HEXAGON
PPM

AUTOMATIC PIPING ISOMETRICS FROM SKETCHES

INTERGRAPH SMART® ISOMETRICS

Intergraph Smart® Isometrics, powered by Isogen®, is a simple-to-use yet powerful pipesketching application. Formerly known as I-Sketch, Smart Isometrics is the choice of piping engineers and designers for producing industry standard isometric drawings quickly and cost-effectively.

Designed to meet the design and documentation challenges of EPCs, fabricators, and owner operators, Smart Isometrics is a versatile 2D design product that plays an important role in the production and transfer of piping data along the Digital Isometric Value Chain.

Key Features

- Sketch pipelines or piping systems in minutes and generate isometric drawings in seconds

- Includes templates for production of check, fabrication, and erection-type drawings

- Integrates with all of the leading 3D plant design systems

- Pipe editing capabilities feature automatic insertion of gaskets, flanges, and bolts

- Includes standard ANSI and DIN catalogs

- Supports multiple output formats, including DXF, DWG, DGN, and IGR (SmartSketch®)

- Generates a variety of reports, including bills of materials, welding, and cut pipe length lists

- Produces industry-standard Isogen isometric drawings to your company standards

- Keeps track of changes and allows integration of piping data with in-house systems using an API

Create Piping Isometrics in Minutes

Design time equals money. Why spend hours producing isometric drawings using 2D CAD systems when you can use Smart Isometrics and do it in minutes? Smart Isometrics is simple to use and easy to learn, requiring minimal training. You simply sketch the pipe; add any desired components such as flanges, valves, gaskets, and bolts; determine the pipe dimensions; and then let Smart Isometrics do the rest.

Nine different Isometric templates are provided with Smart Isometrics to support different drawing types.

Produce Piping System Isometrics

Smart Isometrics enables the piping engineer to design and produce isometrics for individual pipelines, several pipelines designed together in one session, or complete piping systems, providing piping data input to stress analysis applications, or aiding the inspection, testing, and commissioning of installed pipelines.

Realize a Rapid Return on Investment

Smart Isometrics provides dramatic productivity gains for piping isometric production. It takes only minutes to sketch a piping system in Smart Isometrics, and isometric drawings with full bills of materials are then produced in seconds. Using 2D CAD packages or paper and pencil to draw isometrics usually takes between four to eight hours. You can realize considerable cost savings and a rapid return on investment when using Smart Isometrics for either new design or as-building projects.
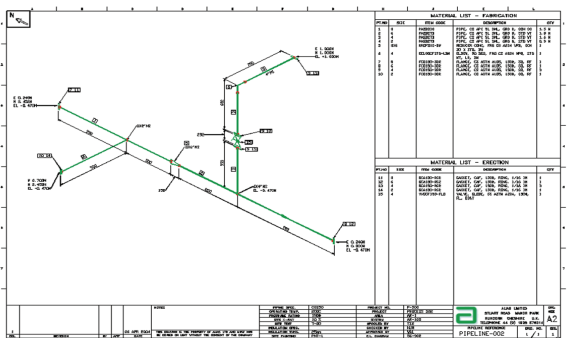
Ideal for 'As-Built' Isometrics

Checking the accuracy of existing piping data is easy with Smart Isometrics. Using the Import feature, you can import as-designed pipes from any Isogen-compliant plant design system. Using Smart Isometrics on a ruggedized tablet PC device, you can walk-down the pipelines in the field, marking up the original as-designed piping data to reflect the real-world, as-built status of the pipes. Finally, you can produce new isometrics documenting plant conditions.

Compatible with Leading Plant Design Systems

Virtually all leading plant design software supports the Isogen IDF or PCF file format, meaning you can use the same Smart Isometrics solution in all projects.

You can also transfer reference data held in Intergraph Smart® Reference Data application to Smart Isometrics, ensuring consistency of design and control of the materials and piping specifications used by engineers on projects.
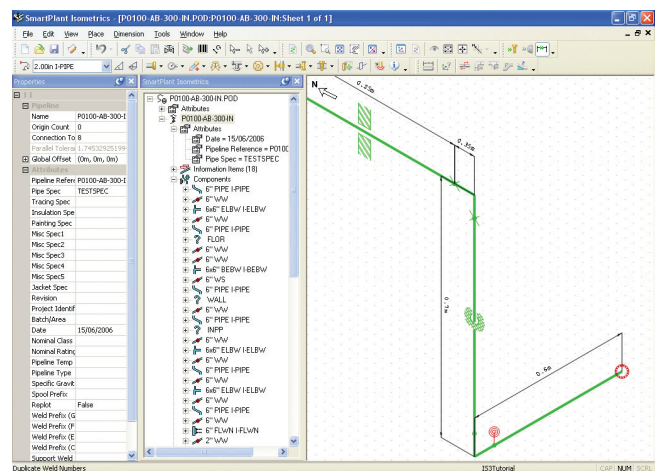
Visualize Piping Data in 3D

Using its integral 3D view, you can interactively visualize pipelines designed in Smart Isometrics, or IDF or PCF files from any other Isogen-compliant system, as scaled 3D models. Any number of files can be visualized simultaneously to create a 3D model of the entire piping system, enabling pipes designed in close proximity to one another to be visually inspected to detect clash problems between new and existing pipework. These models can be saved in MicroStation or AutoCAD format.

Manage Change

Smart Isometrics keeps track of change, as piping data evolves, each state of the isometric is preserved automatically, including any drawings you have generated. Smart Isometrics is fully compatible with PPM's SDx solutions for digital asset management.

Interface Piping Data with Downstream IT Systems

Interface Smart Isometrics-generated piping report data with almost any downstream IT system, such as material control, procurement, workshop, and weld management systems, Intergraph Smart Materials, Oracle, SAP®, Microsoft Excel®- or Access®-based systems, or other legacy systems.

ABOUT HEXAGON

Hexagon is a global leader in digital solutions that create Autonomous Connected Ecosystems (ACE). Our industry-specific solutions create smart digital realities that improve productivity and quality across manufacturing, infrastructure, safety 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 20,000 employees in 50 countries and net sales of approximately 3.8bn EUR. Learn more at hexagon.com and follow us @HexagonAB.