Solid Edge[®] Engineering Handbook

On-line reference and automatic component modeling for machinery design

www.solidedge.com

The Engineering Handbook is a complementary add-on software module for Solid Edge® that delivers tools for custom machinery engineers and designers. These include an on-line engineering reference, calculations based on standard mathematical formulas, and a calculation-driven part generator that automatically creates Solid Edge part models based on functional requirements.

The Solid Edge Engineering Handbook puts a wealth of engineering reference information on the CAD desktop that helps engineers design by function as well as form.

Developed by MechSoft.com, Inc., the Engineering Handbook is fully integrated with Solid Edge and is designed to intelligently, accurately, and correctly preserve the engineer's design intent.



The Solid Edge Engineering Handbook provides calculations that use standard mathematical formulas and physical theory.

On-line calculations, formulas aid right-first-time design

The Solid Edge Engineering Handbook provides a collection of calculations representing standard mathematical formulas and physical theories. The calculations help determine and validate the feasibility of designs and revisions based on functional requirements. An on-line design rules checker



Solid Edge component models are automatically created from calculations in the Engineering Handbook.

constantly monitors changes and reports feedback to the mechanical engineer or designer. Most of the engineering calculations can automatically create parametric part models for use in Solid Edge assemblies.

The Engineering Handbook helps engineers design, select, and strength-check a broad range of common machinery components, including:

- Rolling-contact bearings
- · Belleville springs
- Spur gearing
- Intended belts
- Joints, including separate hub joints, one-side hub joints, or cone joints
- Key joints
- Pin joints
- Pressing-on joints
- Shafts
- Splines
- Involute splining joints
- Tension springs
- Solder joints
 - Helical torsion springs
 - V-belts
 - · Weld joints





The Solid Edge Engineering Handbook provides a desktop reference with formulas, algorithms, and theory.

Automatic component modeling

The calculation-driven parts generator represents mechanical engineering knowledge and rules that encapsulate machine design theory. It automatically creates Solid Edge part models based on engineering formulas, and application service conditions for the components.

Convenient desktop engineering reference

The Engineering Handbook delivers an extensive reference library to the engineer's desktop, accessible directly from the Solid Edge design session. The on-line reference documents the formulas, algorithms, and engineering theory, providing a more convenient and easy-to-use resource than hardcopy machinery reference books.

System Requirements

Solid Edge Engineering Handbook is delivered with Solid Edge, and shares Solid Edge system requirements:

Minimum System Configuration

- Intel Pentium or AMD Athlon processor-based PC
- Windows XP, Windows NT 4.0 Service Pack 6 or later, Windows 2000, or Windows ME
- 128 MB RAM
- 420 MB of disk space for installation
- Minimum Resolution: 1,024x768, 65K colors
- CD-ROM (local or network) for installation

Recommended System Configuration

• Windows 2000, Pentium III or Pentium 4 or AMD Athlon, 256 MB or more RAM, OpenGL accelerator with 65K colors.

 For more information, contact your Solid Edge Reseller:



Solid Edge

Americas 800-807-2200

Europe +31-0-79363-5515

Asia-Pacific 852-2230-3333

www.solidedge.com



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