

# Computer Aided Design 1 (SolidWorks) | Interactive eLearning

Introduction to Solid Modeling - WX12273-PX01XEN-E1

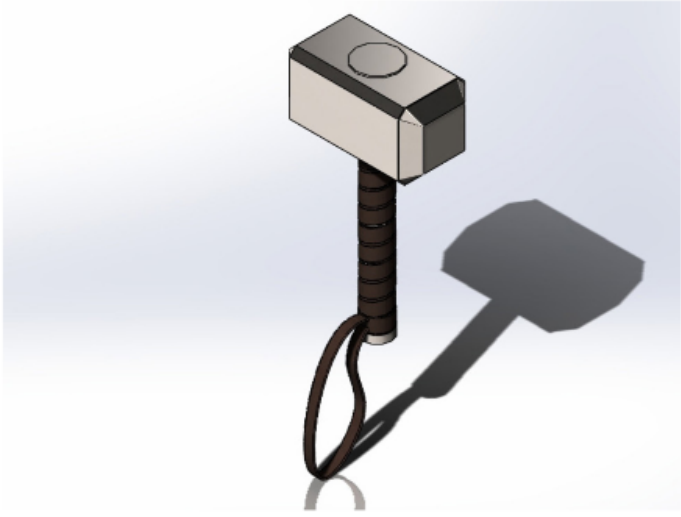
Objective 1: Describe the Function of Solid Modeling Software

Display of Assemblies

Another use of solid modeling software is to show assemblies. Solid modeling software can load all the components used to make a finished product into one drawing.

These components can be assembled using the software's tools to verify that they have been designed correctly.

This process also helps the designer to identify potential problems that may occur during the assembly process, such as interference with another component, and then alter designs to avoid the problem.



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## eLearning Course: M12273

Amatrol's Computer Aided Design 1 (SolidWorks) eLearning introduces solid modeling by describing the function of solid modeling software and the features of solid modeling. Solid model creation is described and applies the knowledge taught by having the learner use sketch commands and tools to create a sketch and extruded boss/base features to create a solid model. Solid Model features such as drawing planes, extrude cut features, fillets and chamfers, and revolved features are explored. Also included are topics such as multi-view drawings, dimensioning, and title blocks.

## eLearning

### What is Solid Modeling?

A solid modeling software program is a computer application that is used to create virtual 3D models of components. It is a powerful tool used in design and manufacturing to quickly convey ideas and perform virtual testing of components before the expense of acquiring machinery and tooling to create real-world components that may, or may not, function as intended. Solid modeling software typically contains drawing tools that allow the user to quickly create and modify part features, and to reduce the time spent creating the solid model.

### Computer Aided Design (CAD) eLearning Full of Engaging Multimedia, Job-Ready Skills

Amatrol's extensive, thorough multimedia covers computer aided design concepts. Interactive screens paired with instructive graphics teach an array of computer aided design topics from solid models to production drawing. Learners can then apply this theoretical knowledge to immediate hands-on skills. For example, learners study how SolidWorks creates multiview drawings and then create their own multiview drawing from a 3D model. This combination of theory and practice ingrains concepts in a learner's mind and makes more advanced topics easier to comprehend.

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