ORACLE AGILE PLM FOR INDUSTRIAL MANUFACTURING

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AGILE FOR INDUSTRIAL MANUFACTURING

BENEFITS
- Enables manufacturers to manage complex product development activities across organizations, suppliers, and customers
- Special suitability for enterprises in the range of manufacturing, machine and equipment construction and automotive supplier
- Encapsulates a comprehensive understanding of the product engineering process for Industrial Manufacturing.
- By focusing on specific aspects of the product lifecycle, Agile PLM for Industrial Manufacturing allows manufacturers to implement PLM as a series of smaller projects that guarantee success and provide return-on-investment in months, not years.

Oracle's Agile product lifecycle management (PLM) solutions enable companies to accelerate product innovation and maximize product profitability by managing the information, processes, and decisions about products throughout their lifecycles and across the global product network. Companies can increase profits, reduce costs and achieve quality improvements, while ensuring compliance with regulatory requirements and accelerate innovation. The Agile PLM platform provides seamless links with existing IT environments, complete support for decision-making and performance to support collaborative processes in the product life cycle.

Agile PLM is built on a standards-based, secure and scalable platform, and can be implemented quickly and efficiently. Built on best-practice, Agile PLM solutions help you to achieve optimal results with your products.
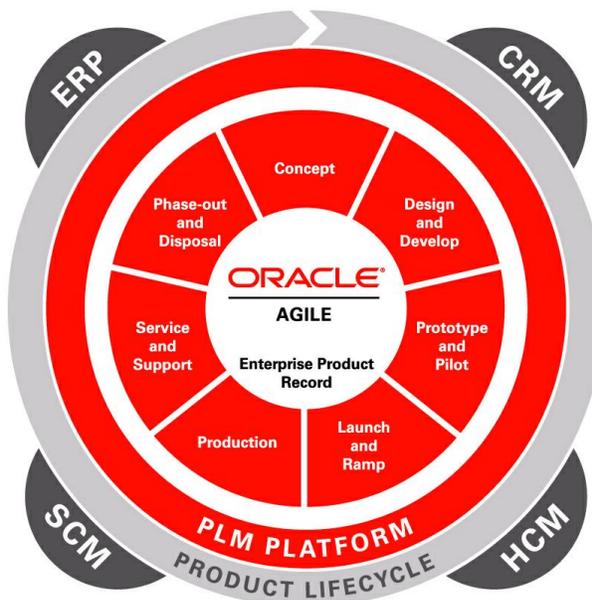
SUPPORTING THE CRITICAL BUSINES PROCESSES OF THE PRODUCT LIFECYCLE

Constant support of the critical business processes in the product life cycle

Shorter realization time for Engineering Change Orders (ECOs)

Shorter development time for product innovations

Agile PLM for Industrial Manufacturing supports the critical business processes beginning with the concept, through design and development, prototyping and piloting to market introduction, the start of the production run, production to service, support and product phase out as well as disposal. The solution links customers, sales, engineering and manufacturing into a single, globally-used environment. Functions in the area of requirements management and comprehensive function of historicizing ensure the linkage of the requirements from concept- and design to product configuration. Thus, changes can be traced in the product life cycle and it is ensured that the product meets customer requirements.

The Enterprise Product Record is the core of Agile PLM for Industrial Manufacturing, where all information about a product is managed in a structured manner. The Product Record contains Bills Of Material, Product requirements, article master data, CAD Information and other documents as well as information on product changes and rules on the configuration of product variants.

The Product Record is the central hub used for reducing coordination efforts in the process of provisioning product data to sales, service, engineering, purchasing, production plus development partners and suppliers. The product record can be extended with customer specific objects.

The structured linkage of product information in the product record makes sure that for example the effects of engineering change orders can be checked immediately. In doing so, you can make sure that customer requirements can be fulfilled.

Elaborated Access Controls make sure that intellectual property is secured, while required communication across the enterprise is enforced. Business processes in the area of new construction / innovation, bespoke modifications and variant configuration are supported.

Assessment of Requirements and Design Concept

Agile PLM for Industrial Manufacturing supports the planning and controlling of product platforms and portfolios, program plans and project requirements. Companies can enforce a cross-functional approach in the planning, development, production and servicing of complex industrial products, focusing on program performance, cost reduction and product quality.

This enables effective planning and execution of projects running in parallel. Companies can keep control of resources, cost, schedule,

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performance modules and key performance indicators with Agile PLM for Industrial Manufacturing. They can keep all development and manufacturing partners in sync with one central, web based product record, accessible by all participants in the supply chain.

Through the standardization of components and platforms, the optimum, repeated use of the know-how is made possible. Tenders and quotations are fully supported, customer and market requirements are captured and controlled by the system, and traceably shown for the downstream areas of design, planning, tendering, manufacturing and service. As a result, purchasing decisions are made on the basis of objective performance criteria.

Design & Development

Agile PLM for Industrial Manufacturing offers optimized support for contract manufacturing and manufacturing of custom-made products. The system manages large, complex product information, including for mechanical, electrical components and software components. The management of complex design and analysis of content that was created with MCAD, ECAD, software and authoring tools, relieves engineers from manual work.

The system also provides the design of repeatable and measurable business processes across the entire product data management platform. This includes all development activities in the fields of mechanics, electronics and software, ensuring customer expectations and commitments are met.

Prototyping & Piloting

Agile PLM for Industrial Manufacturing enables the coordination of outsourcing to globally distributed development and production partner, as well as effective communication of Engineering Change Orders to all parties involved. Since errors are reduced in the interpretation of customer and marketing requirements, companies can even avoid a relevant number of ECOs.

With all project or location-spreading activities the intellectual property is protected by Agile PLM.

Market Launch and Start of Production Run

With Agile PLM for Industrial Manufacturing companies achieve the complete, consistent integration with ERP and other systems to create bills of material, amendments, and communication within the

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company and with the suppliers.

The system allows the analysis of supplier performance and costs, in order to find the best partners. The close link between development and purchasing with suppliers ensures that externally purchased components and sub systems meet the quality, schedule and cost requirements

Production

The coordination of cost reduction programs in cooperation with suppliers reduces production costs. Actual product configurations are reflected in the system, ready to be used not only in production, but also in the other departments like sales or service. Overheads are reduced by the use of electronic communication of product information in the area of sales, service, engineering, procurement, production and supply chain.

Service & Support

Relevant product information is documented in the global product record „as maintained". This helps significantly with troubleshooting and root cause analysis during planning and execution of maintenance, repair and improvement work.

Required time for response, planning and implementation of job-related or customer-specific service and maintenance projects can be reduced significantly. Agile PLM for Industrial Manufacturing enables a comprehensive Post-Sales Service and Support, because all product configuration changes made by services, the coordination of service engineers, customer support and engineering can be managed by the system.

Product Phase Out & Disposal

Agile PLM for Industrial Manufacturing supports the coordination of the product phase out of spare parts from the supplier network as well as monitoring of compliance with recycling regulations.

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CENTRAL FEATURES AND FUNCTIONS

Document Management

Centrally manages technical product information assets with vaulting, access control, history and revision control, lifecycle management, viewing, redlining, and printing of common engineering documents such as project plans, requirements specifications, engineering studies, and images.

According to their privileges and function in the context of a project, users receive access to technical documents. Entitled users can view document-trails and functions of change management from any computer in the company network.

The direct integration with Microsoft Office applications allows users to search and manage information from their familiar working environment. They can query for author, version, topic and content.

The integration of the Oracle AutoVue viewer supports viewing various data formats and the creation of markups and comments.

Templates for documents, PLM- and business processes make sure that technical documents remain at a high standard with fewer errors. These templates can be easily defined and then implemented across the enterprise. Automatic document creation allows for global reading access to important documents. These documents can be made available in alternative data formats like pdf.

Unique document and version numbers can be assigned automatically, with fully definable sequencing. Diverse requirements of suppliers or customers can be managed with external numbering management functions.

Product Data Management

With Product Data Management, Agile PLM for Industrial Manufacturing is the perfect solution for the complete, secured and clear administration of the product definition. The emphasis is on technical information on projects, items, and bills of material. All information is consistent and centrally available from design concept to the finished product.

BOM articles and the structure are created by means of easy-to-use templates and drag-and-drop, or they can be included automatically by using authoring tools (CAD).

The flexible copy-and paste functionality helps duplicating complex product structures and the mapping of new part numbers or version numbers. Fundamental attribute definitions and query functions can

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be extended by classifications. Version control and approval workflows enable a comprehensive status management. The product structure can be viewed in the context of construction or manufacturing. Effective BOM comparisons enable the analysis of two versions of the same or two different BOMs.

The system allows searching of common parts based on geometry-characteristics. Companies can use this feature in the integrated development process, in order to enable part re-use and improvement of effectiveness in the development of components.

Variant BOMs help manage various product variants in the same BOM, and process them order specific, based on configuration rules. On top of that, Agile PLM for Industrial Manufacturing supports alternative parts, spare parts and optional parts on all BOM levels.

The neutral product structure helps building BOMs. Users can predefine must-have / can-have parts and their respective attributes. Check routines make sure that BOMs are created based on requirements.

Configuration Management (CM) extends the fundamental functions of managing structures by a serial number - based configuration management, integrated in approval and change management processes. Users can define and manufacture product configurations based on customer requirements. Individual configurations can be tracked and managed.

Project Management capabilities include comprehensive functionality of projects and project structures. These structures can be refined horizontally or vertically. By mapping an employee to a project, users can also define the function of the employee in the project.

The creation and management of a hierarchical classification system is possible for most of the objects like norm parts, standard parts, sub-assemblies, documents and projects. One object can be mapped to many classifications. Attributes and other classifications can be inherited.

Agile PLM for Industrial Manufacturing organizes and manages product design data supporting globally distributed engineering teams developing "Engineering-to-Order" and "Configure to-Order" type of products. The solution integrates conceptual design through release to manufacturing by integrating BOM, CAD, change management, and ERP activities as a seamless, project based design chain.

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Supported Integrations to MCAD Systems: AutoCAD, Catia V4, Catia V5, Eplan 5, I-deas, Inventor, OneSpace, Solid Edge, Pro/Engineer, SolidWorks, SolidDesigner, ME10, Medusa, Euclid und Unigraphics NX u.a.

Supported Integrations to ECAD Systemen: Mentor Graphics, Cadence, Zuken, ViewLogic, PADS, Protel, Incases, EPLAN, Ruplan, ELCAD, Veribest, Integra Station, ORCAD, e3 u.a.

Supported Integrations to Software and Firmware: Clearcase, PVCS, Altera, Actel, Intel, Xlinx, Motorola, LatticeLogic u.a.

Supported Integrations to Desktop Publishing Systems like Framemaker, Arbortext, Broadvision and InDesign as well as ERP Systems like SAP, Oracle E-Business Suite, Oracle JD Edwards, Baan, PSI Penta, and Microsoft Axapta

Multi-CAD Support and Integrations

Agile PLM for Industrial Manufacturing supports the integration of various CAD applications (CAD for mechanical, electrical and electronic) and authoring tools with PLM.

Customers are not required to use a specific tool, but can leverage flexibility and choice for using various CAD tools in the enterprise, while enforcing the usage of a single PLM system.

The tight integration with the Oracle AutoVue viewer supports viewing diverse data formats and the creation of comments and mark-ups.

The combined usage of the Oracle AutoVue viewer and Agile PLM for Industrial Manufacturing supports this requirement. Opening a document requires only to transfer the pixel information required for representation, not the actual document file. This avoids the local storage of documents.

On top of the integrations to CAD systems Agile PLM for Industrial Manufacturing is ready to integrate with software and firmware, MS-Office, desktop publishing systems, and of course ERP systems.

Distributed Working Model

Agile PLM for Industrial Manufacturing supports a distributed working model, for collaboration across plants and enterprises. System authorizations include role-based models, and can also be implemented based on project- and organization structures.

Global development teams can leverage the distributed, local access to documents. Access controls can be set up based on projects or organizational structures. The system always provides high performance access to relevant documents. Customers and partners get direct access only to relevant information in the PLM system.

The optional Workspace Management provides capabilities for creation, management, compression and loading of individual multi-layer workspaces, corresponding to folder structures on local drives.

Loaded files can be loaded to the respective CAD environment opened in a separate window, or transferred to the local workspace.

Interactive dialogs for the workspace management, detailed object definitions and comprehensive properties management enable user centric and effective business processes for highest productivity.

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More than 150 leading globally operating companies trust in the power of Agile PLM for Industrial Manufacturing.

Extensive Change Managemet

Product development is based on changes. Efficient change management processes, supported by workflows, are a critical success factor for development teams. A graphical workflow editor helps to model and manage business processes either enterprise specific or based on standards like CMII.

Oracle Agile PLM for Industrial Manufacturing contains pre-configured change management processes. These can be adapted to your needs and requirements. For example, with the mass changes function you can exchange one component in many building sets in one step. Integrated effect analysis shows the effect on other products.

Depending on your preferred working mode you can describe and evaluate changes before execution. This recipe-based method avoids effort and loss of information in the process of capturing change order requests.

Development teams use Oracle AutoVue markups to collaboratively manage and edit documents and save evaluations and change orders as markups.

Configuration And Flexibility

Agile PLM for Industrial Manufacturing offers very flexible tools for the adaption of user interface and business logic. Changes are managed in a repository. Also with an upgrade on newer releases your settings remain, in order to protect your investment in Oracle Agile PLM for Industrial Manufacturing.

CONTACT

For more information about Oracle Agile PLM for Industrial Manufacturing, please visit http://www.oracle.com/goto/plmsolutionspace or call +498001824145 to speak to an Oracle representative

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