

CADISON WORLD

Experiences & News

2010 | Issue 1



Driven by a focus on better project planning, engineering, and project data integration leading to higher efficiency and faster time-to-completion

Integrated Digital Plant Model

CADISON

CADISON[®]

CADISON add-on modules

CADISON Engineer2Web

CADISON Archiver

CADISON ERP-Interface

CADISON ROHR2-Interface

CADISON API

CADISON Maintenance

CADISON Steel

CADISON Material Designer

CADISON Navisworks

CADISON Project-Engineer

CADISON Project-Navigator

CADISON P&ID-Designer

CADISON 3D-Designer

CADISON Electric-Designer

CADISON MATPIPE

CADISON workstation tools

© Julius Moritz GmbH
— generiert using CADISON technology —

ciC 2010

CADISON International Conference 2010

The next conference will take place from 30th September until 1st October, 2010 in Darmstadt, Germany. More details will follow shortly. If you have suggestions or topics, please do not hesitate to contact us by e-mail: cadison@itandfactory.com.

“ Although until recently CAD/CAE systems were the best way to ensure competitiveness in the plant design process, the time has come to migrate to the next stage of optimization, namely the integration of all project data.

Our answer to our customer’s need for integrated data, increased engineering efficiency and ease-of-learning is CADISON... Integrated Digital Plant Model. ”

Hello,

I am delighted to share with you the information in this issue and the progress we are making with the differentiated approach to plant engineering.

Since inception our philosophy has been to focus on meeting the needs of ‘Project Engineering’ and not just create the best CAD driven system as many have attempted. CADISON’s object oriented data model for the various application domains saves time & money by allowing for the integration of all planning phases.

Our approach also considered the difficulty of recruiting & retaining specialized expensive CAD operators using competitive products. Hence, we have leveraged the most popular platforms, namely AutoCAD and Visio Professional to deliver our outstanding ‘Plant Engineering’ solution that is open and more efficient for our customers.

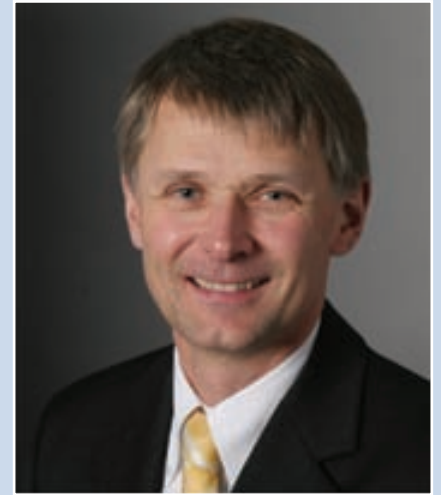
We now believe that the next generation of efficiency improving solutions will have to be segment-specific instead of a generic solution for all segments and hence our future road-map represents this thinking.

Over the last three years we have also developed capabilities to assist our customers in project implementation with our engineering services team(s) and domain experts in India and Germany going beyond selling, training and consulting activities.

I am pleased to share with you some of our customer case-studies, examples of how organizations (small & large) are benefiting from our CADISON solution. I hope CADISON will help all our customers execute projects more efficiently and with lesser costs compared to usage of other CAD driven systems.

I look forward to see some of you in the upcoming CADISON International Conference 2010 that will take place from September 30th, 2010 until October 1st, 2010 in Darmstadt, Germany.

Warm regards,
Georg Kremer



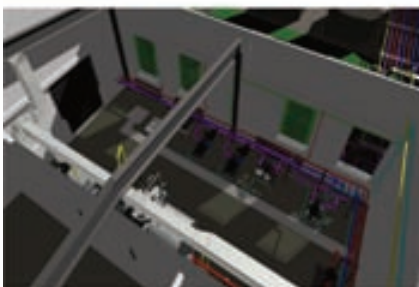
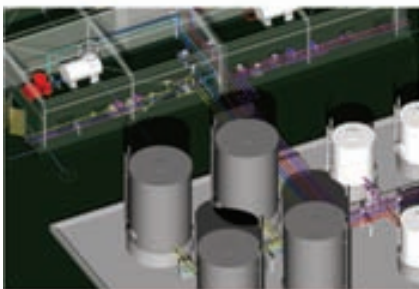
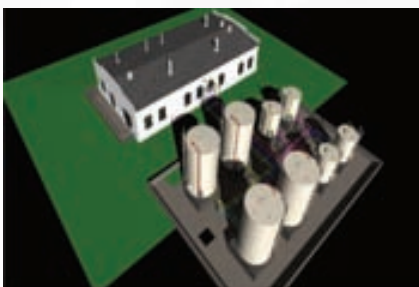
Georg Kremer
Managing Director
ITandFactory GmbH



ITandFactory HQ
Bad Soden (Germany)
Near Frankfurt



How "Energotehprom" Ltd Deployed CADISON for a 110MW Power plant project in Ukraine



"Energotehprom" Ltd (ETP) creates high-efficient systems of heat and power energy based on the modern gas turbine and steam gas technologies. ETP is involved in creating heat and power supply systems - from development of the investment offers to building of the turnkey power engineering objects.

ETP leveraged CADISON for an Oil cleaning plant for a 110 MW Power plant in Ukraine. The ITandFactory team worked closely with ETP on the Start-Up strategy, workflow analysis and CADISON training was followed by coaching and Software customization.

The benefits included structured and better quality drawings with more details. 3D modeling ensured automatic section Views and the tagging system KKS in CADISON saved a lot of time. The orientation in the project was a new experience e.g. labeling Valves and Pipeline. The errors in the project were nearly reduced to 0%. Work automation included Clash detection and Spec (Report) creation.

A comprehensive professional 3D integrated engineering tool that provides a central data bank solution to improve inter-disciplinary workflows, produces updated part lists for the company's ERP system and uses existing AutoCAD investments.



Dipl.-Ing. Silvio Sturm
Design/System Technology Div
AEL Appratabau, Leisnig

“AutoCAD was commonly used in the company already. So our choice of CADISON ensured that data exchange between our own divisions would function without any problems from the very beginning. The CADISON choice also fit into our financial framework better compared to other solutions.”

“As a plant design and plant erection contractor, we have to work on an inter-disciplinary basis, paying attention to pipelines, tanks & vessels, electrical, measuring and control engineering. And our choice to achieve the task was CADISON. We chose Navisworks for our visualization, and clash detection needs which CADISON works well with. We like the ability of CADISON to work with other tools in an integrated way.”

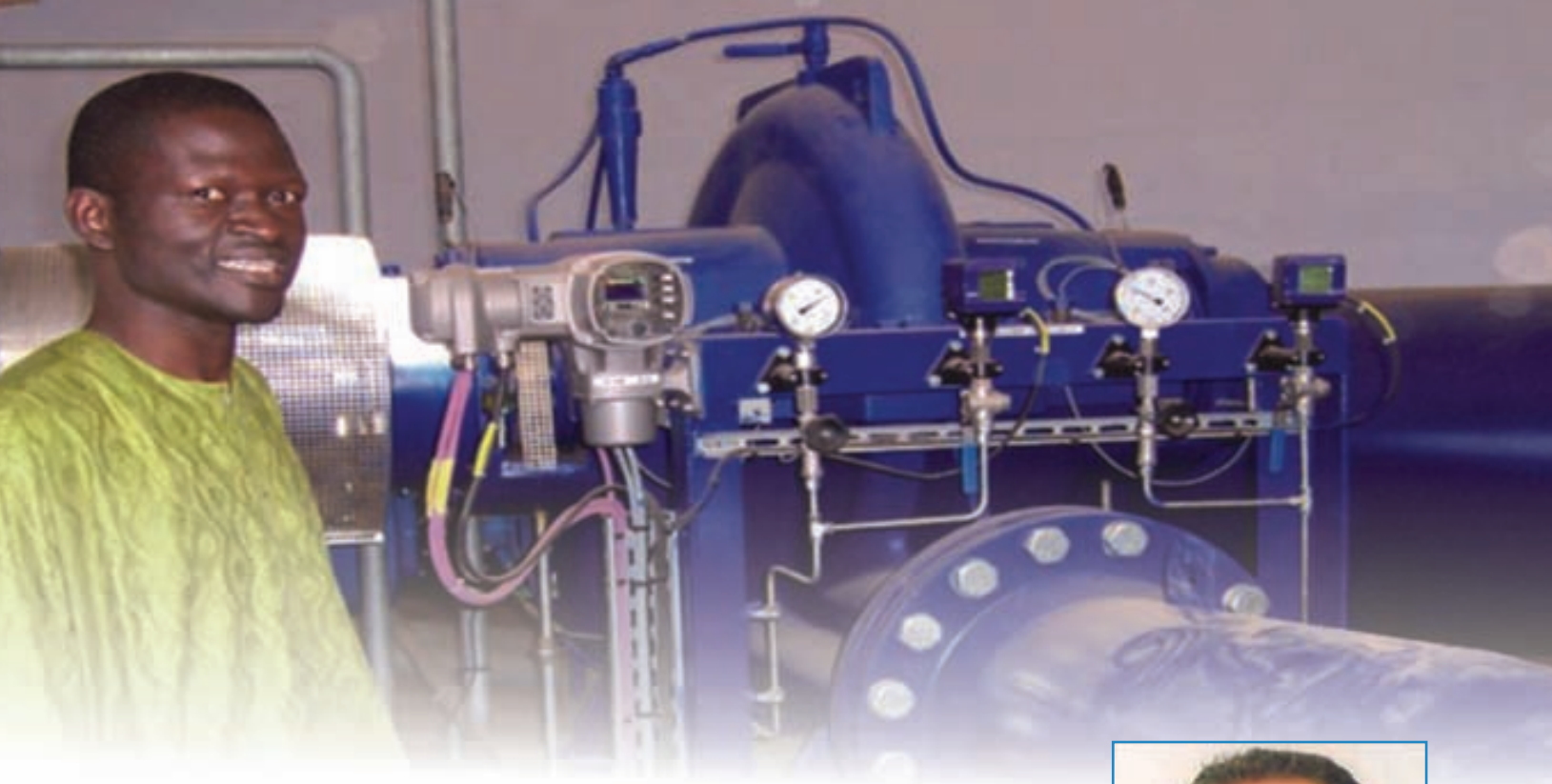


Dipl.- Ing. Jürgen Stegger, M.D.
Borsig Membrane Technology
GmbH



Jürgen Pagel
Head of Technology,
AMR-Engineering

“We are designing faster and more productive with CADISON. The interfaces between pipe diagrams, isometry and part lists work with identical data thus avoiding mistakes during transfer. There is more time for engineering and checking, orders for components can be sent earlier – an advantage from the point of view of quality and cost.”



Pump stations designed with CADISON supply water to people in Dakar

“ The combination of a planning tool based on AutoCAD enabling CAD planning while also allowing engineers to manage all CAD data in Project-Engineer is an ideal basis for our work.”



KSB Aktiengesellschaft
Alexander Schmitt, Plant Design,
Department T148, KSB AG

The water supply project "Project Eau à Long Terme" (PLT) aims at securing water supplies in Dakar in a long-term by expanding tapping capacity at Lac de Guiers, 200 km away, as well as developing long-distance water pipelines. In order to increase water transport volumes, a new booster station was built near Méckhé using funds from the Kreditanstalt für Wiederaufbau (KfW). The plant is designed as a closed system. The pump station is directly integrated in the two continuous pipelines.

CADISON modules installed at KSB Aktiengesellschaft

- Project-Engineer
- P&ID-Designer
- 3D-Designer
- MATPIPE
- PDM

KSB used CADISON for planning the pipeline systems and engineering of the entire water transport systems. The Méckhé Project involved basic engineering of the entire pump station and detailed engineering of the components as well as full delivery and for the first time in KSB history the planning of a pump station using CADISON.

The follow-up project in Senegal was also designed by KSB, enabling Alexander Schmitt to reuse a large share of the component data which in turn reduced the engineering effort.

CADISON provides automatic data synchronisation for LTH Dresden



Andreas Hiegelsberger,
Project Manager, Process Technology

“With CADISON we always know that the proposals and the calculations for the current planning phase will match up.”

CADISON modules installed at LTH Dresden

- Project-Engineer
- P&ID-Designer
- MATPIPE
- 8 licences



An LTH specialty: CreamoProt plants for the production of microparticle whey proteins

LTH Dresden is a specialist company in the areas of stainless steel processing and plant engineering for the foodstuffs industry. The challenge was automatic data synchronisation of planning changes – for the engineers and the decisive factor for choosing CADISON was that it could compile all of the components of a drawing into one calculation list. In planning for complex machine rooms or complete creameries this is a vital aspect for the company.

Visio P&ID-Designer 2010



Visio P&ID-Designer 2010

The workstation for engineering & sales

Visio P&ID-Designer 2010 contributes to the enhancement of your competitiveness. It is both user-friendly & cost-effective and ensures optimized productivity, compelling results & predictable budgeting. For fast creation of P&ID's this tool allows you to position previously defined components using the workstation's symbols library (in accordance with the (EN ISO 10628, ANSI etc.)



Visio P&ID Designer 

Based on your feedback

A practical tool for Engineers, Process experts, Managers who are not CAD savvy. Saves time and money without losing out on Project Data Integration.

CADISON customers will be pleased to know that we listened to your feedback in our conference 2 years ago and after an expenditure of Euro 280,000 in development and testing, we now offer you a good P&ID tool based on Visio Prof. 7 from Microsoft. We stay committed to listen to you and develop practical solutions that are portable, integrated, & can be used by many because of lower costs. How we continue to create value for you with our solution & services is important for us and your feedback is critical for us. By mid-2011, we will offer an upgrade at a reasonable price for Visio Prof. 10 version.



User informs User



Conference proceedings at the CiC 2008 in Essen, Germany

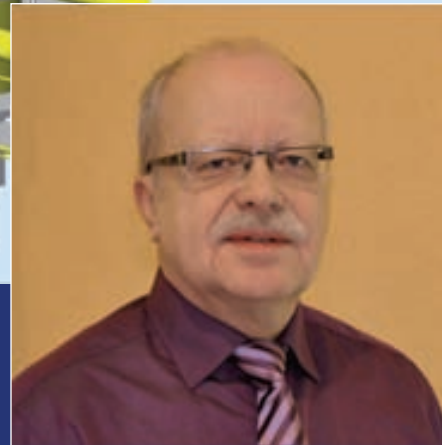
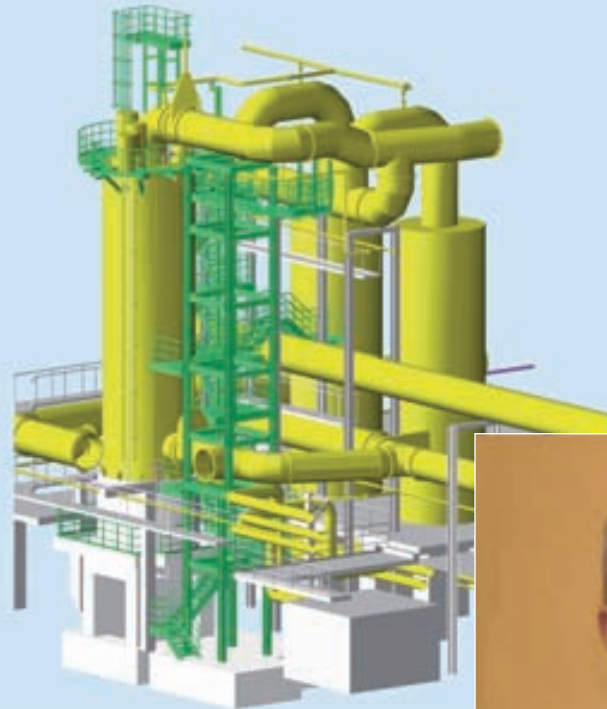
The Essen Conference in late 2008 marked the beginning of a new era for ITandFactory. Expansion into emerging markets and addition of development resources in Pune, India strengthens our ability to better service our customers.

“ The CADISON Conference in 2008 was set in the midst of an old coal mine which is now a historic site and a popular venue to hold conferences. ”



The coal mine : The location from which CADISON now has its image

AMR Engineering designs and manufactures machines and equipment for the chemical and pharmaceutical industry, power generation and metallurgy for more than 40 years. They use CADISON for all their design and manufacturing work.



Advantages of CADISON interface to ROHR2:

- Avoids erroneous inputs since no repeated data entry is required
- Use of standardized and acknowledged calculation methods
- Very quick analysis and calculation for evaluation of results
- Reduces the calculation costs in the range between 30 and 50 %.

"Handling of ROHR2 is relatively easy to learn. The challenge is the correct interpretation of calculation results and their implementation in the planning of actions that meet practical requirements. However, the planning engineer should have profound background knowledge of static analysis."

Dipl.-Ing. Jürgen Pagel, technical manager of AMR-Engineering

As an engineering company AMR-Engineering has been designer and manufacturer of machines and equipment for the chemical and pharmaceutical industry, power generation and metallurgy for more than 40 years. Some 40 % of AMR's turnover are covered by tank, steel and pipe construction. Consequently, it is not surprising to read that this engineering company has already been working with the calculation program ROHR2 for more than two decades.

Dipl.-Ing. Jürgen Pagel, technical manager of AMR-Engineering: "Stress calculation is obligatory in sensitive pipe systems in plant construction, especially in case of nuclear power generation. The customer stipulates this requirement in many different forms, or the applicable codes and standards are prescribed. In such cases we have to demonstrate that stress limits in the pipes are not exceeded. Sometimes it might be

necessary to simulate certain conditions, such as different operational states or even extreme load situations and hazardous incidents."

Jürgen Pagel understands it as decisive advantage that the engineering tool CADISON used since 2008 for 3D planning provides the interface to ROHR2: All relevant features of pipes designed in the 3D model may be transmitted to the stress calculation program via NTR file containing the describing data for analysis. "The 3D model initially generated with CADISON forms the basis for creation of pipeline isometrics. The data, i.e. the coordinates of pipes, valves, built-in components and connections are automatically transmitted via the interface to the calculation program. Thus our planning team may start its work directly from CADISON with stress calculations and the required analyses so that up to 30 % of time and effort can be saved."

Plant maintenance solution to create value for owners / operators

Lifecycle management for plant operations

The lifecycle of a plant averages in principle over a period of many years and within that time a lot of tasks need to be managed, such as regulatory matters, remodeling, plant optimization and maintenance. Time and cost optimization of these processes is a pivotal factor in terms of keeping the plant operator competitive.

A substantial amount of a plant's lifecycle data is defined and generated during the planning phase. The capacity to recycle this data directly back into the plant lifecycle by using the CADISON platform is the main advantage of that module. Thus it is now customary and altogether feasible to define and archive on an early engineering stage project data that will be used to operate a plant after roll-out. Result is that the plant designer can expand and optimize the scope of his services by transmitting these data, drawings and models to the plant operator for further use. Exactly for that special kind of work the CADISON Maintenance module has been designed.

CADISON Maintenance Online is an add-on application that allows for direct access to maintenance related information in the CADISON database. The tool integrates additional properties into the system that allows maintenance intervals to be freely configured and dependencies between them to be determined.

CADISON Maintenance Offline is an add-on tool that enables users to view and edit servicing data locally without accessing the main CADISON database. The application is user friendly, can be readily accessed via a Windows based computer and the user introduction on-site is very short.

Rainer Schmidt



“Safety forms the basis for our business,” is the maxim at United Initiators. This maxim is firmly anchored in the awareness of every employee and shapes their behaviour and the way they work. All technical activities, irrespective of whether these involve a new installation or a conversion, the introduction of or changes to production processes and workflows, are preceded by exhaustive hazard analyses conducted by highly qualified experts.

Owing to the properties of the products made and the raw materials used, the company equipment and its employees must meet very high requirements. Accordingly, the systems for monitoring and guaranteeing safety as well as for the continuous improvement of all processes are highly developed.

The tasks and responsibilities of the Technical Department comprise design and planning, new installations and conversions as well as maintenance, including performing all monitoring duties for all technical equipment on site. **As a key instrument for reliable and efficient processing, the planning tool Cadison is used.**

Another important criterion for this choice was migratability of data, which were in the past captured by a system provided by Evonik. Obviously, the team from IT and Factory managed this with flying colours, after all otherwise this talk would never have taken place in this form. “The migration of the legacy data was a real challenge,” stresses Rainer Schmidt, who is responsible for the technical revision/regular tests now controlled with Cadison. In a period of around five months, everything was finished. Strictly speaking, only four weeks were effectively needed to convert the documents of the 5 000 test cycles already completed. A certain haste was necessary as the next tests were already pending. “Migration always means a certain time in which the old system no longer functions, but the new one is not yet available,” Schmidt pointed out.

While prior to the introduction in June 2009, certain maintenance functions were already supported in the MRM module (Maintenance & Revision Management) from Cadison, these were not sufficient for the intended purpose. Special modifications were necessary. For the application at United Initiators, it is particularly important for a large number of different testing intervals to be meticulously maintained. The different types of test, e.g. TÜV (Technical Control Board) or mass tests, in connection with certain technical requirements for the objects, apparatus or machines to be tested must be supported by Cadison. Böttcher states, “United Initiator’s requirements aren’t particularly exotic.” Many owner/operators have to comply with similar test obligations, says the expert. The documentation within the Cadison MRM is now designed such that both the test specification and the test log as documentation is linked to the tested object. If any faults are detected during testing, subsequent remediation of these faults is also recorded in the IT system.

Excerpts from article in ‘**digitalPLANT Business + Engineering 2010**’

Westfalia Separator GmbH, a GEA group company, uses CADISON for one of its largest projects for construction of a 110,000 t/a bio-diesel system in Extremadura, Spain

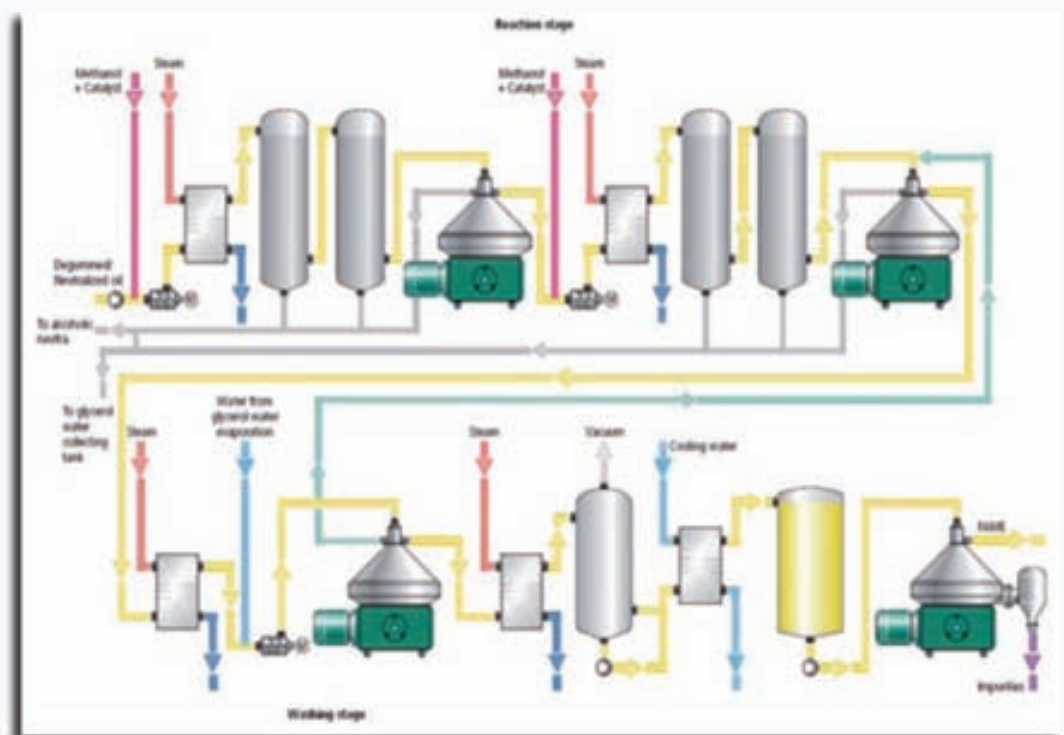
Six years ago, the engineers at Westfalia Separator implemented successfully CADISON as their engineering solution based on an intelligent 3D model. Today, approx. 180 work stations are currently equipped with CADISON at Westfalia Separator.

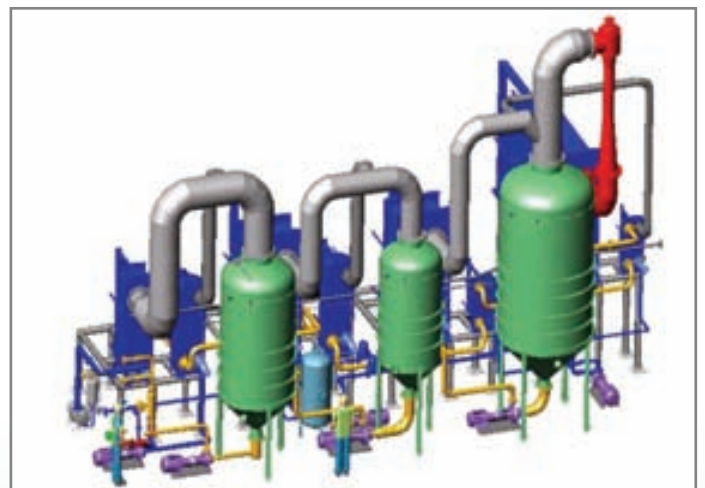
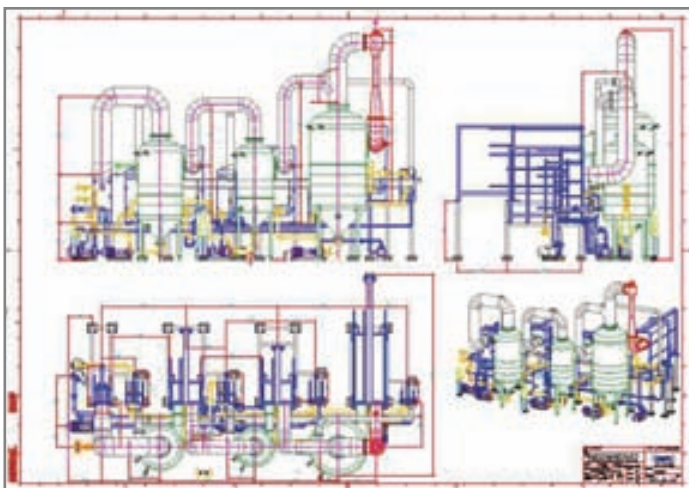


Achim Scholz,
Director
CAD/CAE Management & IT Services
Westfalia Separator

“Our goal was to handle approx. 50 percent of all projects via CADISON – especially the larger projects where several planners are simultaneously involved in plant design. We have achieved this goal. And we now process essentially more projects with the same number of employees.”

“Before that, we only had pure CAD systems such as Medusa and Auto-CAD enabling “drawings” on the screen – but without any additional intelligence. CADISON offered us the opportunity to work with an intelligent model supported by data and information.”





Alfa Laval, a world leader in heat transfer, centrifugal separation and fluid handling uses CADISON as an engineering tool. So users in 6 countries leverage CADISON for their engineering work and find re-use of data & models easier to implement in CADISON.

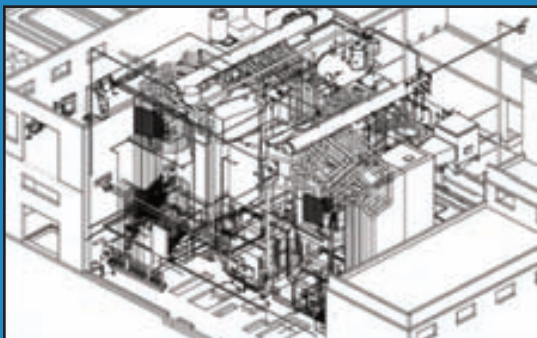
Urbas Maschinenfabrik GmbH (Austria) uses CADISON for design of a Biomass-fired co-generation power station in Bardejov, Slovakia



Designed with CADISON: 3D model of the biomass fired co-generation power station in the town of Bardejov in East Slovakia.

Urbas has been producing power generation equipment for intelligent utilization of biogenic fuels for more than 20 years. Today the company ranks among Europe's leading and most successful suppliers of biomass-fired co-generation power stations in the output range between 500 kW and 15 MW.

The biomass-fired co-generation power stations developed by Urbas ensure sustainable utilization of natural fuels. These high-technology plants convince the users by future-oriented energy utilization for generation of process energy and green electricity. This project uses two boiler lines with a maximum installed steam output of 20.4 t; the generator terminal power reaches 8.672 kWel. The 3D model designed with CADISON, with the required bill of quantities forms the optimum basis for calculation and planning of assembly procedure. Thus, Urbas reaches shorter process times in operations scheduling and even reduced assembly times through optimized management processes. Thus shorter process flows are ensured even in material procurement and material disposition so that stock-out of small items like bolts, seals, fittings etc. can be excluded.



CADISON modules installed at Urbas:

- Project-Engineer
- P&ID-Designer
- 3D-Designer
- MATPIPE
- Navisworks

Urbas uses the engineering planning tool CADISON also for this project. Why did Urbas decide to use this tool already many years ago? "CADISON is open to data exchange with our other tools – and this is of key importance for safeguarding a trouble-free work flow ", says Mag. Josef Urbas. The division manager Dipl.-Ing. Karl Laschkolnig states further advantages of CADISON for Urbas and/or its customers: "Based on 3D modelling our planning staff could optimize the management processes. On the other hand, collisions with the interests of other trades like equipment engineering, steel construction – i.e. platforms, landings, boiler house etc. – and concrete construction can already be reliably avoided in the design phase. Thus time and costs are saved and assembly of the plant on customer's premises can be ensured in due time."

Karl Laschkolnig declares: "Our customers are mainly profiting from shorter process times together with a higher rate of quality. Moreover, the customers may already incorporate their own planning efforts with exact documentation at an earlier time." Another benefit: Even business partners without profound technical knowledge may already profit from 3D visualization in the acquisition phase since they get an idea of the plant: "Misunderstandings can be dispelled much earlier than before." CADISON supports the high quality requirements of Urbas as equipment manufacturer and general contractor, among others through the possibility of pre-fabrication in the workshops. Proceeding from exact 3D planning and continuous data work flow a rapid process flow in operations scheduling, and short assembly times are ensured through optimum management processes.

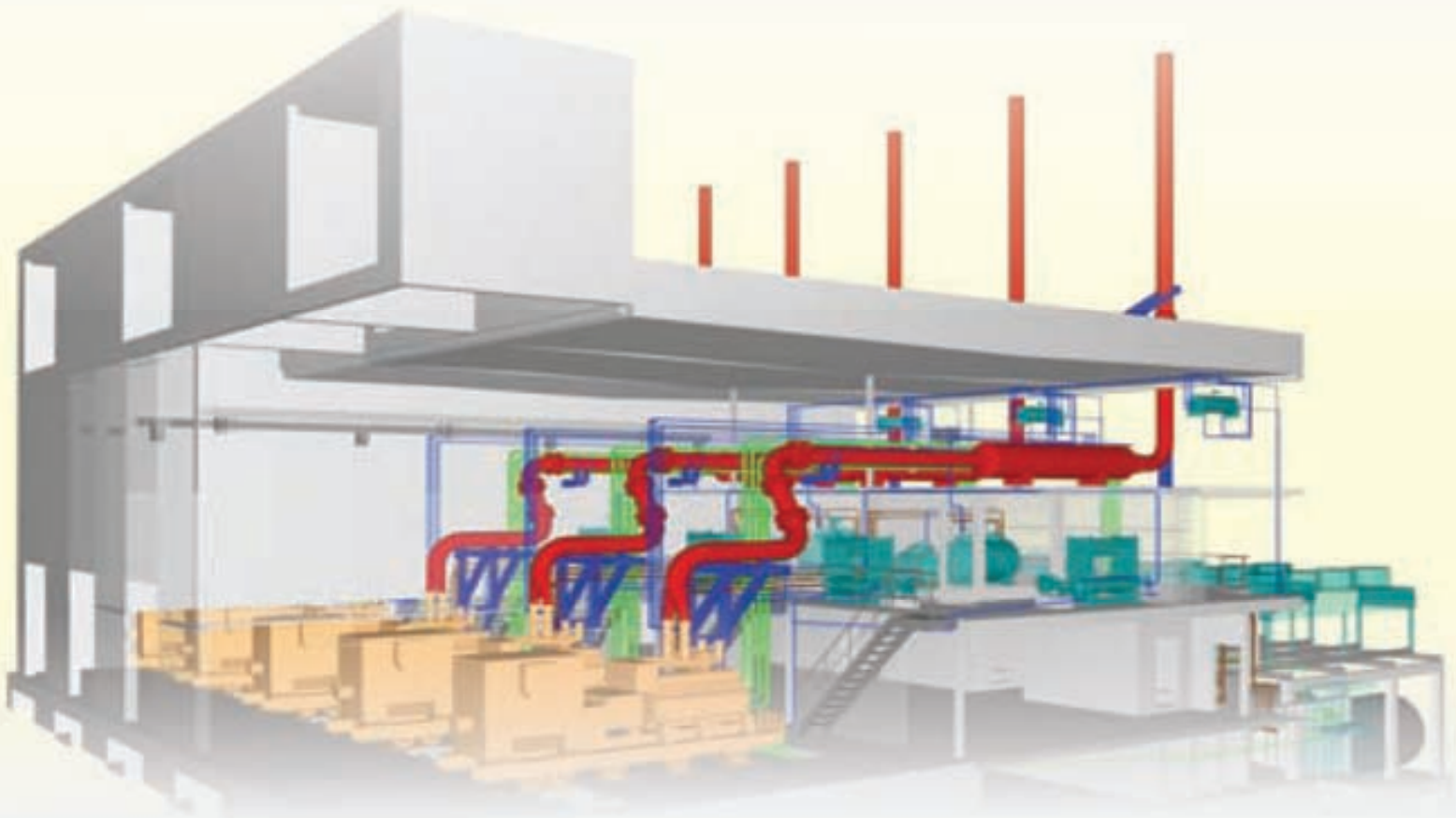


Turn-key project handed over by Urbas:
The biomass fired co-generation power station in the town of Bardejov in East Slovakia.

AMR Engineering GmbH, Essen

Says Dieter Ochel, Managing Partner of AMR – Engineering
“ We chose CADISON from various competitive offers on the one hand based on other companies’ positive experiences and because of obviously good control over different interfaces on the other hand. An important advantage of CADISON is the team that goes along with the tool.”

Till now, reaction time has been prompt in case of any problem.
The CADISON team does not leave its users alone with a problem.



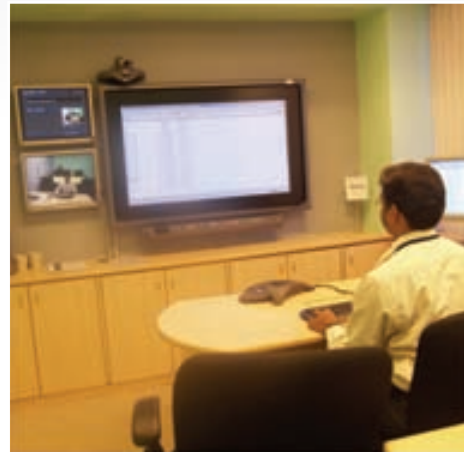
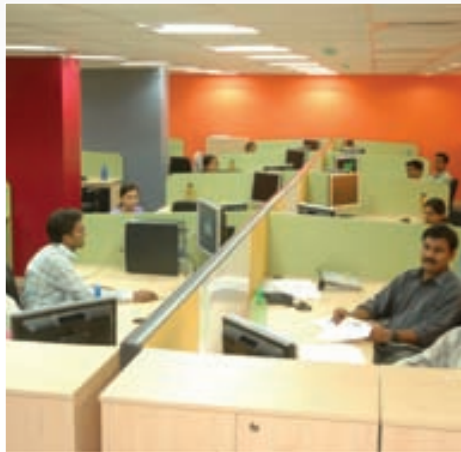
Extensive & Identical emergency diesel power supply plants for nuclear power – Using CADISON

Over the last 30 years, AMR-Engineering has been designing plants and machinery for its customers in the power, pharma, chemistry and metallurgical engineering areas. The engineering design firm already had tools like PDS and Prochem (but was missing a 3D plant design tool based on AutoCAD). The objective was to find a tool that could be learnt by AutoCAD users and would improve productivity by at least 25%.

Our Parent Neilsoft Ltd. is Accelerating Our Product Development Schedule



Neilsoft facilities in Pune, India



Sales Offices in: Pune Bangalore Mumbai Chennai Delhi

Next developments in the pipeline... 2011 Directions

- Pipe support
- 64 bit support to handle very large projects
- Electrical / I&C enhancements and interfaces to other solutions
- Visio P&ID Designer upgrade to Visio Prof. 10 Version
- Power substation design automation solution – customized to customer rules & standards for a price
- Interface to Autodesk Inventor
- Increased Autodesk products compatibility.... Open Approach
- CADISON for Power... A differentiated approach
- Many enhancements in existing modules
- Custom development for our customers to be offered

CADISON R9 practical workshop follow-up



The CADISON R9 practical workshop that was held on 25th February 2010 in Frankfurt was a great success! More than 100 CADISON users learnt all about the innovations and new features of CADISON R9 based on a real project example. The participants used the breaks as an opportunity for lively discussions and to share views and experiences among themselves. Our experts from customer service and development diligently answered all questions posed from the audience during the final session.

Prototype for optimized generation of 2D layouts

Many customers were asking for a suitable tool to generate optimized 2D layouts from 3D models using the CADISON 3D -Designer. The CADISON development team has given this topic some special consideration and came up with a prototype. This is available as Make2D_Alpha1.zip to CADISON customers in the download section on our website. Documentation concerning installation and how to use it are also provided. In order to use this tool a licence for CADISON 3D- Designer 8.5 up to 9.0 is required. Please note that Make2D is currently only available in German.

In order to further extend and improve the functionalities of this tool, you are welcome to give us your comments and suggestions. The next version of the prototype is planned to be released by the end of Q3, 2010 and will also be available in English. Our goal is to provide Make2D as an integrated function in CADISON R10.

CADISON R9.0.1 is released



After the successful launch of CADISON R9 the CADISON development team continuously worked on further improvements.

CADISON R9.0.1 is available. The essential modifications include:

- Compatibility with Windows 7
- Extension of functionalities in Visio P&ID-Designer
- Customizing
- Comprehensive bug fixing

CADISON R9.0.1 is available for CADISON maintenance customers in the download section on our website www.cadison.com.

“ A suitable tool to generate optimized 2D layouts from 3D models using CADISON 3D Designer ”

Oerlikon Neumag Plans and Designs Its Plants Using CADISON

The plant engineers at Oerlikon Neumag – the business unit within the segment Oerlikon Textile, the worldwide largest textile machine provider, and the market and technology leader in the range of the synthetic fiber plants - use CADISON already for five years.

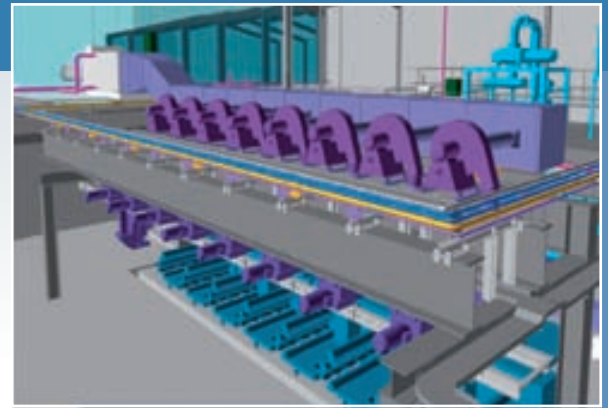
The most important reason for the introduction of this engineering tool is as follows: More and more clients assign new projects preferentially to an integrated plant manufacturer, who is able to offer complete systems. "In the past years, many customers arranged by themselves an entire plant from individual components, such approach and thinking is today very pronounced", reported Mr. Hartmut Claussen the Head of Project Management & Mechanical Engineering. Accordingly to that the company Neugman is set up new: 'It doesn't go any longer about individual machines, we design complete plants!'

"CADISON saved to us approximately 30% of expenditure time"

For a customer in United Arab Emirates a turnkey project was planned completely with CADISON - a typical combination project, in which three of Neumag locations and also one external planner were involved. The mandate of this project was covered under the guidance and administration of CADISON:

- Conceptual design and construction of the machines for the fiber production (with SolidWorks machines were planned and handed over to CADISON).
- Construction of the infrastructure for the production plant (supply and waste water pipelines, cable routes, HVAR, process layout, and rack and warehouse areas). In project- and document manager PDM were the data of all applications administered, organized and evaluated for the further use in ERP system (SAP). The change complexity of 50% represents the plant as showcase of CADISON.

"We can load large attachments with large data set and work with them in actual time - a result of ,lean' and special structure of this plant engineering tool." The total process from planning the plant to its assembly is considerably faster and all above more transparent! The changes are faster realizable and the planning complexity for new plants decreases significantly.

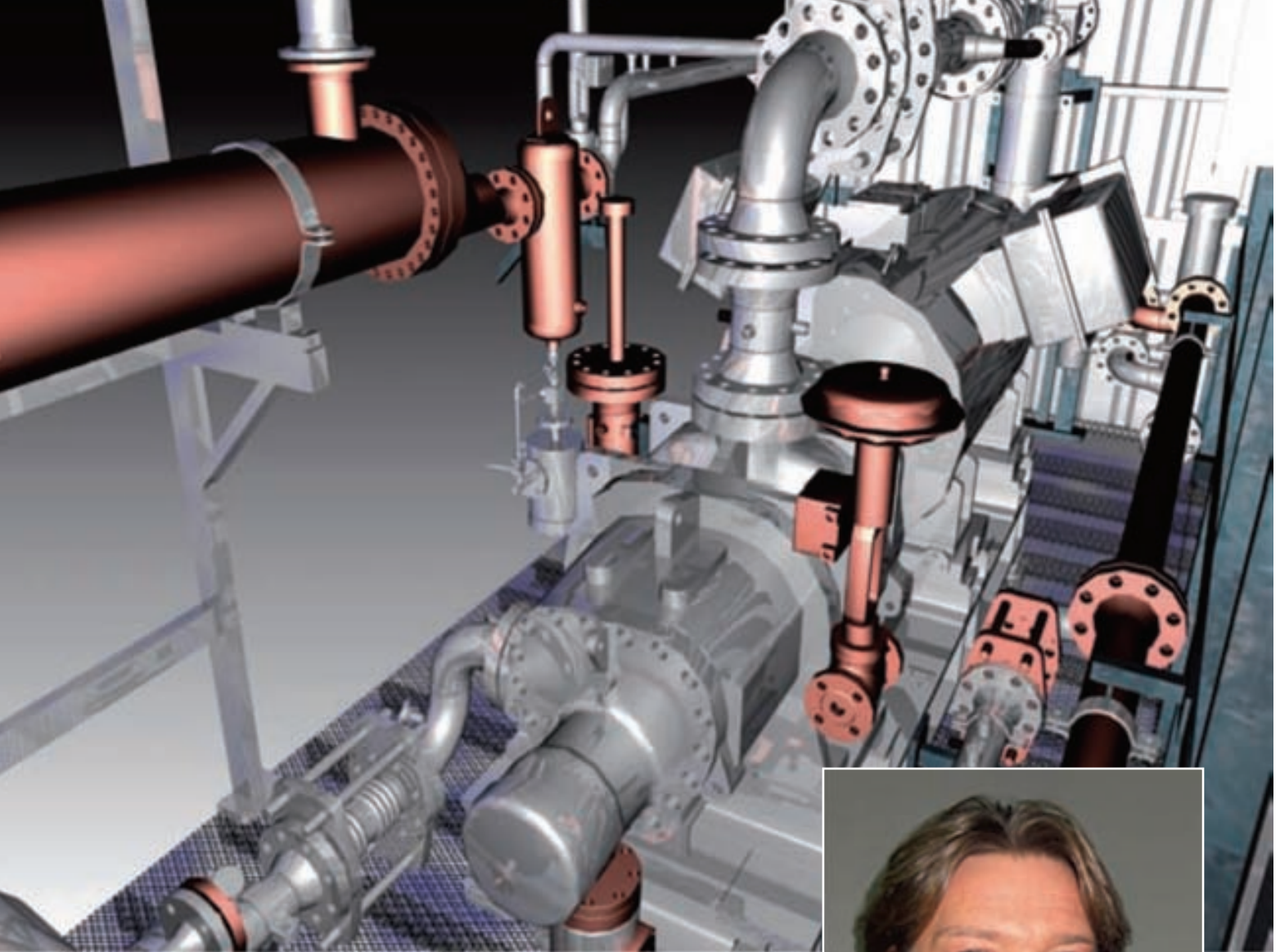


Dipl.-Ing. Hartmut Claussen
Head of Project Management &
Mechanical Engineering

" With CADISON it is easy to adapt the machines and plants to the realities of customers. Important too is the compatibility to other software tools such as SolidWorks and SAP "



Dipl.-Ing. Jens Willumeit
System Supporter
for CAD Systems in Plant Engineering



VPT – Kompressoren GmbH, Remscheid

“ We use CADISON for our precise engineering work that requires a powerful planning tool. The tool provides a unique intelligently designed checkin / checkout Technology which supports project workflow in networked working groups. ”

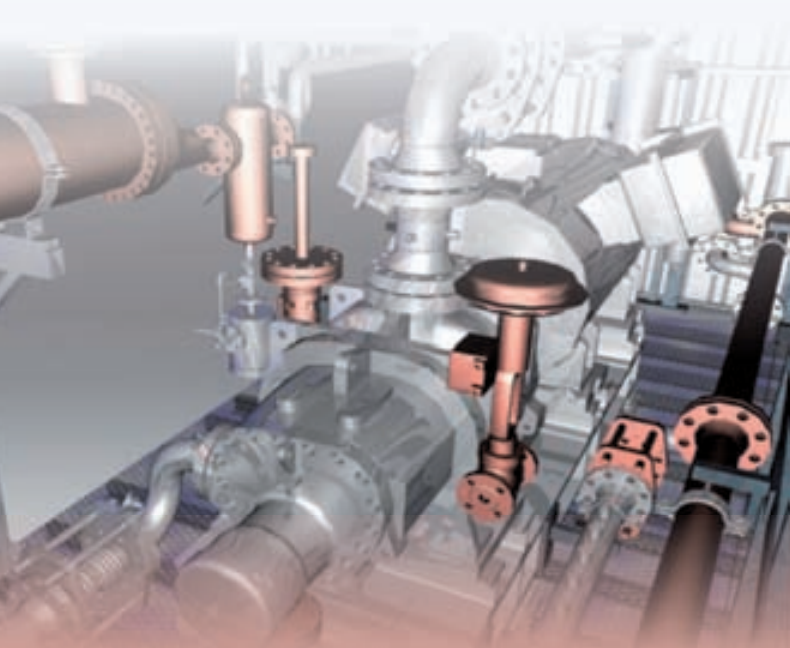


Coresten Kollenbach
Managing Director

VPT supplies industrial air and gas compressors, for example, gas turbines for offshore installations or for use in the chemical and petrochemical sectors. The company is also active in the renewable energy sector (biogas). The company offers all-in-one solutions which are tailored to specific applications. These solutions cover the entire spectrum from design, engineering, production, installation and commissioning and also include personnel training and maintenance.

Project time	> 5000 hours
Components	> 1000
Measuring Points	> 500
Isometrics	> 100
Assembly Sections	> Pipeline Construction Plant Engineering Instrumentations & Control

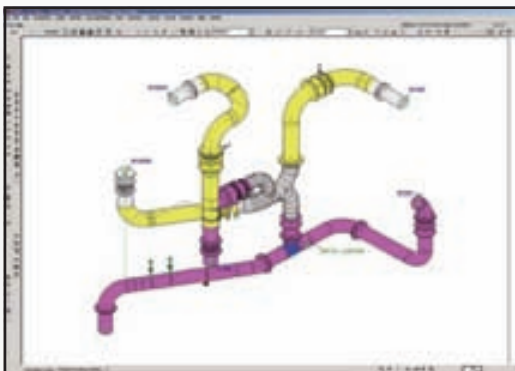
Clash free design is a goal that is easily achieved using CADISON and Navisworks from Autodesk



Navisworks software consists of four products to help you and your extended teams experience enhanced control, confident collaboration, and reliable information aggregation on even your most complex projects. Combined with CADISON that product family gives you a great opportunity to increase your competitiveness and to optimize your internal engineering process workflow, enabling a real-time, whole-project view for effective 3D coordination, 4D planning, photorealistic visualization, dynamic simulation, and accurate analysis.

CADISON interface with Rohr2 improved productivity and accuracy for engineers

In plant construction strict legal conditions require a steady rising effort in documentation. At the same time a higher economic competition demands a continuous rationalization process to shorten the planning times. Today integrated planning systems with specialized components have a central meaning in the project planning. This requires a narrow cooperation of all engineering divisions and a smooth communication is the necessary consequence.



A better workflow optimization and the integration of all needed project data was the main goal to combine ROHR2 with the CADISON platform.

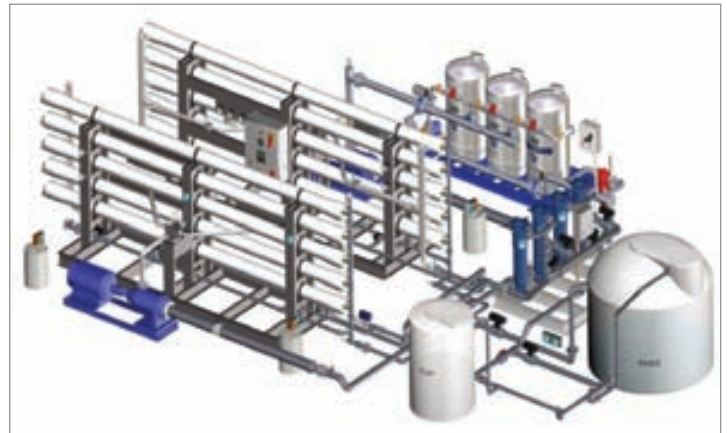
The main use of ROHR2 is component analysis, construction and structure analysis of complex piping systems. Pipe stress analysis with ROHR2 is carried out to various numerous standards and piping codes, e.g. ANSI, ASME, KTA, EN 13480, FDBR, AGFW, BS 7159 and ISO 14692. ROHR2 compares existing data with the allowable stresses, results will be documented over reports and graphic displays.

The ROHR2-Interface allows to transfer all relevant piping data, designed by CADISON 3D-Designer, to the ROHR2 calculation program. After finalizing the pipe work, CADISON generates automatically an NTR file (neutral interface file). This file contains all information that is needed for the ensuing import and analysis to be carried out in ROHR2. The static analysis includes the analysis of any loads and load combinations according to first and second order Theory for linear and nonlinear boundary conditions (friction, gap of supports, support uplift).

Increased Efficiency and Flexibility through...

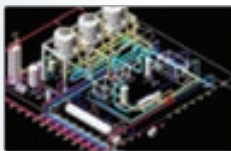


Leveraging Technology to improve Speed, Ability to handle larger models and Reduce engineering costs



Standardization and Re-use of Legacy Data & Plant Models

Plant Engineering Services



Process Engineering



Piping & Fire Protection



Mechanical



Instrumentation & Control



Project Management Services



Electrical



Architectural



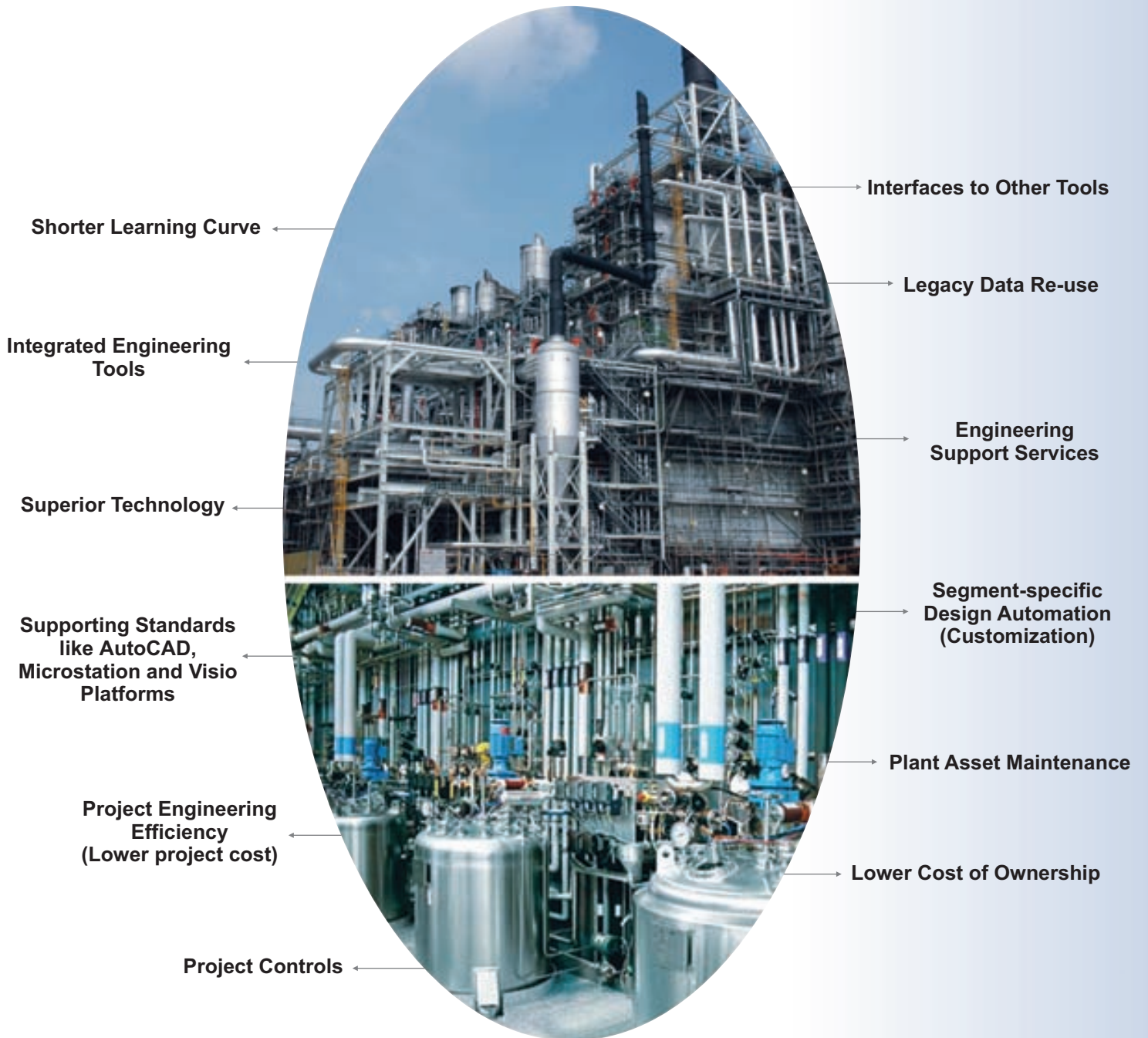
Civil/Structural



HVAC

Integrated Engineering Tools & Services for more efficient project delivery

CADISON - A Solution for Your Project Needs



ITandFactory GmbH

Auf der Krautweide 32
65812 Bad Soden

Phone: +49 61966092310

Fax: +49 6196 6092 202

ITandFactory is a joint venture between Neilsoft Ltd. in India and TRIPLAN AG in Germany, and with this combination we are uniquely positioned to provide our customers with solutions comprised of software, process oriented IT tools & the associated design concepts.

International offices:**Germany**

Krefeld:
ITandFactory GmbH
Alte Friedhofstraße / Building L222
47829 Krefeld
Krefeld@ITandFactory.com

Phone: +49 2151 5163 277

Waiblingen:

ITandFactory GmbH
Mittlere Sackgasse 3
71334 Waiblingen
Waiblingen@ITandFactory.com

Phone: +49 7151 5028-163

Austria

St. Poelten:
ITandFactory GmbH
Heinrich-Schneidmahl-Straße 15
3100 St. Poelten
St.Poelten@ITandFactory.com

Phone: +43 2742 9001 3110

Switzerland

Head office Rheinfelden :
ITandFactory AG
Quellenstrasse 37
4310 Rheinfelden
Rheinfelden@ITandFactory.com

Phone: +41 61 833 3050

Basel :

Basel@ITandFactory.com

Phone: +41 61 338 3232

USA

Canton:
Sales.USA@ITandFactory.com

Phone: +1 734 459 1100

UK

Luton:
Sales.UK@ITandFactory.com

Phone: +44 1582 455 559

Spain

Martorell:
Spain@ITandFactory.com

Phone: +34 93 774 4474

Italy

Milano:
Italy@ITandFactory.com

Phone: +39 02 48300930

India offices:**Neilsoft Limited**

Pride Parmar Galaxy 8th Floor
10/10 + A Sadhu Vaswani chowk
Pune 411001

Phone: +91 20 26053003

Fax: +91 20 2613 1755

Neilsoft Limited

406, Embassy Centre
11, Crescent Road
Kumara Park (E)
Bangalore 560001

Phone: +91 80 2226 7786

Fax: +91 80 2237 4189

Neilsoft Limited

Room No.4, 5th Floor
Crown Court, No.34,
Cathedral Road, Gopalapuram
Chennai – 600 086

Phone: +91 44 2811 4247

Fax: +91 44 2811 4247

Neilsoft Limited

703, Modi Tower
98, Nehru Place
New Delhi 110019

Phone: +91 11 3088 3174-77

Fax: +91 11 3088 3178

Neilsoft Limited

B-206, Kanara Business Centre
Off Ghatkopar – Andheri Link Road
Next to Everest Gardens, Ghatkopar (E)
Mumbai 400 075

Phone: +91 22 6770 2737

Fax: +91 22 6770 2736

www.ITandFactory.com

ITandFactory believes the information in this publication is correct as of its publication date. As part of continued product development, such information is subject to change without prior notice and is related to the current software release. ITandFactory is not responsible for any inadvertent errors.