



# PDS® DELIVERING THE BEST POSSIBLE DESIGN

PDS<sup>®</sup> is a comprehensive, intelligent computer-aided design/ engineering (CAD/CAE) application.

PDS has been chosen by owner operators; engineering, procurement, and construction (EPC) firms; and their vendors to design projects around the world since the mid-1980s. PDS helps companies achieve more with fewer resources by providing:

- Automation that improves productivity
- Three-dimensional modeling that helps designers create a better design
- Interference checking to reduce or eliminate field rework
- Accurate material take-offs that cut costs
- Specification-driven design and checking that improve accuracy

PDS runs on Microsoft<sup>®</sup> Windows<sup>®</sup>; is compatible with popular relational database management systems such as Microsoft SQL Server and Oracle; and interfaces with Intergraph Smart<sup>®</sup> 3D and Hexagon PPM software, as well as a variety of thirdparty software.

# **Distribution of Work Increases Productivity**

PDS is built on industry standards that promote the creation, sharing, exchange, and best use of engineering data, and its integration with key business systems and processes throughout a facility's lifecycle. PDS users in multiple disciplines can work on a project simultaneously – improving design coordination, reducing errors, and increasing productivity.

Providing all the tools you need to distribute work, PDS ensures design data integrity, accuracy, and auditability. PDS creates and maintains the essential database for global operations and regulatory compliance, streamlining operations, maintenance, and downstream retrofit projects.

#### Front-end Accuracy Creates Downstream Savings

PDS uses the same technology platform and user interface to make FEED solutions easier to implement, lowering the total cost of ownership. Our strategic alliance vendors also share technology and user interface standards to facilitate the sharing of front-end data. Front-end tasks in PDS provide data downstream to the physical design, construction, operations, and maintenance phases.

# Integration with Complementary Applications

PDS integrates with Intergraph Smart 3D – a next-generation 3D design solution that leverages real-time concurrent design, rules, relationships, and automation – as well as Intergraph Smart P&ID, a data-centric, rule-based engineering solution that creates intelligent P&IDs while building a comprehensive data model (see Figure 2).

It also integrates with Intergraph Smart Instrumentation, which drives deliverables for different phases of the lifecycle, enforcing data consistency and eliminating duplicate data entry. PDS can also be used in conjunction with Intergraph Smart Electrical, an electrical schematics and wiring diagram application that interfaces with the instrument application to generate wiring diagrams.

### **Equipment Modeling Module**

The equipment modeling module enables you to model primary process equipment such as vessels, towers, heat exchangers, columns, and pumps, as well as ancillary items such as platforms, ladders, and stairs.

#### **Piping Module**

The piping module is specification-driven, using extensive online piping component catalogs organized by piping material classes to make design efficient, standardized, and accurate. The library contains ANSI, DIN, ISO, and other standards.

### Structural Modeling with the FrameWorks® Plus Module

FrameWorks<sup>®</sup> Plus, a PDS module, is a powerful, easy-touse 2D/3D structural modeling and drafting program that supports drawing, modeling, analysis, and reporting.

### **HVAC Modeling Module**

The HVAC modeling module provides interactive 3D tools to lay out and model ducts and other HVAC components.

### **Electrical Raceway Module**

PDS Electrical Raceway provides powerful, interactive 3D tools to lay out and design electrical cable trays and conduit systems, junction boxes, underground duct banks, and cable trenches. It can also be used to lay out electrical equipment such as motor control centers, starters, disconnect, and transformers.

#### Automatic Orthographic Drawing Generation Solution

PDS Ortho Drawings is an automatic annotation and dimensioning standalone solution used to produce project deliverables from PDS physical (3D) models.



Figure 1: PDS is production-proven on small- and large-scale projects.



Figure 2: Intergraph Smart P&ID data can be shared with upstream and downstream tasks.

# **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.

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