

## Sheet Metal Solidworks

This book is intended to help new users learn the basic concepts of SOLIDWORKS and good solid modeling techniques in an easy to follow guide that includes video instruction. It is a great starting point for those new to SOLIDWORKS or as a teaching aid in classroom training to become familiar with the software's interface, basic commands and strategies as users complete a series of models while learning different ways to accomplish a particular task. At the end of this book, you will have a fairly good understanding of the SOLIDWORKS interface and the most commonly used commands for part modeling, assembly and detailing after completing a series of components and their 2D drawings complete with Bill of Materials. The book focuses on the processes to complete the modeling of a part, instead of focusing on individual software commands or operations, which are generally simple enough to learn. Throughout this book the author introduces you to new commands that are required to pass the Certified SOLIDWORKS Associate exam, as listed on the SOLIDWORKS website. A dedicated chapter provides you with details about the exam, as well as a practice test to help you prepare for the actual exam. SOLIDWORKS is an easy to use CAD software that includes many time saving tools that will enable new and experienced users to complete design tasks faster than before. Most commands covered in this book have advanced options, which may not be covered in this book. This is meant to be a starting point to help new users to learn the basic and most frequently used commands.

This book starts with SolidWorks 2020 using step-by-step examples. It begins with creating sketches and parts, assembling them, and then creating print ready drawings. This book gives you an idea about how you can design and document various mechanical components, and helps you to learn some advanced tools and techniques. This book also follows some of the best practices in creating parts. In addition to this, there are some additional chapters covering sheet metal and surface design. Each topic in this book has a brief introduction and a step-by-step example. This will help you to learn Creo Parametric 4.0 quickly and easily. - Go through with the User Interface - A step-by-step practice to create sketches and 3D models - Teach you about advance Part Modeling tools - Learn the procedure to create Multiple-body parts - Learn to modify components at each step - Learn to create assemblies - Learn Top-down assembly design - Learn to create 2D drawings

SOLIDWORKS 2021 Advanced Techniques picks up where SOLIDWORKS 2021 Intermediate Skills leaves off. Its aim is to take you from an intermediate user with a basic understanding of SOLIDWORKS and modeling techniques to an advanced user capable of creating complex models and able to use the advanced tools provided by SOLIDWORKS. The text covers parts, surfaces, SimulationXpress, sheet metal, top-down assemblies and core and cavity molds. Every lesson and exercise in this book was created based on real world projects. Each of these projects has been broken down and developed into easy and comprehensible steps. Furthermore, at the end of every chapter there are self test questionnaires to ensure that you have gained sufficient knowledge from each section before moving on to more advanced lessons. This book takes the approach that in order to understand SOLIDWORKS, inside and out, you should create everything from the beginning and take it step by step. Who this book is for This book is for the intermediate to advanced user who has already completed the SOLIDWORKS Basic Tools book and may have also completed the SOLIDWORKS Intermediate Skills book. People who are very familiar with SOLIDWORKS and its add ins will also find this book to be a valuable resource.

SOLIDWORKS Exercises - Learn by Practicing (3rd Edition) book is designed to help engineers and designers interested in learning

SOLIDWORKS by practicing 100 real-world mechanical models. This book does not simply provide step-by-step instructions to design 3D models, instead it is a practice book that challenges users to first analyze the drawings and then create the models using the powerful toolset of SOLIDWORKS. This approach helps users to enhance their design skills and take it to the next level. You can also access the video instruction for creating each exercise of the book. This book is written with a wide range of SOLIDWORKS users in mind, varying from beginners to advanced users. In addition to SOLIDWORKS, each exercise of this book can also be designed on any other CAD software such as CATIA, Creo Parametric, NX, Autodesk Inventor, and Solid Edge. NOTE: The exercises/models available for download are created in SOLIDWORKS 2021 and cannot be opened in the lower version of SOLIDWORKS.

This book provides the reader with a comprehensive knowledge of all the tools provided in the software SOLIDWORKS for a variety of engineering areas. It presents a broad choice of examples to be imitated in one's own work. In developing these examples, the authors' intent has been to exercise many program features and refinements. By displaying these, the authors hope to give readers the confidence to employ these program enhancements in their own modeling applications.

The CSWPA is a set of exams designed to demonstrate your advanced abilities in five distinct areas of SOLIDWORKS. By passing the CSWPA exams you prove to potential employers that you have an advanced skill set within SOLIDWORKS, and you become more desirable in the job market. Certified SOLIDWORKS Professional Advanced Preparation Material is intended for the SOLIDWORKS user who has already passed the CSWP exam, and is ready to advance to the next level. This book covers the five CSWPA examinations: Sheet Metal, Weldments, Surfacing, Mold Tools, and Drawing Tools. The lessons in this book were created based on the actual CSWPA examinations. Each of these projects has been broken down and developed into easy and comprehensible steps for the reader. Every challenge is explained very clearly in short chapters, ranging from 30 to 50 pages. Each step comes with a screen shot to help you understand the main concept of each design more easily. Learn the CSWP Advanced Preparation Materials at your own pace, as you progress from Parts, Assemblies, Drawings and then to more complex design challenges. To get the most out of this CSWPA-Certification Preparation book it is strongly recommended that you have studied and completed all the lessons in the Basic Tools, Intermediate Skills and Advanced Techniques books. It is also a great resource for the more CAD literate individuals who want to expand their knowledge of the different features that SOLIDWORKS 2021 has to offer. This book is a great resource to prepare for and pass the CSWPA exams which will prove your expertise and further your career. After completing at least four of the five CSWPA exams you will become eligible to try for the highest level SOLIDWORKS certification, the Certified SOLIDWORKS Expert. Table of Contents 1. Drawing Tools 2. Mold Tools 3. Weldments 4. Sheet Metal 5. Surfacing Glossary Index SOLIDWORKS Quick-Guide

Provides an introduction to SolidWorks 2010 through step-by-step tutorials that cover such topics as linkage assembly, front support assembly, the fundamentals of drawing, and pneumatic test module assembly.

This book starts with SolidWorks 2021 using step-by-step examples. It begins with creating sketches and parts, assembling them, and then creating print ready drawings. This book gives you an idea about how you can design and document various mechanical components, and helps you to learn some advanced tools and techniques. This book also follows some of the best practices in creating parts. In addition to this, there are some additional chapters covering sheet metal and surface design. Each topic in this book has a brief introduction and a step-by-step example. This will help you to learn SolidWorks 2018 quickly and easily. \* Go through with the User Interface \* A step-by-step practice to create sketches and 3D models \* Teach you about advance Part Modeling tools \* Learn the procedure to create Multiple-body

parts \* Learn to modify components at each step \* Learn to create assemblies \* Learn Top-down assembly design \* Learn to create 2D drawings \* Learn basic tools available in Sheet Metal and Surface Environment \* Create sheet metal drawings \* Create complex shapes using surface modeling tools You can download Resource Files from : [www.cadfolks.com](http://www.cadfolks.com) (Available very soon)

SOLIDWORKS 2021: A Power Guide for Beginners and Intermediate Users textbook has been designed for instructor-led courses as well as self-paced learning. It is intended to help engineers and designers interested in learning SOLIDWORKS for creating 3D mechanical design. This textbook is a great help for new SOLIDWORKS users and a great teaching aid in classroom training. This textbook consists of 14 chapters, with a total of 798 pages covering the major environments of SOLIDWORKS such as Sketching environment, Part modeling environment, Assembly environment, and Drawing environment. This textbook teaches users to use SOLIDWORKS mechanical design software for creating parametric 3D solid components, assemblies, and 2D drawings. This textbook also includes a chapter on creating multiple configurations of a design. This textbook not only focuses on the usage of the tools and commands of SOLIDWORKS but also on the concept of design. Every chapter in this textbook contains tutorials that provide users with step-by-step instructions for creating mechanical designs and drawings with ease. Moreover, every chapter ends with hands-on test drives which allow users to experience the user friendly and technical capabilities of SOLIDWORKS.

SOLIDWORKS 2017: A Power Guide for Beginners and Intermediate User textbook is designed for instructor-led courses as well as for self-paced learning. It is intended to help engineers and designers interested in learning SOLIDWORKS for creating 3D mechanical design. Taken together, this textbook can be a great starting point for new SOLIDWORKS users and a great teaching aid in classroom training. This textbook consists of 14 chapters, total 768 pages covering major environments of SOLIDWORKS: Sketching environment, Part modeling environment, Assembly environment, and Drawing environment, which teach you how to use the SOLIDWORKS mechanical design software to build parametric models and assemblies, and how to make drawings of those parts and assemblies. Moreover, this textbook includes the topic of Configurations. This textbook not only focuses on the usages of the tools/commands of SOLIDWORKS but also on the concept of design. Every chapter of this textbook contains tutorials which instruct users how things can be done in SOLIDWORKS step by step. Moreover, every chapter ends with hands-on test drives which allow users to experience themselves the ease-of-use and powerful capabilities of SOLIDWORKS. Table of Contents: Chapter 1. Introduction to SOLIDWORKS Chapter 2. Drawing Sketches with SOLIDWORKS Chapter 3. Editing and Modifying Sketches Chapter 4. Applying Geometric Relations and Dimensions Chapter 5. Creating First/Base Feature of Solid Models Chapter 6. Creating Reference Geometries Chapter 7. Advanced Modeling - I Chapter 8. Advanced Modeling - II Chapter 9. Patterning and Mirroring Chapter 10. Advanced Modeling - III Chapter 11. Working with Configurations Chapter 12. Working with Assemblies - I Chapter 13. Working with Assemblies - II Chapter 14. Working with Drawings Main Features of the Textbook Comprehensive coverage of tools Step-by-step real-world tutorials with every chapter Hands-on test drives to enhance the skills at the end of every chapter Additional notes and tips Customized content for faculty (PowerPoint Presentations) Free learning resources for faculty and students Additional student and faculty projects Technical support for the book: [info@cadartifex.com](mailto:info@cadartifex.com)

SOLIDWORKS 2020 Learn by doing introduces new users to mechanical design using SOLIDWORKS and how it can be used to create a variety of models. In fourteen tutorial based chapters, the author guides you through all the necessary commands and options in SOLIDWORKS 2019, from sketching to parametric modeling and finally ending with rendering. The commands are presented one step at a time using simple examples. The approach used in this book helps you to become a skilled SOLIDWORKS user. SOLIDWORKS 2020 Learn by doing begins with introduction to basic modeling. The later chapters focus on additional modeling, top-down assemblies, sheet metal modeling, drafting, surface modeling, mold tools, weldments, Model-based dimensioning, Appearances, and SimulationXpress. Table of Contents 1. Getting Started 2. Modeling Basics 3. Assembly Basics 4. Creating Drawings 5. Sketching 6. Additional Modeling Tools 7. Sheet metal Modeling 8. Top-Down Assembly 9. Dimensions and Annotations 10. Surface Design 11. Mold Tools 12. Weldments 13. MBD Dimensions 14. Appearances and Rendering 15. SimulationXpress

SOLIDWORKS Sheet Metal Design 2021 CAD Artifex

Engineering Design with SolidWorks 2011 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 beginning 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 enclosed Multimedia CD. 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 authors developed the industry scenarios by combining their own industry experience with the knowledge of engineers, department managers, vendors and manufacturers. These professionals are directly involved with SolidWorks everyday. Their responsibilities go far beyond the creation of just a 3D model. The book is designed to compliment the SolidWorks Tutorials contained in SolidWorks 2011.

SOLIDWORKS 2016: A Power Guide for Beginners and Intermediate Users textbook is designed for instructor-led courses as well as for self-paced learning. This textbook is intended to help engineers and designers who are interested in learning

SOLIDWORKS for creating 3D mechanical designs. It will be a great starting point for new SOLIDWORKS users and a great teaching aid in classroom training. This textbook contains 13 chapters which consist of 758 pages covering major environments of SOLIDWORKS: Part, Assembly, and Drawing, which teaches you how to use the SOLIDWORKS mechanical design software to build parametric models and assemblies, and how to make drawings of parts and assemblies. Every chapter of this textbook contains tutorials which intend to help users to experience how things can be done in SOLIDWORKS step by step. Moreover, every chapter ends with hands-on test drives which allow users to experience themselves the ease-of-use and powerful capabilities of SOLIDWORKS. Table of Contents: Chapter 1. Introduction to SOLIDWORKS Chapter 2. Drawing Sketches with SOLIDWORKS Chapter 3. Editing and Modifying Sketches Chapter 4. Applying Geometric Relations and Dimensions Chapter 5. Creating First/Base Feature of Solid Models Chapter 6. Creating Reference Geometries Chapter 7. Advanced Modeling - I Chapter 8. Advanced Modeling - II Chapter 9. Patterning and Mirroring Chapter 10. Advanced Modeling - III Chapter 11. Working with Assemblies - I Chapter 12. Working with Assemblies - II Chapter 13. Working with Drawing

Beginner's Guide to SOLIDWORKS 2017 – Level II starts where Beginner's Guide – Level I ends, following the same easy to read style and companion video instruction, but this time covering advanced topics and techniques. The purpose of this book is to teach advanced techniques including sheet metal, surfacing, how to create components in the context of an assembly and reference other components (Top-down design), propagate design changes with SOLIDWORKS' parametric capabilities, mold design, welded structures and more while explaining the basic concepts of each trade to allow you to understand the how and why of each operation. The author uses simple examples to allow you to better understand each command and environment, as well as to make it easier to explain the purpose of each step, maximizing the learning time by focusing on one task at a time. This book is focused on the processes to complete the modeling of a part, instead of focusing on individual software commands or operations, which are generally simple enough to learn. At the end of this book, you will have acquired enough skills to be highly competitive when it comes to designing with SOLIDWORKS, and while there are many less frequently used commands and options available that will not be covered in this book, rest assured that those covered are most of the commands used every day by SOLIDWORKS designers. The author strived hard to include many of the commands required in the Certified SOLIDWORKS Professional Advanced and Expert exams as listed on the SOLIDWORKS website.

- The perfect follow up to SOLIDWORKS Intermediate Skills
- Uses a step by step tutorial approach with real world projects
- Comprehensive coverage of advanced SOLIDWORKS tools and techniques
- Covers parts, surfaces, SimulationXpress, sheet metal, top-down assemblies and core and cavity molds
- Features a quick reference guide and a Certified SOLIDWORKS Professional practice exam

SOLIDWORKS 2020 Advanced Techniques picks up where SOLIDWORKS 2020 Intermediate Skills leaves off. Its aim is to take you from an intermediate user with a basic understanding of SOLIDWORKS and modeling techniques to an advanced user capable of creating complex models and able to use the advanced tools provided by SOLIDWORKS. The text covers parts, surfaces, SimulationXpress, sheet metal, top-down assemblies and core and cavity molds. Every lesson and

exercise in this book was created based on real world projects. Each of these projects has been broken down and developed into easy and comprehensible steps. Furthermore, at the end of every chapter there are self test questionnaires to ensure that you have gained sufficient knowledge from each section before moving on to more advanced lessons. This book takes the approach that in order to understand SOLIDWORKS, inside and out, you should create everything from the beginning and take it step by step.

Learn to design parts and assemblies using the sheet metal tools in SOLIDWORKS (versions 2013 through 2017). SOLIDWORKS Sheet Metal Design 2021 textbook has been designed for instructor-led courses as well as self-paced learning. It is intended to help engineers and designers interested in learning SOLIDWORKS for creating real-world sheet metal components. This textbook is a great help for SOLIDWORKS users new to sheet metal design. It consists of total 132 pages covering the sheet metal design environment of SOLIDWORKS. It teaches users to use SOLIDWORKS mechanical design software for creating parametric 3D sheet metal components. This textbook not only focuses on the usage of the tools and commands of SOLIDWORKS for creating sheet metal components but also on the concept of design. It contains Tutorials followed by theory that provide users with step-by-step instructions for creating sheet metal components. Moreover, it ends with Hands-on Test Drives which allow users to experience the user friendly and technical capabilities of SOLIDWORKS.

Engineering Design with SOLIDWORKS 2021 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 featuring machined, plastic and sheet metal components. Desired outcomes and usage competencies are listed for each project. The book is divided into five sections with 11 projects. Project 1 - Project 6: Explore the SOLIDWORKS User Interface and CommandManager, Document and System properties, simple and complex parts and assemblies, proper design intent, design tables, configurations, multi-sheet, multi-view drawings, BOMs, and Revision tables using basic and advanced features. Additional techniques include the edit and reuse of features, parts, and assemblies through symmetry, patterns, configurations, SOLIDWORKS 3D ContentCentral and the SOLIDWORKS Toolbox. Project 7: Understand Top-Down assembly modeling and Sheet Metal parts. Develop components In-Context with InPlace Mates, along with the ability to import parts using the Top-Down assembly method. Convert a solid part into a Sheet Metal part and insert and apply various Sheet Metal features. Project 8 - Project 9: Recognize SOLIDWORKS Simulation and Intelligent Modeling techniques. Understand a general overview of SOLIDWORKS Simulation and the type of questions that are on the SOLIDWORKS Simulation Associate - Finite Element Analysis (CSWSA-FEA) exam. Apply design intent and intelligent modeling techniques in a sketch, feature, part,

plane, assembly and drawing. Project 10: Comprehend the differences between additive and subtractive manufacturing. Understand 3D printer terminology along with a working knowledge of preparing, saving, and printing CAD models on a low cost printer. Project 11: Review the Certified SOLIDWORKS Associate (CSWA) program. Understand the curriculum and categories of the CSWA exam and the required model knowledge needed to successfully take the exam. 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.

- Starts at an introductory level, designed for beginners
- Comprehensive coverage of beginning tools and techniques
- Uses a step by step, tutorial approach with real world projects
- Covers the creation of parts, assemblies and drawings
- Features a quick reference guide and a Certified SOLIDWORKS Associate practice exam
- The first book of a three book series

SOLIDWORKS 2021 Basic Tools is the first book in a three part series. It introduces new users to the SOLIDWORKS interface, SOLIDWORKS tools and basic modeling techniques. It provides you with a strong understanding of SOLIDWORKS and covers the creation of parts, assemblies and drawings. Every lesson and exercise in this book was created based on real world projects. Each of these projects has been broken down and developed into easy and comprehensible steps. Furthermore, at the end of every chapter there are self test questionnaires to ensure that you have gained sufficient knowledge from each section before moving on to more advanced lessons. This book takes the approach that in order to understand SOLIDWORKS, inside and out, you should create everything from the beginning and take it step by step. Who this book is for This book is for the beginner who is not familiar with the SOLIDWORKS program and its add ins.

This senior undergraduate level textbook is written for Advanced Manufacturing, Additive Manufacturing, as well as CAD/CAM courses. Its goal is to assist students in colleges and universities, designers, engineers, and professionals interested in using SolidWorks as the design and 3D printing tool for emerging manufacturing technology for practical applications. This textbook will bring a new dimension to SolidWorks by introducing readers to the role of SolidWorks in the relatively new manufacturing paradigm shift, known as 3D-Printing which is based on Additive Manufacturing (AM) technology. This new textbook: Features modeling of complex parts and surfaces Provides a step-by-step tutorial type approach with pictures showing how to model using SolidWorks Offers a user-Friendly approach for the design of parts, assemblies, and drawings, motion-analysis, and FEA topics Includes clarification of connections between SolidWorks and 3D-Printing based on Additive Manufacturing Discusses a clear presentation of Additive Manufacturing for Designers using SolidWorks CAD software "Introduction to SolidWorks: A Comprehensive Guide with Applications in 3D Printing" is

written using a hands-on approach which includes a significant number of pictorial descriptions of the steps that a student should follow to model parts, assemble parts, and produce drawings.

SOLIDWORKS 2018 Learn by doing introduces new users to mechanical design using SOLIDWORKS and how it can be used to create a variety of models. In fourteen tutorial based chapters, author guides you through all the necessary commands and options in SOLIDWORKS 2018, from sketching to parametric modeling and finally ending with rendering. The commands are presented one step at a time using simple examples. The approach used in this book helps you to become a skilled SOLIDWORKS user. SOLIDWORKS 2018 Learn by doing begins with introduction basic modeling. The later chapters focus on additional modeling, top-down assemblies, sheet metal modeling, drafting, surface modeling, mold tools, weldments, DimXpert, and rendering. Table of Contents 1. Getting Started 2. Modeling Basics 3. Assembly Basics 4. Creating Drawings 5. Sketching 6. Additional Modeling Tools 7. Sheet metal Modeling 8. Top-Down Assembly 9. Dimensions and Annotations 10. Surface Design 11. Mold Tools 12. Weldments 13. DimXpert 14. Appearances and Rendering If you are an educator, you can request an evaluation copy by sending us an email to [online.books999@gmail.com](mailto:online.books999@gmail.com)

This book is your self-study guide. The objective of this book is to help you learn SOLIDWORKS 2015 by using its various features. The fourteen lessons in this tutorial introduce you to the designing, documentation, and presentation in SOLIDWORKS 2015. The topics covered in this tutorial are part and assembly design, drawings, sheetmetal, surface design, mold tools, weldments, DimXpert, and rendering. The skills you develop after completing this tutorial are: \* Basics of Part, Assembly, and drawings \* Creating Sketches \* Additional Part and Assembly tools \* Sheet Metal Design \* Basics of Surface design \* Mold Tools \* Design and documents Weldments \* GD&T using DimXpert \* Appearances and Rendering

Beginner's Guide to SOLIDWORKS 2016 – Level II starts where Beginner's Guide – Level I ends, following the same easy to read style and companion video instruction, but this time covering advanced topics and techniques. The purpose of this book is to teach advanced techniques including sheet metal, surfacing, how to create components in the context of an assembly and reference other components (Top-down design), propagate design changes with SOLIDWORKS' parametric capabilities, mold design, welded structures and more while explaining the basic concepts of each trade to allow you to understand the how and why of each operation. The author uses simple examples to allow you to better understand each command and environment, as well as to make it easier to explain the purpose of each step, maximizing the learning time by focusing on one task at a time. This book is focused on the processes to complete the modeling of a part, instead of focusing on individual software commands or operations, which are generally simple

enough to learn. At the end of this book, you will have acquired enough skills to be highly competitive when it comes to designing with SOLIDWORKS, and while there are many less frequently used commands and options available that will not be covered in this book, rest assured that those covered are most of the commands used every day by SOLIDWORKS designers. The author strived hard to include the commands required in the Certified SOLIDWORKS Associate test as listed on the SOLIDWORKS website, and some, as well as several more.

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This book is based on the actual CSWPA-SM exam. It is the most complete and comprehensive book on CSWPA-SM available, and it will thoroughly prepare you to take and pass the CSWPA-SM exam. The CSWPA-SM exam is one of the most challenging of the CSWPA exams and this book will help you prepare for this exam. There 15 Questions in the exam as is in this book and the exam length is 90 minutes. Each and every step comes with actual exam screen captures and step by step solutions with screen captures from solidworks. Solidworks is one of the most widely used MCAD packages on the planet and it is an excellent example of how certification can distinguish a standout designer or design engineer from the rest of the crowd. The completion of the Certified SOLIDWORKS Professional Advanced Sheet Metal (CSWPA-SM) exam shows that you have successfully demonstrated your ability to use SOLIDWORKS Sheet Metal tools and employers can be confident that an individual with this certification understands the set of SOLIDWORKS tools that aid in the design of sheet metal components. A journey of a thousand miles begins with the first step, take the step today by purchasing this eBook or in fact a roadmap to passing your Certified SOLIDWORKS Professional Advanced Sheet Metal (CSWPA-SM) Exam and joining a family of thousands of Certified Solidworks Professionals across the Globe. This book is not only for someone who wants to write and pass the Certified SOLIDWORKS Professional Advanced Sheet Metal (CSWPA-SM) exam but it is also for those who want to learn the best practice in using sheet metal tools in Solidworks as well as those who want to keep their skills honed and or maintain their ingenuity and proficiency with the software. To write the CSWPA-SM exam, one should have passed the CSWA and CSWP exams.

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Understand Top-Down assembly modeling and Sheet Metal parts. Develop components In-Context with InPlace Mates, along with the ability to import parts using the Top-Down assembly method. Convert a solid part into a Sheet Metal part and insert and apply various Sheet Metal features. Project 8 - Project 9: Recognize SOLIDWORKS Simulation and Intelligent Modeling techniques. Understand a general overview of SOLIDWORKS Simulation and the type of questions that are on the SOLIDWORKS Simulation Associate - Finite Element Analysis (CSWSA-FEA) exam. Apply design intent and intelligent modeling techniques in a sketch, feature, part, plane, assembly and drawing. Project 10: Comprehend the differences between additive and subtractive manufacturing. Understand 3D printer terminology along with a working knowledge of preparing, saving, and printing CAD models on a low cost printer. Project 11: Review the Certified SOLIDWORKS Associate (CSWA) program. Understand the curriculum and categories of the CSWA exam and the required model knowledge needed to successfully take the exam. 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.

Learn to design parts and assemblies using the sheet metal tools in SOLIDWORKS.

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SOLIDWORKS 2017 Learn by doing introduces new users to mechanical design using SOLIDWORKS and how it can be used to create a variety of models. In fourteen tutorial based chapters, author guides you through all the necessary commands and options in SOLIDWORKS 2017, from sketching to parametric modeling and finally ending with rendering. The commands are presented one step at a time using simple examples. The approach used in this book helps you to become a skilled SOLIDWORKS user. SOLIDWORKS 2017 Learn by doing begins with introduction basic modeling. The later chapters focus on additional modeling, top-down assemblies, sheet metal modeling, drafting, surface modeling, mold tools, weldments, DimXpert, and rendering. Table of Contents 1. Getting Started 2. Modeling Basics 3. Assembly

Basics 4. Creating Drawings 5. Sketching 6. Additional Modeling Tools 7. Sheet metal Modeling 8. Top-Down Assembly 9. Dimensions and Annotations 10. Surface Design 11. Mold Tools 12. Weldments 13. DimXpert 14. Appearances and Rendering

Sheet Metal Drafting Using SolidWorks® teaches basic drafting techniques and sheet metal drafting using SolidWorks. The text begins with simple solid models and proceeds to complex sheet metal assemblies with drawings, exploded views, parts lists, revisions, and other items related to the field. The material is presented so that users can learn SolidWorks Sheet Metal and basic drafting techniques by actually using the program in real-world situations. Written specifically for the student version of SolidWorks, this text is ideal for online and lecture courses. The complete SolidWorks reference-tutorial for beginner to advanced techniques Mastering SolidWorks is the reference-tutorial for all users. Packed with step-by-step instructions, video tutorials for over 40 chapters, and coverage of little-known techniques, this book takes you from novice to power user with clear instruction that goes beyond the basics. Fundamental techniques are detailed with real-world examples for hands-on learning, and the companion website provides tutorial files for all exercises. Even veteran users will find value in new techniques that make familiar tasks faster, easier, and more organized, including advanced file management tools that simplify and streamline pre-flight checks. SolidWorks is the leading 3D CAD program, and is an essential tool for engineers, mechanical designers, industrial designers, and drafters around the world. User friendly features such as drag-and-drop, point-and-click, and cut-and-paste tools belie the software's powerful capabilities that can help you create cleaner, more precise, more polished designs in a fraction of the time. This book is the comprehensive reference every SolidWorks user needs, with tutorials, background, and more for beginner to advanced techniques. Get a grasp on fundamental SolidWorks 2D and 3D tasks using realistic examples with text-based tutorials Delve into advanced functionality and capabilities not commonly covered by how-to guides Incorporate improved search, Pack-and-Go and other file management tools into your workflow Adopt best practices and exclusive techniques you won't find anywhere else Work through this book beginning-to-end as a complete SolidWorks course, or dip in as needed to learn new techniques and time-saving tricks on-demand. Organized for efficiency and designed for practicality, these tips will remain useful at any stage of expertise. With exclusive coverage and informative detail, Mastering SolidWorks is the tutorial-reference for users at every level of expertise.

SOLIDWORKS 2019 Learn by doing introduces new users to mechanical design using SOLIDWORKS and how it can be used to create a variety of models. In fourteen tutorial-based chapters, author guides you through all the necessary commands and options in SOLIDWORKS 2019, from sketching to parametric modeling and finally ending with rendering. The commands are presented one step at a time using simple examples. The approach used in this book helps you to become a skilled SOLIDWORKS user. SOLIDWORKS 2019 Learn by doing begins with introduction basic modeling. The later chapters focus on additional modeling, top-down assemblies, sheet metal modeling, drafting, surface modeling, mold tools, weldments, MBD Dimensions, and rendering.

Take your sheet metal skills to the next level by designing a sheet metal enclosure with SOLIDWORKS in this project-based course. Beginner's Guide to SOLIDWORKS 2020 – Level II starts where Beginner's Guide – Level I ends, following the same easy to read style and companion videoinstruction, but this time covering advanced topics and techniques. The purpose of this book is to teach advanced techniques including sheet metal, surfacing, how to create components in the context of an assembly and reference other components (Top-down design), propagate design changes with SOLIDWORKS' parametric capabilities, mold design, welded structures and more while explaining the basic concepts of each trade to allow you to understand the how and why of each operation. The author uses simple examples to allow you to better understand each command and environment, as well as to make it easier to explain the purpose of each step,

maximizing the learning time by focusing on one task at a time. This book is focused on the processes to complete the modeling of a part, instead of focusing on individual software commands or operations, which are generally simple enough to learn. At the end of this book, you will have acquired enough skills to be highly competitive when it comes to designing with SOLIDWORKS, and while there are many less frequently used commands and options available that will not be covered in this book, rest assured that those covered are most of the commands used every day by SOLIDWORKS designers. The author strived hard to include many of the commands required in the Certified SOLIDWORKS Professional Advanced and Expert exams as listed on the SOLIDWORKS website.

- Picks up where SOLIDWORKS Basic Tools leaves off
- Uses a step by step tutorial approach with real world projects
- Comprehensive coverage of intermediate SOLIDWORKS tools and techniques
- Expands on Solids, Surfaces, Multibodies, Configurations, Drawings, Sheet Metal and Assemblies
- Features a quick reference guide

SOLIDWORKS 2021 Intermediate Skills is part of a three part series which builds on the SOLIDWORKS features learned in SOLIDWORKS 2021 Basic Tools. SOLIDWORKS 2021 Intermediate Skills broadens your SOLIDWORKS knowledge base by covering such features as surveys, lofts and boundaries, the use of multibodies, generating engineering drawings and other SOLIDWORKS functions that are critical for the effective use of this powerful software. This book helps prepare you for the advanced features of SOLIDWORKS which are covered in SOLIDWORKS Advanced Techniques. It uses a step by step tutorial approach with real world projects. This book also features a Quick-Reference-Guide to the SOLIDWORKS 2021 commands, icons, and customized hotkeys. Who's this book for? This book is for the mid-level user, who is already familiar with the SOLIDWORKS program. It is also a great resource for the more CAD literate individuals who want to expand their knowledge of the different features that SOLIDWORKS 2021 has to offer.

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