HEXAGON

Brochure

CADWorx & Analysis Solutions

The Industry Choice

The Industry Choice

Plant Design and Engineering Solutions

CADWorx & Analysis Solutions offerings work together to give you the power to tackle the most challenging and complex projects with greater ease and superior results never before achievable. Chosen by more than 80% of leading plant engineering companies and owner operators from around the world, CADWorx & Analysis Solutions are:

- Easy to use
- Flexible
- Scalable
- Trusted to deliver accurate, reliable results

CADWorx®

Complete and Easy-to-use Plant Design Suite

CADWorx® Plant Design Suite is an integrated complete BricsCAD®-based - (included) and AutoCAD®-based software solution set for plant design that provides intelligent drawing and database connectivity, advanced levels of automation, and easy-to-use drafting tools.
The comprehensive suite of design tools includes piping, structural steel, equipment, process and instrument diagrams, and design review, plus automatic isometrics and bills of material.

CADWorx is quick and easy to set up and use, so you can start designing right away. The bi-directional links between CADWorx and CAESAR II® for pipe stress analysis, and PV Elite® for pressure vessel analysis, enable designers and engineers to easily share information while keeping the drawings, models, and related information synchronized as changes are made. Plus, the fast processing and highly refined user-interface features in CADWorx make it possible for multiple users to work together efficiently, even on the largest models.

CADWorx has revolutionized the plant design industry with its ease of use, flexibility, inter-connectivity and scalability.

CAESAR II®

World Standard for Pipe Flexibility and Stress Analysis

Since its introduction in 1984, CAESAR II has remained the world's most widely used pipe flexibility and stress analysis software. A complete solution for quick and accurate analysis of piping systems subjected to a wide variety of loads, CAESAR II addresses weight, pressure, thermal, seismic, and other static and dynamic conditions, based on user-defined variables and accepted industry guidelines.

CAESAR II can analyze piping systems of virtually any size or complexity, whether you are designing a new system or troubleshooting an existing one. Plus, CAESAR II features direct integration between CAD design tools (such as CADWorx Plant and Intergraph Smart® 3D) and analysis. This means engineers and designers can easily share information while keeping their drawing and related information synchronized.

With CAESAR II, you can do more in less time and deliver more accurate results.

PV Elite®

Vessel and Exchanger Analysis Made Simple

PV Elite provides engineers, designers, estimators, fabricators and inspectors with solutions that match their pressure vessel and heat exchanger design needs. Because the software is user-friendly, it is perfect for both regular and occasional users requiring fast startup and confidence in their safety code calculations.

PV Elite is a complete solution for the quick and intuitive design of new pressure vessels. It also evaluates and re-rates existing vessels, including fitness for service analysis. The software considers the whole vessel, addressing all of the wall thickness rules and stress analysis requirements for vertical towers, horizontal vessels and heat exchangers. You can also evaluate individual vessel components.

Users benefit from faster workflows thanks to tubesheet design and analysis, rectangular and non-circular vessel analysis and individual component analysis. PV Elite boosts confidence in your safety code calculations with the software's design tools and wizards, plus comprehensive error checking to deliver clear, concise and accurate results.

GT STRUDL®

Structural Analysis and Design Modeling Software

For 40 years, GT STRUDL has offered structural engineers a complete design solution and we've now incorporated 3D CAD modeling and 64-bit high-performance computation solvers into all versions.

Our structural analysis software is a high-quality, interoperable, and data driven system for comprehensive frame and finite element analysis, including international design codes for both steel and reinforced concrete.

GT STRUDL includes all the tools necessary to analyze a broad range of structural engineering and finite element analysis problems, including linear and nonlinear static and dynamic analysis, and can do so accurately in a fraction of the time of most other solutions. GT STRUDL is completely interoperable with modeling packages such as Intergraph Smart 3D and CADWorx® Structure.

The CAD modeler user interface offers BricsCAD and AutoCAD environments that enable structural engineers to easily model, analyze and design the most complex structures.

Dramatic Time and Cost Savings

With CADWorx & Analysis Solutions' design and engineering offerings, designers and engineers can collaborate in real-time. Users located around the world can share information on projects with complete accuracy and synchronization of effort. This eliminates redundancies and reduces errors and delays throughout the process.

Enjoy faster and greater returns on investment because you can start designing right away. Projects are quick to set up and cost less to:

- Design
- Analyze
- Build
- Operate

The Leading Edge

Hexagon's PPM division keeps pace with changes in international standards and codes, so you are always assured of up-to-date, internationally-viable output. We closely monitor industry trends and new technologies to keep you on the leading edge of plant design and engineering.

Industry Applications

- **Mining**
- **Pipelines/Offshore**
  - Buried pipe
  - Intra-plant pipe
  - Transmission lines
- **Power**
  - Co-generation
  - Coal
  - Gas
  - Hydroelectric
  - Nuclear
- **Nuclear Plants**
  - Pipe Stress Analysis
  - Structural
  - NQA-1 Compliance
- **Process Facilities**
  - Chemical
  - Food & beverage
  - Petrochemical
  - Pharmaceuticals
  - Natural gas
  - Offshore
  - Refineries
  - Semiconductors
- **Structural/ Buildings**
  - Architectural
  - Building services
  - Equipment
  - HVAC
  - Steelwork
- **Shipbuilding**
- **Storage tanks**

About Hexagon

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

Our technologies are shaping urban and production ecosystems to become increasingly connected and autonomous — ensuring a scalable, sustainable future.

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.