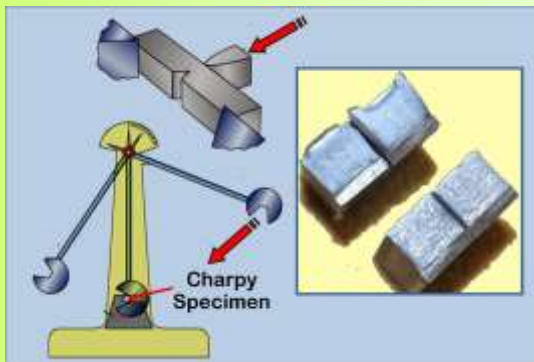
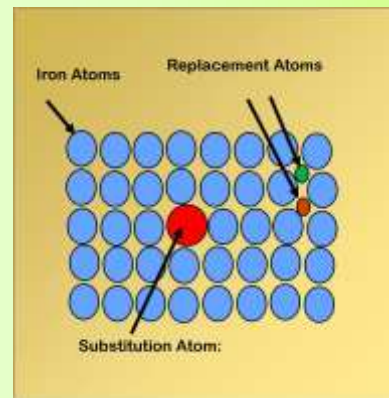
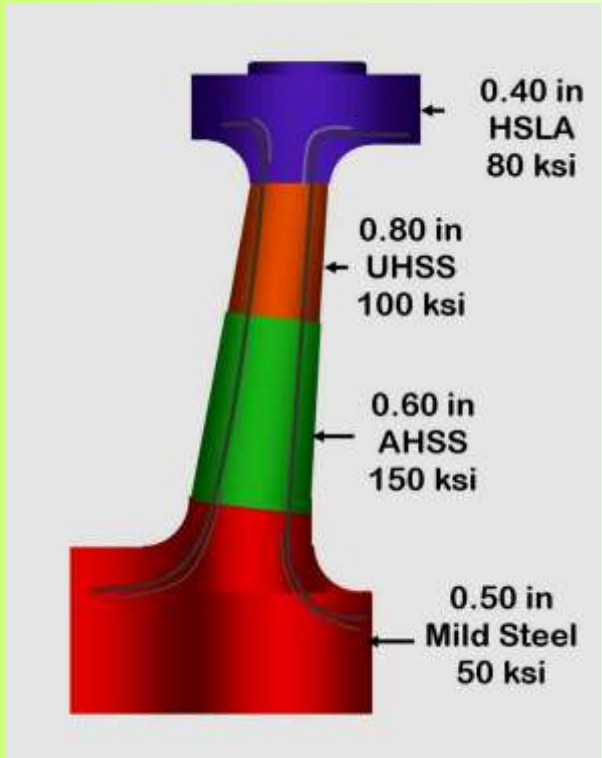


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Chapter 8: Advanced Materials & Metallurgical Processes:

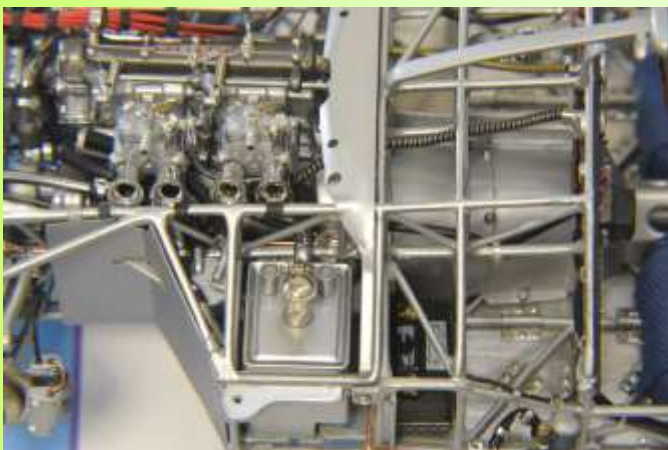
13 PAGES, 26 PICTURES



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Chapter The Future of (Hot Rod) Automobile Chassis & Glossary



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Advanced Automotive WELDING



Welding is an essential skill for the classic car restorer and enthusiast fabricator because almost all high-performance or collector cars need welding repair or restoration work. Welding automotive components, body parts, and other pieces requires specific equipment and specialized skills. With this book, you can make the transition from welding simple joint welding to welding J-, U-, and other complex joints. In addition, you will be able to weld aluminum, chrome-moly, stainless steel, carbon steel, titanium, and magnesium.

American Welding Society past president and welding expert, author Jerry Utrachi reveals all major welding processes and techniques, so you can weld to repair and fabricate with advanced materials. TIG, MIG, oxyacetylene, and stick welding techniques are illustrated for a wide range of automotive applications, so you can complete advanced chassis, body, and engine welding projects. MIG is by far the most popular welding process, and as such, MIG welding techniques, including spray arc, short arc, and pulsed arc, are shown and discussed in great detail. Using the techniques revealed in this book, you will be able to fabricate many body, structural, and functional automotive components.

Welding projects include constructing and installing a roll cage, welding subframe connectors on a chassis, repairing an aluminum frame, welding in a floor pan, and many others. Effectively cutting steel, aluminum, and other metals is also revealed. Oxyacetylene and plasma cutting techniques are explained so welders can make clean and precise cuts. No matter your skill level, this book will help you improve your skills and complete more advanced projects.



Gerald "Jerry" Utrachi has more than 40 years' experience in the welding field. He managed a welding materials R&D laboratory and was vice president of a major welding equipment manufacturer. He has served as the 2007 president of the American Welding Society. A passionate "hot rodder," he currently owns a 1934 Ford Pro Street Rod and a daily-driver 2008 Corvette. He and his wife live in Florence, South Carolina.

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ISBN 978-1-934709-96-2
Item SA235

Printed in China