



Engineering Graphics with SolidWorks 2015 and Video Instruction

By David C. Planchard



Engineering Graphics with SolidWorks 2015 and Video Instruction By David C. Planchard

Engineering Graphics with SolidWorks 2015 and video instruction is written to assist technical school, two year college, four year university instructor/student or industry professional that is a beginner or intermediate SolidWorks user. The book combines the fundamentals of engineering graphics and dimensioning practices with a step-by-step project based approach to learning SolidWorks with video instructions. Learn by doing, not just by reading.

The book is divided into two parts: Engineering Graphics and SolidWorks 3D CAD software. In Chapter 1 through Chapter 3, you explore the history of engineering graphics, manual sketching techniques, orthographic projection, Third vs. First angle projection, multi-view drawings, dimensioning practices (ASME Y14.5-2009 standard), line type, fit type, tolerance, fasteners in general, general thread notes and the history of CAD leading to the development of SolidWorks.

In Chapter 4 through Chapter 8, you apply engineering graphics fundamentals and learn the SolidWorks User Interface, Document and System properties, simple parts, simple and complex assemblies, design tables, configurations, multi-sheet, multi-view drawings, Bill of Materials, Revision tables, basic and advanced features. Follow the step-by-step instructions in over 80 activities to develop eight parts, four sub-assemblies, three drawings, and six document templates. Formulate the skills to create and modify solid features to model a FLASHLIGHT assembly.

Chapter 9 provides a bonus section on the Certified Associate - Mechanical Design (CSWA) program with sample exam questions and initial and final SolidWorks models. Passing the CSWA exam proves to employers that you have the necessary fundamental engineering graphics and SolidWorks competencies.

Review individual features, commands, and tools for each project using the video instruction and SolidWorks Help. The chapter exercises analyze and examine usage competencies based on the project objectives. The book is designed to complement the SolidWorks Tutorials located in the SolidWorks Help menu.

Desired outcomes and usage competencies are listed for each project. Know your objectives up front. Follow the step-by step procedures to achieve your design goals. Work between multiple documents, features, commands, and properties that represent how engineers and designers utilize SolidWorks in industry. The author developed the industry scenarios by combining his own industry experience with the knowledge of engineers, department managers, vendors, and manufacturers.

Table of Contents

- Introduction
- 1. History of Engineering Graphics
- 2. Isometric Projection and Multi View Drawings
- 3. Dimensioning Practices, Scales, Tolerancing and Fasteners
- 4. Introduction to SolidWorks Part Modeling
- 5. Revolved Features
- 6. Swept, Lofted, and Additional Features
- 7. Assembly Modeling
- 8. Fundamentals of Drawing
- 9. Introduction to the Certified SolidWorks Associate Exam
- Appendix
- Index

 [Download Engineering Graphics with SolidWorks 2015 and Vide ...pdf](#)

 [Read Online Engineering Graphics with SolidWorks 2015 and Vi ...pdf](#)

Engineering Graphics with SolidWorks 2015 and Video Instruction

By David C. Planchard

Engineering Graphics with SolidWorks 2015 and Video Instruction By David C. Planchard

Engineering Graphics with SolidWorks 2015 and video instruction is written to assist technical school, two year college, four year university instructor/student or industry professional that is a beginner or intermediate SolidWorks user. The book combines the fundamentals of engineering graphics and dimensioning practices with a step-by-step project based approach to learning SolidWorks with video instructions. Learn by doing, not just by reading.

The book is divided into two parts: Engineering Graphics and SolidWorks 3D CAD software. In Chapter 1 through Chapter 3, you explore the history of engineering graphics, manual sketching techniques, orthographic projection, Third vs. First angle projection, multi-view drawings, dimensioning practices (ASME Y14.5-2009 standard), line type, fit type, tolerance, fasteners in general, general thread notes and the history of CAD leading to the development of SolidWorks.

In Chapter 4 through Chapter 8, you apply engineering graphics fundamentals and learn the SolidWorks User Interface, Document and System properties, simple parts, simple and complex assemblies, design tables, configurations, multi-sheet, multi-view drawings, Bill of Materials, Revision tables, basic and advanced features. Follow the step-by-step instructions in over 80 activities to develop eight parts, four sub-assemblies, three drawings, and six document templates. Formulate the skills to create and modify solid features to model a FLASHLIGHT assembly.

Chapter 9 provides a bonus section on the Certified Associate - Mechanical Design (CSWA) program with sample exam questions and initial and final SolidWorks models. Passing the CSWA exam proves to employers that you have the necessary fundamental engineering graphics and SolidWorks competencies.

Review individual features, commands, and tools for each project using the video instruction and SolidWorks Help. The chapter exercises analyze and examine usage competencies based on the project objectives. The book is designed to complement the SolidWorks Tutorials located in the SolidWorks Help menu.

Desired outcomes and usage competencies are listed for each project. Know your objectives up front. Follow the step-by-step procedures to achieve your design goals. Work between multiple documents, features, commands, and properties that represent how engineers and designers utilize SolidWorks in industry. The author developed the industry scenarios by combining his own industry experience with the knowledge of engineers, department managers, vendors, and manufacturers.

Table of Contents

Introduction

1. History of Engineering Graphics
2. Isometric Projection and Multi View Drawings
3. Dimensioning Practices, Scales, Tolerancing and Fasteners
4. Introduction to SolidWorks Part Modeling

- 5. Revolved Features
- 6. Swept, Lofted, and Additional Features
- 7. Assembly Modeling
- 8. Fundamentals of Drawing
- 9. Introduction to the Certified SolidWorks Associate Exam

Appendix

Index

Engineering Graphics with SolidWorks 2015 and Video Instruction By David C. Planchard

Bibliography

- Sales Rank: #972529 in Books
- Published on: 2015-01-15
- Original language: English
- Number of items: 1
- Dimensions: 10.75" h x 8.25" w x 1.00" l,
- Binding: Perfect Paperback
- 550 pages



[Download](#) Engineering Graphics with SolidWorks 2015 and Vide ...pdf



[Read Online](#) Engineering Graphics with SolidWorks 2015 and Vi ...pdf

Download and Read Free Online Engineering Graphics with SolidWorks 2015 and Video Instruction By David C. 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 2014, David's senior Major Qualifying Project team won the Provost award in Mechanical Engineering at WPI for design excellence.

David Planchard is the author of the following books:

- SolidWorks® 2015 Reference Guide, 2014, 2013, 2012, 2011, 2010, 2009 and 2008
- 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 2015, 2014, 2013, 2012, 2011, 2010, 2009, 2008, 2007, 2006, 2005, 2004, 2003, 2001Plus, 2001 and 1999
- Engineering Graphics with SolidWorks® and Video Instruction 2015, 2014, 2013, 2012, 2011, 2010
- SolidWorks® 2015 in 5 Hours with Video Instruction, 2014
- SolidWorks® Tutorial with Video Instruction 2015, 2014, 2013, 2012, 2011, 2010, 2009, 2008, 2007, 2006, 2005, 2004, 2003 and 2001/2001Plus
- 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 3: 2014 -2012, Version 2: 2013, 2012, Version 1: 2011, 2010
- Official Guide to Certified SolidWorks Associate Exams: CSWA, CSDA, and 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:

Teresa Jones:

Book will be written, printed, or created for everything. You can recognize everything you want by a guide. Book has a different type. We all know that that book is important point to bring us around the world. Close to that you can your reading expertise was fluently. A reserve Engineering Graphics with SolidWorks 2015 and Video Instruction will make you to be smarter. You can feel a lot more confidence if you can know about every little thing. But some of you think that will open or reading some sort of book make you bored.

It is not necessarily make you fun. Why they might be thought like that? Have you looking for best book or acceptable book with you?

Jerome Chisolm:

Reading can called thoughts hangout, why? Because if you are reading a book specifically book entitled Engineering Graphics with SolidWorks 2015 and Video Instruction your mind will drift away trough every dimension, wandering in every aspect that maybe not known for but surely will end up your mind friends. Imaging each and every word written in a reserve then become one contact form conclusion and explanation this maybe you never get ahead of. The Engineering Graphics with SolidWorks 2015 and Video Instruction giving you yet another experience more than blown away your head but also giving you useful facts for your better life on this era. So now let us demonstrate the relaxing pattern this is your body and mind will be pleased when you are finished looking at it, like winning a casino game. Do you want to try this extraordinary paying spare time activity?

Juan Crowe:

Do you have something that that suits you such as book? The e-book lovers usually prefer to select book like comic, short story and the biggest you are novel. Now, why not trying Engineering Graphics with SolidWorks 2015 and Video Instruction that give your entertainment preference will be satisfied by means of reading this book. Reading practice all over the world can be said as the opportunity for people to know world considerably better then how they react to the world. It can't be said constantly that reading addiction only for the geeky person but for all of you who wants to always be success person. So , for all of you who want to start reading as your good habit, you could pick Engineering Graphics with SolidWorks 2015 and Video Instruction become your starter.

Jean Cunningham:

A number of people said that they feel weary when they reading a guide. They are directly felt it when they get a half areas of the book. You can choose the book Engineering Graphics with SolidWorks 2015 and Video Instruction to make your reading is interesting. Your own skill of reading skill is developing when you including reading. Try to choose very simple book to make you enjoy to study it and mingle the sensation about book and studying especially. It is to be very first opinion for you to like to open up a book and examine it. Beside that the reserve Engineering Graphics with SolidWorks 2015 and Video Instruction can to be your friend when you're truly feel alone and confuse with the information must you're doing of these time.

**Download and Read Online Engineering Graphics with SolidWorks 2015 and Video Instruction By David C. Planchard
#9BD2OX0UCA3**

Read Engineering Graphics with SolidWorks 2015 and Video Instruction By David C. Planchard for online ebook

Engineering Graphics with SolidWorks 2015 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 Graphics with SolidWorks 2015 and Video Instruction By David C. Planchard books to read online.

Online Engineering Graphics with SolidWorks 2015 and Video Instruction By David C. Planchard ebook PDF download

Engineering Graphics with SolidWorks 2015 and Video Instruction By David C. Planchard Doc

Engineering Graphics with SolidWorks 2015 and Video Instruction By David C. Planchard MobiPocket

Engineering Graphics with SolidWorks 2015 and Video Instruction By David C. Planchard EPub

9BD2OX0UCA3: Engineering Graphics with SolidWorks 2015 and Video Instruction By David C. Planchard