



Engineering Design with SOLIDWORKS 2016 and Video Instruction

By David Planchard

[Download now](#)

[Read Online](#) 

Engineering Design with SOLIDWORKS 2016 and Video Instruction By David Planchard

Engineering Design with SOLIDWORKS 2016 and video instruction is written to assist students, designers, engineers and professionals. The book provides a solid foundation in SOLIDWORKS by utilizing projects with step-by-step instructions for the beginner to intermediate SOLIDWORKS user. Explore the user interface, CommandManager, menus, toolbars and modeling techniques to create parts, assemblies and drawings in an engineering environment.

Follow the step-by-step instructions and develop multiple parts and assemblies that combine machined, plastic and sheet metal components. Formulate the skills to create, modify and edit sketches and solid features.

Learn the techniques to reuse features, parts and assemblies through symmetry, patterns, copied components, Design Tables, Bills of Materials, Custom Properties and Configurations. Address various SOLIDWORKS analysis tools and Intelligent Modeling techniques along with Additive Manufacturing (3D printing). Learn by doing not just by reading.

Desired outcomes and usage competencies are listed for each project. Know your objective up front. Follow the steps in Projects 1 - 9 to achieve the design goals.

Review Project 10 on Additive Manufacturing (3D printing) and its benefits and features. Understand the terms and technology used in low cost 3D printers.

Work between multiple documents, features, commands and custom properties that represent how engineers and designers utilize SOLIDWORKS in industry.

Review individual features, commands and tools with the Video Instruction. The projects contain exercises. The exercises analyze and examine usage competencies. Collaborate with leading industry suppliers such as SMC Corporation of America, Boston Gear and 80/20 Inc.

Collaborative information translates into numerous formats such as paper drawings, electronic files, rendered images and animations. On-line intelligent catalogs guide designers to the product that meets both their geometric

requirements and performance functionality.

The author developed the industry scenarios by combining his own industry experience with the knowledge of engineers, department managers, vendors and manufacturers. These professionals are directly involved with SOLIDWORKS every day. Their responsibilities go far beyond the creation of just a 3D model.

The book is designed to compliment the SOLIDWORKS Tutorials contained in SOLIDWORKS 2016.

Table of Contents

Introduction

1. Overview of SOLIDWORKS and the User Interface
2. Fundamentals of Part Modeling
3. Fundamentals of Assembly Modeling
4. Fundamentals of Drawing
5. Extrude and Revolve Features
6. Swept, Lofted and Additional Features
7. Top Down Assembly Modeling and Sheet Metal Parts
8. SOLIDWORKS Simulation
9. Intelligent Modeling Techniques
10. Additive Manufacturing - 3D Printing

Appendix

Glossary

Index



[Download Engineering Design with SOLIDWORKS 2016 and Video ...pdf](#)



[Read Online Engineering Design with SOLIDWORKS 2016 and Video ...pdf](#)

Engineering Design with SOLIDWORKS 2016 and Video Instruction

By David Planchard

Engineering Design with SOLIDWORKS 2016 and Video Instruction By David Planchard

Engineering Design with SOLIDWORKS 2016 and video instruction is written to assist students, designers, engineers and professionals. The book provides a solid foundation in SOLIDWORKS by utilizing projects with step-by-step instructions for the beginner to intermediate SOLIDWORKS user. Explore the user interface, CommandManager, menus, toolbars and modeling techniques to create parts, assemblies and drawings in an engineering environment.

Follow the step-by-step instructions and develop multiple parts and assemblies that combine machined, plastic and sheet metal components. Formulate the skills to create, modify and edit sketches and solid features.

Learn the techniques to reuse features, parts and assemblies through symmetry, patterns, copied components, Design Tables, Bills of Materials, Custom Properties and Configurations. Address various SOLIDWORKS analysis tools and Intelligent Modeling techniques along with Additive Manufacturing (3D printing). Learn by doing not just by reading.

Desired outcomes and usage competencies are listed for each project. Know your objective up front. Follow the steps in Projects 1 - 9 to achieve the design goals.

Review Project 10 on Additive Manufacturing (3D printing) and its benefits and features. Understand the terms and technology used in low cost 3D printers.

Work between multiple documents, features, commands and custom properties that represent how engineers and designers utilize SOLIDWORKS in industry.

Review individual features, commands and tools with the Video Instruction. The projects contain exercises. The exercises analyze and examine usage competencies. Collaborate with leading industry suppliers such as SMC Corporation of America, Boston Gear and 80/20 Inc.

Collaborative information translates into numerous formats such as paper drawings, electronic files, rendered images and animations. On-line intelligent catalogs guide designers to the product that meets both their geometric requirements and performance functionality.

The author developed the industry scenarios by combining his own industry experience with the knowledge of engineers, department managers, vendors and manufacturers. These professionals are directly involved with SOLIDWORKS every day. Their responsibilities go far beyond the creation of just a 3D model.

The book is designed to compliment the SOLIDWORKS Tutorials contained in SOLIDWORKS 2016.

Table of Contents

Introduction

1. Overview of SOLIDWORKS and the User Interface
2. Fundamentals of Part Modeling
3. Fundamentals of Assembly Modeling
4. Fundamentals of Drawing
5. Extrude and Revolve Features
6. Swept, Lofted and Additional Features
7. Top Down Assembly Modeling and Sheet Metal Parts
8. SOLIDWORKS Simulation
9. Intelligent Modeling Techniques
10. Additive Manufacturing - 3D Printing

Appendix

Glossary

Index

Engineering Design with SOLIDWORKS 2016 and Video Instruction By David Planchard

Bibliography

- Sales Rank: #394664 in Books
- Published on: 2015-12-17
- Original language: English
- Dimensions: 10.75" h x 8.25" w x 1.50" l, 3.48 pounds
- Binding: Perfect Paperback
- 852 pages



[Download](#) Engineering Design with SOLIDWORKS 2016 and Video ...pdf



[Read Online](#) Engineering Design with SOLIDWORKS 2016 and Vide ...pdf

Download and Read Free Online Engineering Design with SOLIDWORKS 2016 and Video Instruction By David Planchard

Editorial Review

About the Author

David Planchard is the founder of D&M Education LLC. Before starting D&M Education, he spent over 27 years in industry and academia holding various engineering, marketing, and teaching positions. He holds five U.S. patents. He has published and authored numerous papers on Machine Design, Product Design, Mechanics of Materials, and Solid Modeling. He is an active member of the SOLIDWORKS Users Group and the American Society of Engineering Education (ASEE). David holds a BSME, MSM with the following professional certifications: CCAI, CCNP, CSDA, CSWSA-FEA, CSWP, CSWP-DRWT and SOLIDWORKS Accredited Educator. David is a SOLIDWORKS Solution Partner, an Adjunct Faculty member and the SAE advisor at Worcester Polytechnic Institute in the Mechanical Engineering department. In 2012, David's senior Major Qualifying Project team (senior capstone) won first place in the Mechanical Engineering department at WPI. In 2014 and 2015, David's senior Major Qualifying Project team won the Provost award in Mechanical Engineering for design excellence.

David Planchard is the author of the following books:

- SOLIDWORKS 2016 Reference Guide with Video Instruction, 2015, 2014, 2013, 2012, 2011, 2010, 2009 and 2008
- Engineering Design with SOLIDWORKS 2016 and Video Instruction, 2015, 2014, 2013, 2012, 2011, 2010, 2009, 2008, 2007, 2006, 2005, 2004, 2003, 2001Plus, 2001 and 1999
- Engineering Graphics with SOLIDWORKS 2016 and Video Instruction, 2015, 2014, 2013, 2012, 2011, 2010
- SOLIDWORKS 2016 in 5 Hours with Video Instruction, 2015, 2014
- SOLIDWORKS 2016 Tutorial with Video Instruction, 2015, 2014, 2013, 2012, 2011, 2010, 2009, 2008, 2007, 2006, 2005, 2004, 2003 and 2001/2001Plus
- Drawing and Detailing with SOLIDWORKS 2014, 2012, 2010, 2009, 2008, 2007, 2006, 2005, 2004, 2003, 2002 and 2001/2001Plus
- Official Certified SOLIDWORKS Professional (CSWP) Certification Guide with Video Instruction, Version 3: 2014-2012 Version 2, 2013-2012; Version 1, 2011, 2010
- Official Guide to Certified SOLIDWORKS Associate Exams: CSWA, CSDA, CSWSA-FEA Version 2: 2015 - 2012, Version 1: 2013, 2012
- Assembly Modeling with SOLIDWORKS 2012, 2010, 2008, 2006, 2005-2004, 2003 and 2001Plus
- Applications in Sheet Metal Using Pro/SHEETMETAL & Pro/ENGINEER

Users Review

From reader reviews:

Jonathan Scott:

Information is provisions for individuals to get better life, information presently can get by anyone from everywhere. The information can be a expertise or any news even a concern. What people must be consider whenever those information which is inside the former life are difficult to be find than now's taking seriously which one is acceptable to believe or which one often the resource are convinced. If you have the unstable resource then you buy it as your main information you will see huge disadvantage for you. All of those

possibilities will not happen within you if you take Engineering Design with SOLIDWORKS 2016 and Video Instruction as the daily resource information.

Leslie Martin:

A lot of people always spent their particular free time to vacation or go to the outside with them friends and family or their friend. Are you aware? Many a lot of people spent many people free time just watching TV, or even playing video games all day long. In order to try to find a new activity here is look different you can read any book. It is really fun for you personally. If you enjoy the book you read you can spent all day every day to reading a reserve. The book Engineering Design with SOLIDWORKS 2016 and Video Instruction it is extremely good to read. There are a lot of people that recommended this book. These people were enjoying reading this book. When you did not have enough space to deliver this book you can buy the particular e-book. You can m0ore very easily to read this book from your smart phone. The price is not to cover but this book features high quality.

Virginia Comer:

Your reading sixth sense will not betray an individual, why because this Engineering Design with SOLIDWORKS 2016 and Video Instruction guide written by well-known writer who knows well how to make book which can be understand by anyone who read the book. Written with good manner for you, dripping every ideas and composing skill only for eliminate your personal hunger then you still skepticism Engineering Design with SOLIDWORKS 2016 and Video Instruction as good book not just by the cover but also with the content. This is one e-book that can break don't assess book by its handle, so do you still needing yet another sixth sense to pick this!? Oh come on your examining sixth sense already alerted you so why you have to listening to yet another sixth sense.

George Hyler:

Is it an individual who having spare time and then spend it whole day through watching television programs or just resting on the bed? Do you need something totally new? This Engineering Design with SOLIDWORKS 2016 and Video Instruction can be the respond to, oh how comes? A book you know. You are so out of date, spending your spare time by reading in this brand-new era is common not a geek activity. So what these books have than the others?

**Download and Read Online Engineering Design with
SOLIDWORKS 2016 and Video Instruction By David Planchard
#BPC7M1Q2GR0**

Read Engineering Design with SOLIDWORKS 2016 and Video Instruction By David Planchard for online ebook

Engineering Design with SOLIDWORKS 2016 and Video Instruction By David Planchard Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Engineering Design with SOLIDWORKS 2016 and Video Instruction By David Planchard books to read online.

Online Engineering Design with SOLIDWORKS 2016 and Video Instruction By David Planchard ebook PDF download

Engineering Design with SOLIDWORKS 2016 and Video Instruction By David Planchard Doc

Engineering Design with SOLIDWORKS 2016 and Video Instruction By David Planchard Mobipocket

Engineering Design with SOLIDWORKS 2016 and Video Instruction By David Planchard EPub

BPC7M1Q2GR0: Engineering Design with SOLIDWORKS 2016 and Video Instruction By David Planchard