INTERGRAPH®

SmartPlant® Isometrics

AUTOMATIC PIPING ISOMETRICS FROM SKETCHES

Intergraph® SmartPlant® Isometrics, powered by ISOGEN®, is a simple-to-use yet powerful Microsoft® Windows®-based, pipe-sketching application. Formerly known as I-Sketch™, SmartPlant Isometrics is fast becoming the first choice of piping engineers and designers for producing industry-standard isometric drawings quickly and cost-effectively.

KEY FEATURES

- Enables sketching of individual pipelines or piping systems in only minutes and generation of 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

- Includes time-saving pipe editing capabilities featuring automatic insertion of gaskets, flanges, and bolts

- Includes standard ANSI and DIN catalogs

- Facilitates the import of reference data held in 3D plant design systems

- 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 the user's company standards

- Offers SmartPlant License Management

Designed to meet the design and documentation challenges of EPCs, fabricators, and owner operators, SmartPlant 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.

CREATE PIPING ISOMETRICS IN MINUTES

Design time equals money. Why spend hours producing isometric drawings using paper and pencil or 2D CAD systems when you can use SmartPlant Isometrics and do it in minutes? SmartPlant 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; dimension the pipe; and then let SmartPlant Isometrics do the rest.

Isometric drawing templates provided with SmartPlant Isometrics include check, final, fabrication only, erection only, final weld information, final with cutting list information, and overview.

PRODUCE PIPING SYSTEM ISOMETRICS

Intergraph SmartPlant 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. Additionally, IDFs or PCFs from any ISOGEN-compliant system can be merged together to produce complete piping system isometrics.

REALIZE A RAPID RETURN ON INVESTMENT

SmartPlant Isometrics provides dramatic productivity gains for piping isometric production. It takes only minutes to sketch a piping system in SmartPlant 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 and eight hours. You can realize considerable cost savings and a rapid return on investment when using SmartPlant Isometrics for either new design or as-building projects.

MARK UP AS-DESIGNED ISOMETRICS

Checking the accuracy of existing piping data is easy with SmartPlant Isometrics. Using the Import feature, you can import as-designed pipes from any ISOGEN-compliant plant design system. Using SmartPlant 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.

DOCUMENT AS-BUILT PIPING SYSTEMS

When isometric documents do not exist, you can use SmartPlant Isometrics to capture as-built piping systems electronically – it's no longer necessary to use pencil and paper. You can simply sketch the piping system directly into SmartPlant Isometrics on a rugged tablet device in the field, and the application produces all of the required as-built isometric drawings and bills of materials.

INTEGRATE WITH LEADING PLANT DESIGN SYSTEMS

SmartPlant Isometrics automates the conversion of reference data from a variety of plant design systems. Following a brief implementation period during which the specific structure of the data is described to the software, the conversion process takes only minutes. SmartPlant Isometrics' ability to receive reference data in this way allows it to work closely with leading 3D plant design systems.

You can also transfer reference data held in Intergraph's SmartPlant Reference Data application to SmartPlant Isometrics, ensuring consistency of design and control of the materials and piping specifications used by engineers on projects.
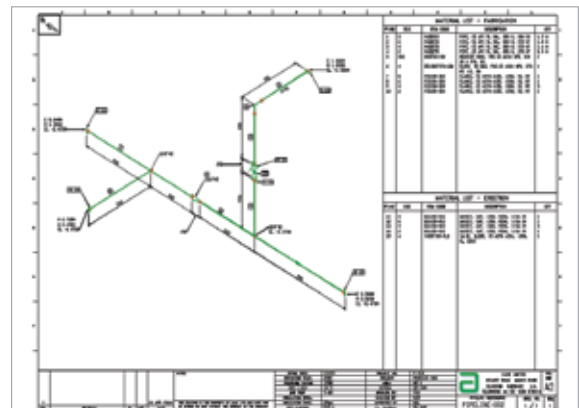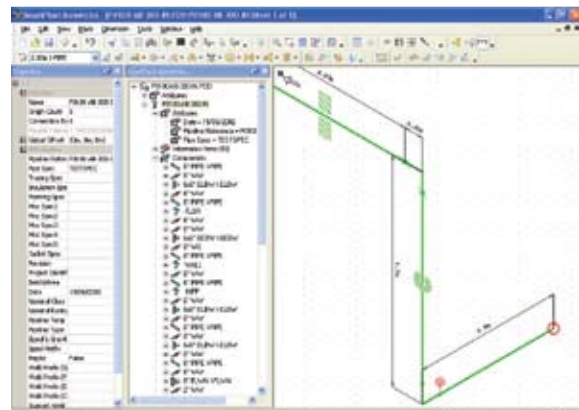
VISUALIZE PIPING DATA IN 3D

Using its integral 3D view, you can interactively visualize pipelines designed in SmartPlant 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.

INTERFACE PIPING DATA WITH DOWNSTREAM IT SYSTEMS

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

ABOUT INTERGRAPH

Intergraph is the leading global provider of engineering and geospatial software that enables customers to visualize complex data. Businesses and governments in more than 60 countries rely on Intergraph's industry-specific software to organize vast amounts of data into understandable visual representations and actionable intelligence. Intergraph's software and services empower customers to build and operate more efficient plants and ships, create intelligent maps, and protect critical infrastructure and millions of people around the world.

Intergraph operates through two divisions: Process, Power & Marine (PP&M) and Security, Government & Infrastructure (SG&I). Intergraph PP&M provides enterprise engineering software for the design, construction, and operation of plants, ships, and offshore facilities. Intergraph SG&I provides geospatially-powered solutions to the defense and intelligence, public safety and security, government, transportation, photogrammetry, utilities, and communications industries.

For more information, visit www.intergraph.com.