AutoCAD and Its Applications BASICS

Reference Material

Drawing Standards

This textbook presents mechanical drafting standards developed by the American Society of Mechanical Engineers (ASME) and accredited by the American National Standards Institute (ANSI). This textbook also references International Standards Organization (ISO) mechanical drafting standards and discipline-specific standards.

ASME Drafting Standards

The ASME is an accredited standards developing organization that meets ANSI requirements. Codes and standards developed under an accredited program can be designated as American National Standards.

The ASME Y14.5 *Dimensioning and Tolerancing* standard presents approved dimensioning and tolerancing practices. This standard and other engineering drawing standards can be ordered directly from the ASME.

ISO Drafting Standards

The ISO is an international organization that provides drafting standards and related documents. Several of the ISO drafting standards for various disciplines are available in the ISO's *Technical Drawings* publication. ISO standards can be ordered directly from the ISO.

United States National CAD Standard

A group of organizations developed the United States National CAD Standard (NCS). The NCS includes four major components:

- *CAD Layer Guidelines*
- Uniform Drawing System, Modules 1–8
- BIM Implementation
- *Plotting Guidelines*

The NCS can be ordered directly through the National Institute of Building Sciences.

American Welding Society Drafting Standards

The American Welding Society (AWS) publishes drafting standards addressing welding technology and related joining disciplines. The AWS A2.4:2012 *Standard Symbols for Welding, Brazing, and Nondestructive Examination* standard and other AWS standards can be ordered directly from the AWS.