



EMPRESARIOS AGRUPADOS, SPAIN

Key Facts

Company: EMPRESARIOS AGRUPADOS

Website:

www.empresariosagrupados.es

Industry: Energy

Country: Spain

Products Used:

- Intergraph Smart® 3D
- Intergraph Smart Review
- Intergraph Smart P&ID
- Intergraph Smart Instrumentation
- Intergraph Smart Electrical
- SmartPlant Foundation
- PDS®
- CAESAR II®

Key Benefits:

- Improved data quality
- Time savings in repetitive engineering processes due to automation
- Minimised construction and assembly problems due to interference control processes
- Enhanced efficiency due to automation and software integration
- Better data reuse capabilities between projects

HEXAGON PPM SOLUTIONS SUPPORTING SUCCESS IN THE POWER GENERATION INDUSTRY

Leading architect-engineering company improves project design data and interrelations with customised SmartPlant® Enterprise solutions

Established in Spain in 1971 and a leader in its field, EMPRESARIOS AGRUPADOS (EA) is an architect-engineering organisation of international standing and diversified activity, operating mainly in the field of power generation.

IDENTIFYING GOALS

EMPRESARIOS AGRUPADOS (EA), one of the largest Spanish engineering companies specialising in the power generation industry, has succeeded internationally with Hexagon PPM SmartPlant® solutions. The company is currently using the SmartPlant suite in most of its engineering projects around the globe. As a long-time Hexagon PPM customer, EA is acquainted with the interoperability of the SmartPlant Enterprise suite and has customised the software in an exceptional manner. This customisation enabled EA to further improve the integration between solutions and enhance engineering efficiency and accuracy.

Hexagon PPM solutions were selected due to them becoming a market standard for integrated engineering disciplines. Since its original implementation, SmartPlant Foundation-based integrated solution has been used as the basis for EA's engineering information management system.

Integration between SmartPlant Enterprise tools and EA's existing systems was needed to ensure a successful implementation. This integration capability also became key to obtaining the expected productivity and quality improvements. These systems include both existing in-house programs for engineering design and calculation as well as the repository documentation system.

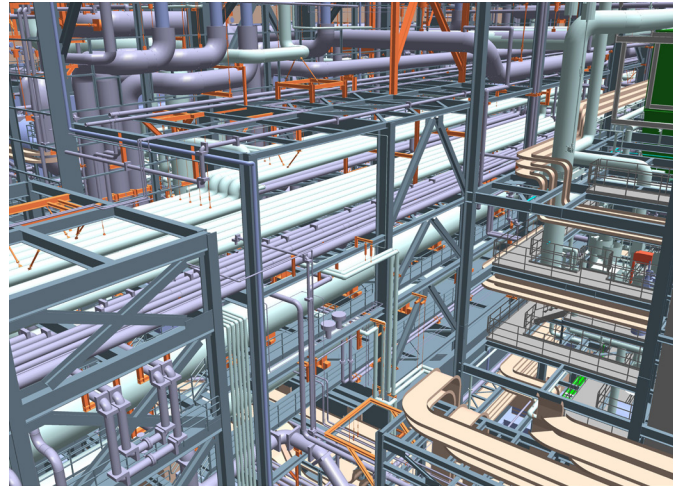


GETTING RESULTS

EA is using Hexagon PPM solutions in most of its engineering projects in the energy industry globally. EA has customised its SmartPlant Enterprise suite for each discipline, most notably:

- Automation of the design and calculation of typical pipe and cable tray supports in Intergraph Smart® 3D. This has provided significant productivity and quality improvements.
- Implementation of Intergraph Smart Electrical for all the electric wiring diagrams and logic diagrams. This has automated a large amount of schematic generation reducing elapsed times.
- Improvement and customisation of SmartPlant P&ID to maximise the capability to reuse engineering information to better integrate with Smart Instrumentation and Smart 3D.
- Integration of SmartPlant Foundation publishing workflows with those in the EA's documentation management system to simplify issuing of engineering and design documentation.
- Improving how information is accessed and managed. The engineer or designer can use Smart 3D and SmartPlant P&ID to check with a single click the information of the equipment, manufacturer drawings, etc. that are hosted in the EA document management system.
- Enhancing the interference management processes, ATEX area management, escape routes and passage areas in the Smart 3D model. This has been done by implementing the solutions based on a 'rule checker system' that helps to avoid errors whilst streamlining processes.
- Automation in Smart 3D, which generates a structural analysis model for non-typical large pipe supports. These calculate and automatically update the support Smart 3D model.

J. García Rendón, IT Project Manager at Empresarios Agrupados said: "The high integration level of the software suite and the capability to better share data between disciplines improve engineering quality while process automation enhances efficiency. As more processes are automated and all disciplines have access to the same information, we have witnessed significant time savings, for example during pipe support design. Our experience



An example of a 3D plant model built with Intergraph Smart 3D.

highlights SmartPlant Enterprise's potential and capabilities for integration and automation. It also showcases how SmartPlant Enterprise can contribute to a major improvement in work processes".

MOVING FORWARD

EA is using the SmartPlant Enterprise system to successfully complete the engineering and design of 20 power generation plants including coal, fuel, solar and combined cycle projects. These include some of the largest projects in the world.

Although the system is highly mature, there is always room for improvement when it comes to the use of new functionalities and products.

"We have always worked closely with Hexagon PPM to share all of the issues, experiences and successes we have had and have received the support we have needed. The automations made in SmartPlant Enterprise suite are bringing us a competitive advantage we need to perform better in the power generation industry. In addition, this helps us to offer our customers more added value", J. García Rendón, IT Project Manager at Empresarios Agrupados, concluded.

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](https://www.hexagon.com) and follow us @HexagonAB.