SmartSketch®

Your engineering companion

SmartSketch® is a versatile and cost-effective precision engineering and drafting product. It gives EPCs and owner operators a competitive edge throughout the facility lifecycle by speeding productivity, cutting costs and offering a sophisticated degree of automation for detail work. As an interlocking piece of Hexagon's PPM division's best-in-class lifecycle solution, SmartSketch is a premium tool for the drawing generation tasks inherent in your work process.

Preserve & Enhance Legacy Data

SmartSketch enables you to reference, combine, edit and create MicroStation and AutoCAD® data. By maintaining MicroStation and AutoCAD element symbology, you can augment schematic workflows where expensive and high-powered CAD is impractical. SmartSketch supports DWG, DXF and DGN data formats to protect your investment in legacy data. You can write to PDF format as well.

Cut Production Time

Using SmartSketch, engineers and designers can create preliminary designs that draftsmen can easily detail and finalize, without the costly errors that frequently occur from misreading hand-drawn sketches. In addition, industry solutions in SmartSketch supply task- and application-specific templates that set up appropriate units, drawing scales, borders, title blocks, toolbars and more than 7,500 symbols specific to your discipline's work environment. Templates for the process, power and marine industries include those for process flow and block diagrams, electrical schematics and plot plans.

Automate Production Designs & Drawings

SmartSketch provides powerful features such as parametrics and relationships that enable execution of design changes quickly and efficiently. SmartSketch automatically creates and maintains relationships between geometric elements and supports parametric graphics. For example, a baseline design can be made customer-specific by driving it from an external data source such as a spreadsheet that holds the dimensions for the specific case. This will update the drawing in a matter of seconds, using a proven and verified design basis to ensure quality. The solution can also be used to edit and modify Smart® 3D drawings, symbols and various 2D graphics used in other applications.

Fit Your Work Process

SmartSketch reduces costs to EPCs and facility owners in three ways. First, SmartSketch provides advanced design and drafting functionality at a fraction of the cost of traditional drafting packages. Second, SmartSketch easily integrates with corporate information, such as spreadsheets and other office tools, through its automation layer. Further, SmartSketch can be customized through programming to address your specific workflow. Finally, features that allow you to reuse data templates and easily update drawings help you avoid inconsistencies in your production drawing.

Add Value Throughout Your Facility

SmartSketch adds value throughout the entire facility by offering full functionality for all phases of the lifecycle. For example, SmartSketch can be used by engineering personnel in disciplines such as process design, power, electrical, structural, instrumentation and HVAC.

During front-end engineering and design (FEED), you can sketch conceptual and preliminary drawings quickly and accurately. Process-, power- and marine-specific solutions allow you to easily draft site layouts, preliminary process flow diagrams (PFDs), and single-line diagrams and schematics.

SmartSketch provides tools to rapidly produce and mark up structural, piping and cable tray details, installation details, electrical and instrumentation schematics and other drawings. Such functionality is valuable in the entire process, from design to construction, maintenance, and decommissioning. SmartSketch helps to avoid and/or automatically update design changes downstream and reduces the overall engineering process time by enabling quick and accurate revisions.

SmartSketch is Versatile

SmartSketch is fully integrated with Microsoft® Office, providing a Microsoft-style interface. SmartSketch can combine graphics with Word documents or Excel® spreadsheets for installation and training manuals, technical illustrations, maintenance records and equipment specifications. SmartSketch's Save As PDF functionality converts drawings to PDF format for quick publication to your corporate intranet or extranet, making SmartSketch the ultimate online extension of your desktop.

The Value Proposition

Save design time, increase accuracy and enjoy cost savings.

Parametric design: Enter variables to save time and increase consistency when creating new designs.

Precision drawing: Use real coordinates and dimensions to create high-quality designs for construction and maintenance.

Ability to leverage legacy data: Read and write traditional CAD formats such as AutoCAD and MicroStation.

Complements data-centric engineering suite: Realize benefits in all phases of engineering, from front-end preliminary P&IDs to back-end drawing production. The solution powers the drawing creation functionality of Smart 3D.

Extends to fit your work process: Easily configure to interface or perform specific tasks that will enhance your work process.

Microsoft Office-compatible: Insert and combine graphics with Microsoft Office files.

Engineering task templates: Take advantage of symbol libraries and templates used by the various engineering disciplines, such as HVAC, architectural and piping.

Relationships: Create and maintain relationships that ensure data connectivity and consistency.

Report results: Report symbol attributes in Microsoft Excel format.

Platform for custom or third-party tool: Build your own tools on top of SmartSketch.

New Features

- SmartSketch offers a variety of powerful features, including:
    - Save As
    - Open MicroStation V8 2D DGN files
- Unlimited number of levels
- Files larger than 32MB can be saved
- Symbol names are not restricted to six characters
- Unlimited reference files
- Double-precision floating point coordinates
    - Coordinate accuracy and fidelity regardless of global origin position
- Curves and line strings can have up to 5,000 vertices
- Fillet rectangle command
    - No need to create four separate fillets for each rectangle
- Group element selection also highlights other group elements when dimensioning using QuickPick tool
- Assists in identifying proper group element when element is coincident with elements of another group
    - Available in both the Distance Between and Angle Between dimension placement commands
- Ability to interactively modify text width/aspect ratio
- Enhancements to the Distance Along command
- Change the application classic icons to the high-resolution icons as the default

About Hexagon

Hexagon is a global leader in digital reality solutions, combining sensor, software and autonomous technologies. We are putting data to work to boost efficiency, productivity, quality and safety across industrial, manufacturing, infrastructure, public sector, and mobility applications.

Hexagon's PPM division empowers its clients to transform unstructured information into a smart digital asset to visualize, build, and manage structures and facilities of all complexities, ensuring safe and efficient operation throughout the entire lifecycle.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 21,000 employees in 50 countries and net sales of approximately 3.8bn EUR. Learn more at hexagon.com and follow us @HexagonAB.