

# Engineering Design with SolidWorks 2014 and Video Instruction

*By David C. Planchard*

Download now

Read Online ➔

**Engineering Design with SolidWorks 2014 and Video Instruction** By David C. Planchard

Engineering Design with SolidWorks 2014 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: SimulationXpress, Sustainability/SustainabilityXpress and DFMXpress and Intelligent Modeling techniques. 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 Project 1 - 8 to achieve the design goals. 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 design to compliment the SolidWorks Tutorials contained in SolidWorks 2014.


## **Table of Contents**

### Introduction

1. Fundamentals of Part Modeling
2. Fundamentals of Assembly Modeling
3. Fundamentals of Drawing
4. Extrude and Revolve Features
5. Swept, Lofted and Additional Features
6. Top Down Assembly Modeling and Sheet Metal
7. SimulationXpress, Sustainability and DFMXpress
8. Intelligent Modeling Techniques

### Appendix

### Index

 [Download Engineering Design with SolidWorks 2014 and Video ...pdf](#)

 [Read Online Engineering Design with SolidWorks 2014 and Vide ...pdf](#)

# Engineering Design with SolidWorks 2014 and Video Instruction

*By David C. Planchard*

**Engineering Design with SolidWorks 2014 and Video Instruction** By David C. Planchard

Engineering Design with SolidWorks 2014 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: SimulationXpress, Sustainability/SustainabilityXpress and DFMXpress and Intelligent Modeling techniques. 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 Project 1 - 8 to achieve the design goals. 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 design to compliment the SolidWorks Tutorials contained in SolidWorks 2014.

## **Table of Contents**

### Introduction

1. Fundamentals of Part Modeling
2. Fundamentals of Assembly Modeling
3. Fundamentals of Drawing
4. Extrude and Revolve Features
5. Swept, Lofted and Additional Features

6. Top Down Assembly Modeling and Sheet Metal
7. SimulationXpress, Sustainability and DFMXpress
8. Intelligent Modeling Techniques

Appendix

Index

### **Engineering Design with SolidWorks 2014 and Video Instruction By David C. Planchard Bibliography**

- Sales Rank: #643089 in Books
- Published on: 2014-01-27
- Original language: English
- Number of items: 1
- Dimensions: 10.75" h x 8.25" w x 1.25" l, 3.33 pounds
- Binding: Paperback
- 776 pages

 [Download Engineering Design with SolidWorks 2014 and Video ...pdf](#)

 [Read Online Engineering Design with SolidWorks 2014 and Vide ...pdf](#)

## **Editorial Review**

### **From the Author**

Classroom support materials for this book (presentations, projects, avi files, labs, quizzes, and initial and final SolidWorks model files) are available to instructors.

### **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 and degrees. 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.

David Planchard is the author of the following books:

- A Commands Guide for SolidWorks® 2013, 2012, 2011, 2010, 2009 and 2008
- Assembly Modeling with SolidWorks® 2012, 2010, 2008, 2006, 2005-2004, 2003 and 2001Plus
- Drawing and Detailing with SolidWorks® 2014, 2012, 2010, 2009, 2008, 2007, 2006, 2005, 2004, 2003, 2002 and 2001/2001Plus
- Engineering Design with SolidWorks® and Video Instruction 2014, 2013, 2012, 2011, 2010, 2009, 2008, 2007, 2006, 2005, 2004, 2003, 2001Plus, 2001 and 1999
- Engineering Graphics with SolidWorks® and Video Instruction 2014, 2013, 2012, 2011, 2010
- SolidWorks® The Basics with Multimedia CD 2009, 2008, 2007, 2006, 2005, 2004 and 2003
- SolidWorks® Tutorial with Video Instruction 2014, 2013, 2012, 2011, 2010, 2009, 2008, 2007, 2006, 2005, 2004, 2003 and 2001/2001Plus
- The Fundamentals of SolidWorks®: Featuring the VEXplorer robot, 2008 and 2007
- Official Certified SolidWorks® Associate Examination Guide, Version 4: 2012, 2011, 2010, Version 3: 2011, 2010, 2009, Version 2: 2010, 2009, 2008, Version 1: 2007
- Official Certified SolidWorks® Professional (CSWP) Certification Guide with Video Instruction, Version 2: 2013, 2012, Version 1: 2011, 2010
- Official Guide to Certified SolidWorks Associate Exams: CSWA, CSDA, and CSWSA-FEA, Version 1: 2013, 2012
- Applications in Sheet Metal Using Pro/SHEETMETAL & Pro/ENGINEER

## **Users Review**

### **From reader reviews:**

#### **Jack Baldwin:**

Can you one of the book lovers? If yes, do you ever feeling doubt when you find yourself in the book store? Aim to pick one book that you just dont know the inside because don't determine book by its deal with may

doesn't work the following is difficult job because you are frightened that the inside maybe not as fantastic as in the outside appearance likes. Maybe you answer can be Engineering Design with SolidWorks 2014 and Video Instruction why because the fantastic cover that make you consider about the content will not disappoint an individual. The inside or content is usually fantastic as the outside as well as cover. Your reading 6th sense will directly assist you to pick up this book.

**William Watts:**

Beside this Engineering Design with SolidWorks 2014 and Video Instruction in your phone, it might give you a way to get nearer to the new knowledge or information. The information and the knowledge you are going to get here is fresh from your oven so don't be worry if you feel like an older people live in narrow commune. It is good thing to have Engineering Design with SolidWorks 2014 and Video Instruction because this book offers to your account readable information. Do you occasionally have book but you rarely get what it's exactly about. Oh come on, that will not happen if you have this in your hand. The Enjoyable agreement here cannot be questionable, such as treasuring beautiful island. Techniques you still want to miss this? Find this book and read it from now!

**Martha Dixon:**

You will get this Engineering Design with SolidWorks 2014 and Video Instruction by browse the bookstore or Mall. Just viewing or reviewing it might to be your solve challenge if you get difficulties for ones knowledge. Kinds of this book are various. Not only by written or printed but in addition can you enjoy this book through e-book. In the modern era such as now, you just looking from your mobile phone and searching what their problem. Right now, choose your own personal ways to get more information about your e-book. It is most important to arrange yourself to make your knowledge are still revise. Let's try to choose suitable ways for you.

**Brandon Seymour:**

As a university student exactly feel bored to help reading. If their teacher questioned them to go to the library in order to make summary for some reserve, they are complained. Just small students that has reading's soul or real their hobby. They just do what the instructor want, like asked to the library. They go to there but nothing reading critically. Any students feel that examining is not important, boring and can't see colorful photos on there. Yeah, it is for being complicated. Book is very important for you personally. As we know that on this period of time, many ways to get whatever we would like. Likewise word says, many ways to reach Chinese's country. Therefore this Engineering Design with SolidWorks 2014 and Video Instruction can make you feel more interested to read.

**Download and Read Online Engineering Design with SolidWorks 2014 and Video Instruction By David C. Planchard**

**#QREHAUZPV57**

# **Read Engineering Design with SolidWorks 2014 and Video Instruction By David C. Planchard for online ebook**

Engineering Design with SolidWorks 2014 and Video Instruction By David C. 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 2014 and Video Instruction By David C. Planchard books to read online.

## **Online Engineering Design with SolidWorks 2014 and Video Instruction By David C. Planchard ebook PDF download**

### **Engineering Design with SolidWorks 2014 and Video Instruction By David C. Planchard Doc**

Engineering Design with SolidWorks 2014 and Video Instruction By David C. Planchard Mobipocket

Engineering Design with SolidWorks 2014 and Video Instruction By David C. Planchard EPub

QREHAUZPV57: Engineering Design with SolidWorks 2014 and Video Instruction By David C. Planchard