Welcome to *Hands-On AutoCAD!*

In creating this book, we decided to take an approach that is dramatically different from that of other CAD books you may have seen or used. *Hands-On AutoCAD* takes a real-life approach to teaching the AutoCAD software. The projects and exercises in each chapter are realistic and interesting, so you can learn AutoCAD in a real-world context. The projects have been chosen to give you an understanding of the different types of projects on which you may be working throughout your career. The variety of project themes also allows you to try several different areas of drafting, which will help you discover which areas interest you most.

Need for Computer Access

Due to the direct approach of *Hands-On AutoCAD*, this book works best if you have access to AutoCAD while you are reading the chapter material. "Try It!" exercises occur throughout the chapter so that you can try out each command and feature as you read about it.

CAD Standards

The field of design and drafting is very large and incorporates many different industries. The intent of this book is not to make you an instant expert, but rather to provide a solid foundation on which you can build.

Pay special attention to the ASME/ANSI drafting specifications as you work through the book. Although companies sometimes alter a rule here and there to meet their needs, these standards are the basis for all drafting work in the United States. Once you truly master them, you are ready to pursue your career in any drafting-related industry.

Working Styles

AutoCAD allows for many different working styles, so the methods drafters pick to enter commands is largely a matter of personal preference. We strongly encourage you to develop your own style. You will find all of the different ways in which each command can be entered in the margin on the page where the command is introduced. Commands are always CAPITALIZED and shown in a different type style so that you can find them easily.

Practice Makes Perfect

Keep in mind that regardless of the industry, computer-aided design and drafting is an iterative process. In other words, the best solution rarely comes from the first try. It often takes many different ideas and attempts before a problem is solved.

In fact, each project will supply you with more tools as you build your skills. You will be able to look back on previous projects as you work through the book and see other ways in which each project could have been done. This is good! We encourage you to explore multiple ways to tackle each problem or project. Creative thinking is one of the key elements of good design. Just don't be discouraged if the first method you try doesn't work the way you thought it would.

Look at the Wright brothers: How many different airplanes and gliders did they create before they made one that would fly until its fuel ran out? The best solutions are often the simplest, but they are rarely the first idea that comes to mind. Just keep trying until you are satisfied with your results.

Good luck to you!

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