



PLM World 2006

Teamcenter Enterprise :

Design to Order – Competitive Excellence with Teamcenter and NX

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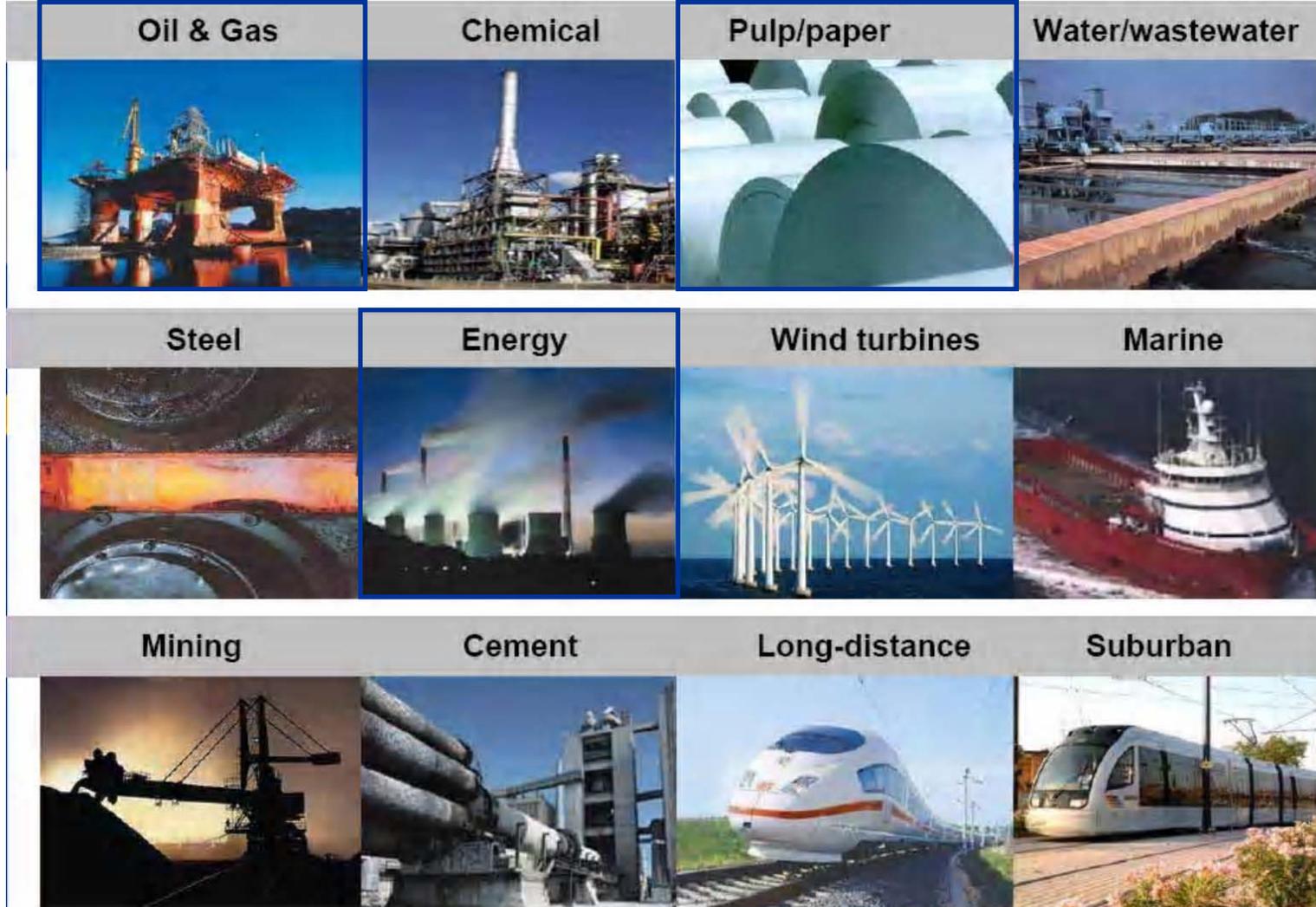
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Siemens A&D LD – Industry sectors

- A&D LD S Berlin
- Company**
- Situation
- Solution / Process
- Highlights



Siemens A&D LD S – Products

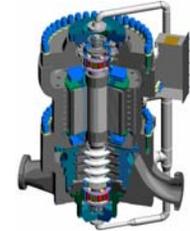
A&D LD S Berlin

Company

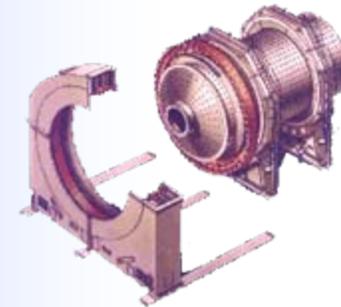
Situation

Solution / Process

Highlights



The **Dynamowerk Berlin** is specialised in designing and manufacturing **special HV-machines** for **multiple** applications for **all** customers.
Power range up to 100 MW





Order Challenges @ Siemens A&D LD S

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Company

Situation

Solution / Process

Highlights

- **Design to order**
 - **Large industry range of Siemens customers requires design to order for the machines**
 - **Every machine is unique**
 - **Precisely adapted to specific customer requirements and individual needs**
- **Keep machine platform concept**
 - **Control cost of sales**
 - **Control engineering costs**
 - **Control entire cycle time (manufacturing and engineering)**



Application engineering

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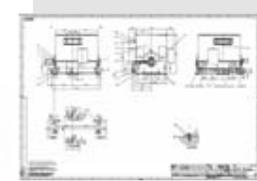
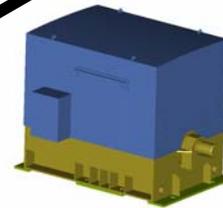
Company

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Solution / Process

Highlights

Standard machine with a high degree of flexibility



Customized machine concept

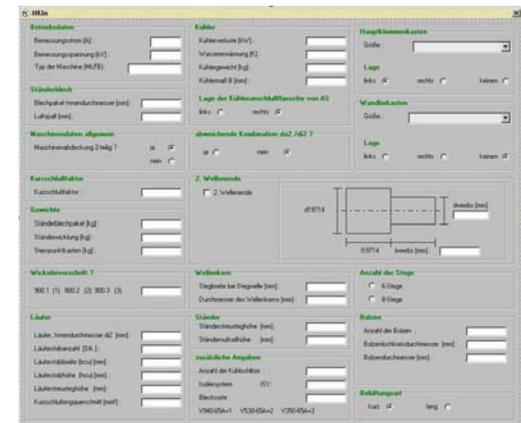
Modification acc. to customer requirements

3D-CAD model and Drawing generation

Mechanical engineering

Electrical engineering

Customer data



Initial Situation

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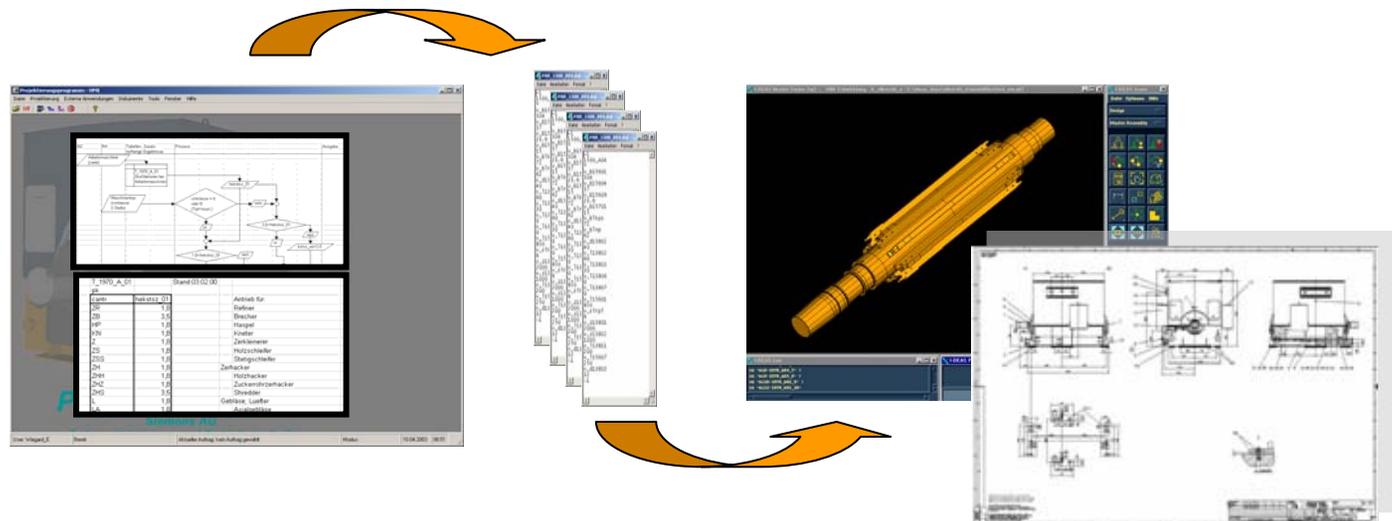
Company

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Solution / Process

Highlights

- CAD-System I-deas with TDM
- Project engineering based on master models
- Full automated design process
- Low user acceptance because of the drawing quality
- High engineering cycle time for drawing detailing





Requirements for the new H-modyn Process

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Situation

Solution / Process

Highlights

- **Use of NX/TC**
- **Reduce engineering costs** 
- **Reduce engineering cycle time by 50%** 
- **Increase process output possibility by 100%**
- **Keep automated design process**
- **Usage of master models (parts and assemblies)**
- **Usage of available standard parts**
- **No administrative and user interaction during the engineering process** 
- **To realize these requirements Siemens and UGS launched the project „H-modyn process redesign“ ...**



Current Situation

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Company

Situation

Solution / Process

Highlights

- **NX with Teamcenter (70 user)**
- **Automated process**
- **Project engineering of entire machine in 3D**
- **Automated generation of 2D-drawings with highest quality**
- **Project engineering based on master models**
- **Machines according to customer requirements based on the Siemens machine platform**
- **How did we reach that...**

Engineering Process – H-modyn

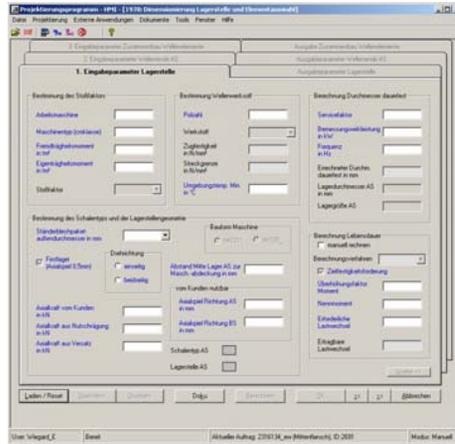
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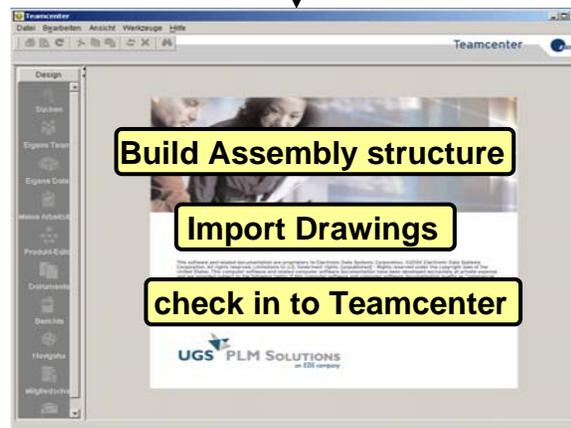
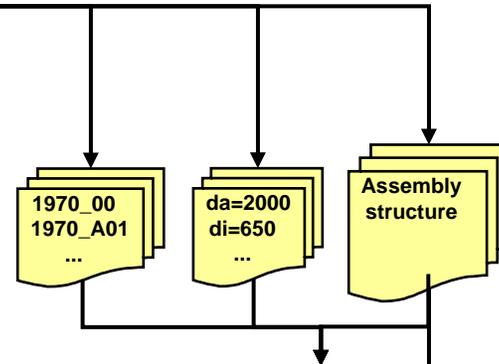
Situation

Solution / Process

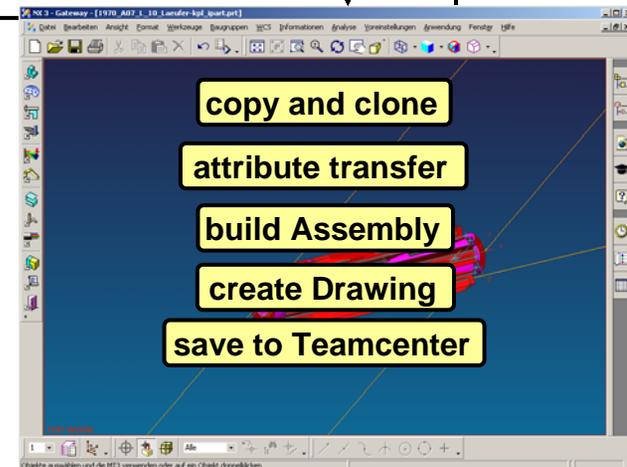
Highlights



Project Engineering Tool



Teamcenter



NX



Movie

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- Company
- Situation
- Solution / Process
- Highlights





Highlights

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Company

Situation

Solution / Process

Highlights

- **Reduced engineering cycle time by 50%**
- **Increased process output possibility by 100%**
- **Increased process output quality**
- **No administrative and user interaction**
- **Resolve complex customer requirements based on a standard platform**
- **Additional possibilities of sales support**
- **Improvement of proposal quality (use 3D data)**
- **UGS supported Siemens to reach the required goals with NX and Teamcenter**



Q&A – Thanks to

A&D LD S Berlin

Company

Situation

Solution / Process

Highlights

■ Project Team:

- **Gianni Di Loreto** (UGS)
- **Andreas Finkmann** (UGS)
- **André Gengenbach** (UGS)
- **Michael Lockner** (MiL-DaV)
- **Volker Lucaß** (Siemens)
- **Enrique Sato-Vidal** (UGS)
- **Erik Wiegard** (Siemens)
- **René Wojatzki** (Siemens)

■ Development Support:

- **Jim Albrecht** (UGS)
- **Denny Chitwood** (UGS)
- **Stuart Pond** (UGS)

■ Presentation Support:

- **Mark Bailey** (UGS, Video)
- **Christian Reineke** (UGS, Video, Pictures)

SIEMENS