Going beyond conventional Computer Aided Design (CAD) to optimize engineering, program and construction management of offshore assets

Product Lifecycle Management (PLM) software for the future offshore fleet
## Energy and utilities
### Solution pillars

<table>
<thead>
<tr>
<th>Equipment design and manufacturing</th>
<th>Plant design and construction</th>
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<th>Capital project management</th>
<th>Plant operations and maintenance</th>
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Energy and utilities
Interaction across segments enhanced with PLM

Owners and operators
How do I operate, evaluate and modernize my assets to leverage them beyond their designed life?

EPCs and AECs
How do I handle the increase in product complexity and regulatory standards?

Services and equipment
How do I make products and services more efficient and reliable?
What is product lifecycle management?

- An enterprise level information strategy
- A comprehensive approach to innovation
- A common repository of information and processes
Customer success story
GE Oil & Gas benefits from intelligently integrated information

Challenges:
• Complexity
  Long cycle time, engineered-to-order, global teams
• On time delivery
  Multiple business functions, orchestration, impact of change
• Quality
  Information traceability, robust workflows, third parties

Solution:
Siemens PLM solutions used in pre-sales business for inquiry to order process management including proposal configuration, BOM generation, cost estimation, proposal generation, and handover to projects

Results:
Successful go-live in 2009 and remains a critical solution for proposal quality control. Solution presentation at Siemens PLM Connections 2013.
Realizing the product lifecycle management vision for offshore and shipbuilding

PLM helps you manage project complexity by giving everyone the right information in the right context to make fast, accurate decisions.
Basic capabilities of the product lifecycle management environment

- Advanced open solutions for the entire lifecycle
- Built to solve key project challenges
- Supporting everyone in your process
Customer success story
Siemens energy benefits from intelligently integrated information

Challenges:
• Multiple disconnected data management systems
• Design data not available globally
• No integration between engineering and projects
• Innovation time-to-market too long

Solution:
Siemens leverages its own tools to solve its most complex challenges, leveraging teamcenter to connect multiple engineering hubs to the global logistics and project execution processes

Results:
Successful go-live in 2011 and solution continues to expand as Siemens invests in new markets in (e.g. Russia, China, Saudi Arabia) and new business lines (e.g. IGCC, nuclear, oil and gas technologies)
Basic capabilities of the product lifecycle management environment

Siemens PLM software:
(Industry-leading products supporting key domains)

- Lifecycle collaboration
- Product engineering
- Specialized engineering
- Simulation and test
- Manufacturing engineering
- Mainstream engineering
Energy and utilities
Intelligently integrated information provides control and consistency

Siemens knows that successful energy solutions require coordination across multiple disciplines
Siemens product lifecycle management software product portfolio

DIGITAL LIFECYCLE MANAGEMENT
• Collaborate & innovate more intelligently...

DIGITAL human factors and logistics
• Analytical event simulation...

Process design, FEED, ops and modernization.
• Integrated engineering to integrated operations

DIGITAL PRODUCT DEVELOPMENT
• Design and engineer better products faster...

DIGITAL SYSTEMS DEVELOPMENT
• Systems modeling and simulation...
Energy and utilities
Siemens unique solution for intelligently integrated information across equipment and plant lifecycles NX – teamcenter – COMOS integration
Product lifecycle management for the offshore and shipbuilding
We are happy to answer your questions!