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Steel for high-tech aviation industry products Source: Böhler Uddeholm

Special Steel Production with PSI*metals*

Metallurgical Process Control and Optimization at Villares Metals S.A.

As the demands imposed on steel quality become more and more stringent and the cost of raw materials continues to rise, it is now imperative to standardise process control and the optimum use of available resources as far as possible. As one of the largest producers of long products for high alloy special steels in Latin America, and the market leader in all of its core segments, Villares Metals has decided to introduce a new melt shop information system based on PSI*metals* which fulfills these high demands.

In many steel plants the overall control of metallurgical processes is still done offline and with manual settings. Because the very specific technological process know-how is usually not an integrated part of the MES and process data are not online available, the traceability and reproducibility of the production is not given and the steel quality cannot be met with the required stability. Higher demands on steel quality and increasing costs of raw material require a highly standardized process control and an optimized usage of the available resources. The new "Melt Shop Information System" (MIS) is based on PSI*metals* and can be used to store the full

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PSI

News ticker

+++ PSI receives order from OAO Gazprom for gas transmission business – control systems for controlling gas flow in strategically important gas transmission pipelines +++ PSI and Fraunhofer working group set standards for transport management – joint study on transport processes for logistics service providers +++ PSI integrates optimisation algorithm in PSI*command* – Plannable maintenance and fault clearance increases efficiency in network operation +++ PSI wins steel industry order from the Chinese Shougang Group - Shougang Qian'An Iron and Steel choose PSI*metals* 5 production management system +++ Shoe retailer ECCO-ROS relies on PSIU software in Russia – new distribution centre in Moscow controlled by PSI*wms* +++ PSI wins leading Russian electrosteel producer as new customer – VIZ-Stal decides to use PSI*metals* 5 for planning and production +++

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Dircksenstraße 42–44
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Telephone: +49 30 2801-2029
Fax: +49 30 2801-1042
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Editorial team: Ulrike Fuchs, Anja Malzer, Bozana Matejcek, Annett Pöhl
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Editorial

Dear readers,

With the purchase of AIS a year ago, PSI Metals took an important step towards internationalisation. The company's existing global customer base has been increased considerably by AIS, and extended to new regions such as South America, the Middle East and Oceania.

Our company's organisation has also been adapted to accommodate these new challenges. In my division, for example, my colleagues are now working at locations in Belgium, Germany, Brazil and Argentina. Consequently, English is not only the lingua franca in the projects, but also the official language for conducting our daily business. Another important aspect is the information and know-how exchange. When forming project teams, we strive for a mix of global solutions expertise and local support. In this way, we guarantee that communication and cooperation are maximised across regional boundaries, and internationalisation is incorporated in our daily activities with the objective of a global network with local support. The same processes for all sites, whether for sales or projects, help us to ensure that our customers all over the world receive the same quality. One year on, our experiences as "PSI & AIS" indicate that we are on the right track. Confidence in the new PSI Metals is rising: both on the part of our customers as evidenced in new PSImetals orders, and on the part of our employees, as can be seen from their active collaboration and exchange of information.

Heinz-Josef Ponten

Director Delivery Division Brussels/Düsseldorf
PSI Metals GmbH

SCHEDULE

30/11–01/12/10	**PSI Metals User Group 2010** / Krefeld www.psimetals.de	PSI Metals Hotel van der Valk Moers
01/03–05/03/11	**CeBIT** / Hannover www.cebit.de	PSIPENTA Hall/Stand
04/04–08/04/11	**Hannover Messe** / Hannover www.hannovermesse.de	PSIPENTA Hall/Stand

► *Continued from page 1*

range of technological process expertise. It also integrates all steel mill planning, control and monitoring functions. The new system was designed, implemented and delivered in close cooperation between Villares Metals and PSI Metals. PSI Metals Germany provided the complex metallurgical and technological planning and optimisation as well as production tracking functionalities of the MIS system. The basic automation and reporting functions were delivered by a Brazilian company.

Realisable potential

To continuously increase the competitiveness the following objectives are linked with the introduction of the MIS:

Quality improvement

The use of preconfigured treatment practices and standardisation of the production process will lead to an improvement in quality not only during production, but also in the manufactured products. Quality control will be carried out throughout production online deviation control of setpoints and actual values, which will enable the setpoint targets to be adapted to the ongoing process, thereby minimising rework. The subsequent evaluation and comparison of setpoint and actual data support the plant engineers to develop new standard treatment practices.

Integrated business processes

PSI*metals* will provide seamless vertical and horizontal integration of all computer systems, from the shop floor right up to SAP, thus enabling business processes at all levels to work together more smoothly. Better operator guidance will reduce operator workload and faults while increasing throughput rate by computerized support of all melt shop processes.

Realistic planning

Individual, quality-related production paths will improve production sequencing and optimise the sequence of processing steps. The equipment planning considers the availability and contamination of steel ladles and casting equipment.

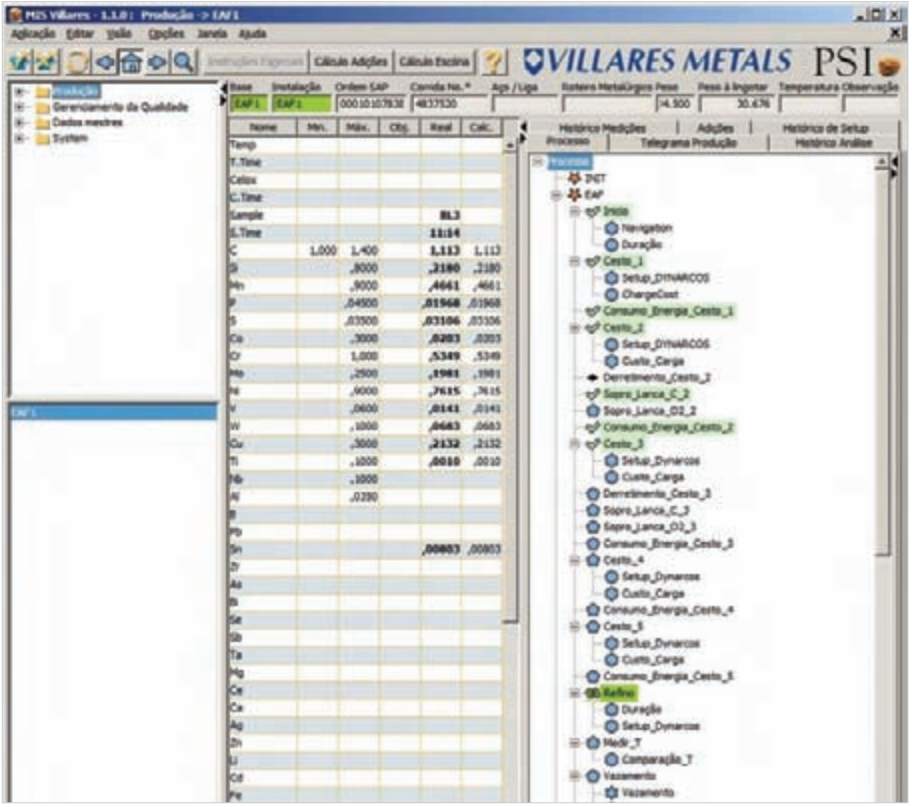
Reduced costs

All quality and cost-related data will be recorded to enable better traceability and cost calculation. Raw material costs will be reduced by optimized and model supported calculation of charge, alloy and slag former materials under consideration of actual stock situation and availability and production situation. The integration of all connected systems via standardised, configurable interfaces will reduce IT maintenance costs.

Heat planning and scheduling with PSI*metals*

The daily heat planning will be supported by the PSI*metals* Planning, PSI*metals* Production and PSI*metals* Quality components.

The Heat Production Orders received from SAP are automatically sequenced based on configurable, complex algorithms. The scheduling rules and restrictions consider e.g. allowed grade transitions, equipment contamination and availability. In further step the casting equipment and ladles for the sequenced heats are also planned based on configurable rules. For ladle planning not only the availability but also the actual and future contamination is taken into account.



A station monitor shows the operator all actual production information of a heat in production and guides the operators through the entire production process along the different facilities in the steel making and special steel making plant.

Source: PSI Metals

Villares Metals S.A.

is the largest non-flat highly alloyed special steels producer in Latin America and market leader in all core segments, namely

- high speed steels,
- tool steels,
- stainless steels and valve steels special alloys and forged parts for the highest specifications.

It is an independent Brazilian company within the world market leading and public listed BÖHLER UDDEHOLM AG Group which belongs to the voestalpine AG group.

Villares Metals operates a steel plant in Sumaré, Brazil with Melt Shop, Blooming, Forging, Rolling, Heat Treatment and Finishing for all segments. The steel mill includes:

- a conventional melt shop with electric arc furnace, ladle furnace, vacuum treatment, ingot and continuous casting
- a special melt shop with vacuum induction melting, electroslag remelting and vacuum arc remelting.

This enables Villares Metals to attain the most rigorous quality specifications and their clients demand for highest technology in areas such as aeronautics, automotive, nuclear industry, as well as for medical devices.

Bruno Pessoa
General Melt Shop Manager, Villares Metals

"We have been convinced by PSI's strong experience in the area of ensuring quality in steel making."

Cost-efficient use of raw materials

The charge-/alloy optimization ensures cost optimized usage of raw material considering the actual stock situation and future evolution as well as quality constraints given by the production order. The calculated raw materials for the individual Heat are reserved on the stock. Based on these reservations a consumption forecast is calculated to trigger the purchase of new material.

Standardised process expertise

During production, quality control is performed based on production feedback and fully configurable treatment practices. The treatment practices compose the entire technological process know-how, i.e. the production route and process steps, intermediate target analyses, material restrictions and all required rules to derive the setpoints to meet the quality. Calculated setpoints are sent to the automation level for online process control. Also the rules for deviation management are part of the treatment practices to automatically activate rework steps and generate new setpoints in case of deviations between the target and the actual values, e.g. insertion of additional alloying steps in case of deviation of some chemical elements. Also allocation and de-allocation of heats to other suitable production orders are supported in case the quality cannot be met.

Competitive advantages through quality

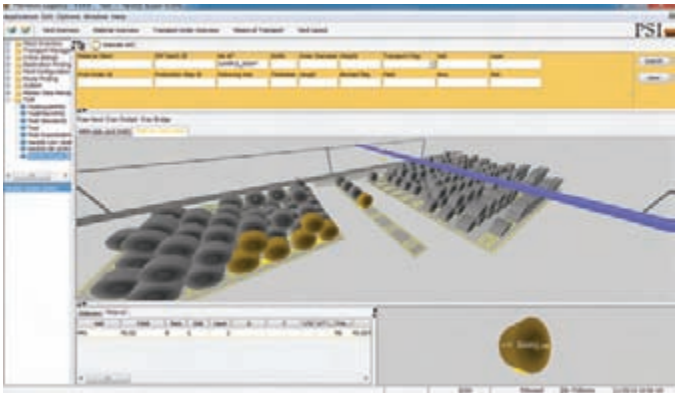
Bruno Pessoa, General Melt Shop Manager of Villares Metals said "Attaching great importance to quality aspects in production is a main competitive advantage of our company. We selected PSI and PSImetals to improve standardization of the production of each steel grade and to ensure process quality control . We have been convinced by PSI's strong experience in the area of ensuring quality in steel making and their PSI*metals* solution as well as highly pleased customers."

▶ *Information*

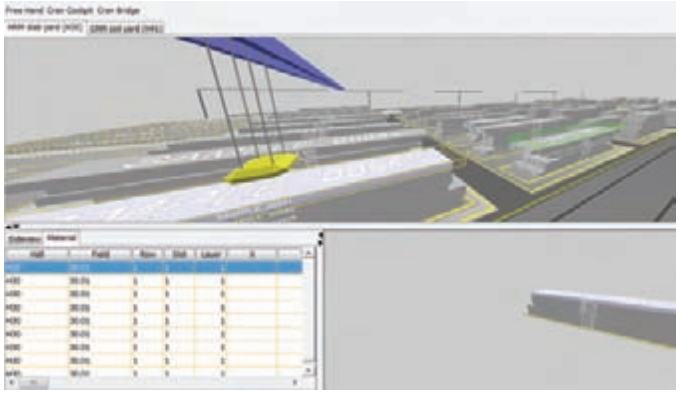
Contact: Heinz-Josef Ponten,
Director Delivery Division Brussels/Düsseldorf
PSI Metals GmbH
Telephone: +49 21160 219-389
Fax: + 49 21160 219-240
Email: hjponten@psi.com
Internet: www.psimetals.com

Products and solutions: 3D visualisation in PSI*metals*

Optimisation in 3D – Transparent processes, faster workflows



Users can apply filters to search for various material properties. The search results are highlighted in colour.



Material movements within the warehouse are simplified by colour coding the starting point (yellow) and destination (green) positions. Source (2): PSI Metals

Three-dimensional visualisations make reality appear more tangible. This is not only true at the cinema. Graphic imaging with 3D visualisation can also recreate a navigable version of storage areas. Users move around as they would in the real area while the software provides them with proven decision-making support through visual aids. Virtual warehouse management in 3D combines the advantages of graphics with optimisation to enable efficient logistics processes. With PSI*metals* Logistics, PSI presents a three-dimensional visualisation for warehouse management in the metal industry.

Managing logistics processes in production is a major success factor in the supply chain. PSI*metals* Logistics is a proven industry solution for warehouse management, material flow tracking and transport optimisation, and answers questions like "Where are the materials?" or "Where is the best place to store this material?" These functions have now been converted to a 3D display for PSI*metals* Logistics.

Since a warehouse is always a three-dimensional space, information is often lost in a two-dimensional display or it must be provided in supplementary charts or tables. The new 3D representation of the warehouse in PSI*metals* Logistics shows a perfect image of the actual inventory and warehouse situation. The user can walk through the warehouse "virtually", without actually leaving his seat. With the 3D view of the warehouse, users can also find unreadable material IDs and locate the material they are looking for with coloured highlighting. Stacks can be rotated and tilted at the computer to get the best possible view.

Various perspectives are provided so that the widest range of user needs can be selected together. A "hands-free" camera enables the user to take a virtual drive through the warehouse. Virtual views from the crane operator's cab and the view of the grab can be supplemented with all of the information that the operator would not actually see from his place high above the warehouse area. For example, it is simple to display certain material properties such as the temperature of plate slabs in the virtual tour. With a mouse-click on the material a target storage location can be determined. The transport task then is created automatically and even optimized on demand. For having a better basis of decision-making the material movement can be simulated.

Besides the classic two-dimensional display, PSI*metals* Logistics in 3D also provides a simple spatial overview corresponding to the actual warehouse, supplemented with detailed information of a complex storage area. The fascinating, realistic graphics combined with the optimisation methods of PSI*metals* result in transparent processes and faster workflows in production and logistics.

► *Information*

Contact: Annett Pöhl, Marketing

PSI Metals GmbH, Berlin, Germany

Telephone: + 49 302801-1817

Fax: + 49 302801-1020

Email: info@psimetals.com

Internet: www.psimetals.com

Products & Solutions: Logistics processes are more environmentally friendly with PSI solutions

Green through and through

Green through IT: From the warehouse to shipping scheduling and the design of global supply chains – intelligent IT systems form the basis for sustainability and green logistics.

Green through IT – principles and programming of sustainable logistics solutions Source: Fotolia

Though green is undeniably the colour of spring and new growth, recently it has also become associated with a number of stranger crops. The "green" attribute is becoming more and more widely used as an important quality feature and selling point in every sector of industry in the industrialised world. Many market participants embrace it enthusiastically. But besides the many clever, sustainable solutions and offerings that are entirely worthy of the epithet "green", many cowboys have jumped on this bandwagon, and the label "green" has been applied to a number of unlikely products. One such instance is "Green IT".

These days, information technology provides access to vast new opportunities for optimisation in industry and logistics. In many cases, it has introduced the first ever systematic approach to efficiency and flexibility in (logistics) processes. This is particularly true for demand-oriented resource allocation.

According to a recent study, "SMART 2020", carried out by the independent, non-profit organisation "The Climate Group", by 2020 it should be possible to reduce overall carbon dioxide emissions by about 15 percent and save EUR 600 billion in energy costs worldwide with the aid of new information and communication technologies. The German Federal Association for Information Technology, Telecommunications and New Media (BITKOM) cites additional secondary benefits of using intelligent IT which could help to avoid creating five times as much carbon dioxide as is generated to meet energy requirements. But this does not make software "green".

It would seem that, in the light of rampant green inflation, which increasingly turns highly ambitious goals into a dried up husk, the time is ripe to define certain terms for IT solutions that enable companies to save energy and resources by optimising their use in the process disciplines. Software is NOT green, it makes green POSSIBLE. "Green through IT", is the ambitious aim of intelligent, forward-looking logistics software.

Green with PSI*wms*

Multisite-capable warehouse management systems such as the premium software package, PSI*wms*, offer a way to control collaborative processes linked with intelligent resource management across multiple warehouses, for example. With this system, all of the necessary, valuable resources associated with internal logistics, such as time, space, workforce, energy and materials, can be allocated efficiently, and hence economically.

But the software itself is not green. Rather it serves as the basis for sustainability and green logistics. "Green through IT".

Green with PSI*tms*

For fleet management, transport scheduling and route organisation, transportation management systems like PSI*tms* help to spread transportation more evenly and avoid unladen runs and part loads. This means they help to cut essential transport mileage,

Wolfgang Albrecht
Managing Director, PSI Logistics

"Serious software manufacturers will not represent their products as 'green technology' or 'green IT'."

CO_2 emissions and transport costs. But the software itself is not green. Rather it serves as the basis for optimising resource deployment and reducing environmental impact. "Green through IT".

Green with PSI*global*

In terms of sustainability, future logistics considerations when planning and optimising transport and logistics networks will be characterised significantly less by flows of goods and more by relocation aspects within the modal split. The integral planning and control system PSI*global* is designed to map, analyse, control and optimise multistage, multimodal logistics networks. PSI*global* is a premium software program for continuous monitoring and evaluation of value chain logistical processes, and as such it has been expressly equipped with optimisation features based on ecological variables. The emission costs feature or multimodal optimisation of logistics networks can be used to weigh up costs and service aspects against environmental factors such as sustainability and emission reductions, thereby achieving optimum weightings based on the selected assumptions and parameters. But the software itself is not green. Rather it offers solutions to the economic demands of modern corporate strategies. "Green through IT".

Serious IT is not green

As the previous examples show, serious, responsible software manufacturers will therefore never represent their products as "green technology" or "green IT". They provide modularly designed, scalable, standard products that offer operators the highest possible degree of flexibility and investment security. Moreover, through innovative resource management – from the internal optimisation effects of intersite and intercompany options to the design and planning of complete supply chains – they also create the conditions for achieving a green logistics program. So the slogan for intelligent, future-oriented logistics software should not be "Green IT", but rather "Green through IT", because it functions both as the basis and the programme for sustainable logistics solutions.

► ***Information***

Author: Wolfgang Albrecht,
Managing Director, PSI Logistics GmbH, Berlin
Telephone: +49 40 696958-22
Fax: +49 40 696958-16
Email: w.albrecht@psilogistics.com
Internet:www.psilogistics.com

News: Integrated transportation management system for PostLogistics

PSI subsidiary PSI Logistics GmbH has been commissioned by the Swiss Post Office to deliver an integrated transportation management system for its PostLogistics division. The project will be based on the standard products PSI*tms* for transport management and PSI*global* for planning logistics networks. The value of the project awarded to PSI is in the mid-seven-figure range.

With its integrated transport planning system, PSI Logistics is providing the Swiss Post Office with the ability to carry out its transport planning, scheduling and performance activities in dynamic transport processes. In this context, the main focus of attention will be on optimising transport resource utilisation, improving responsiveness to heavily fluctuating volumes and increasing flexibility in light of rapidly changing delivery locations. As a result, in the future PostLogistics will be able to respond even faster and more flexibly to changes in the 52,000 transport orders it carries out every day.

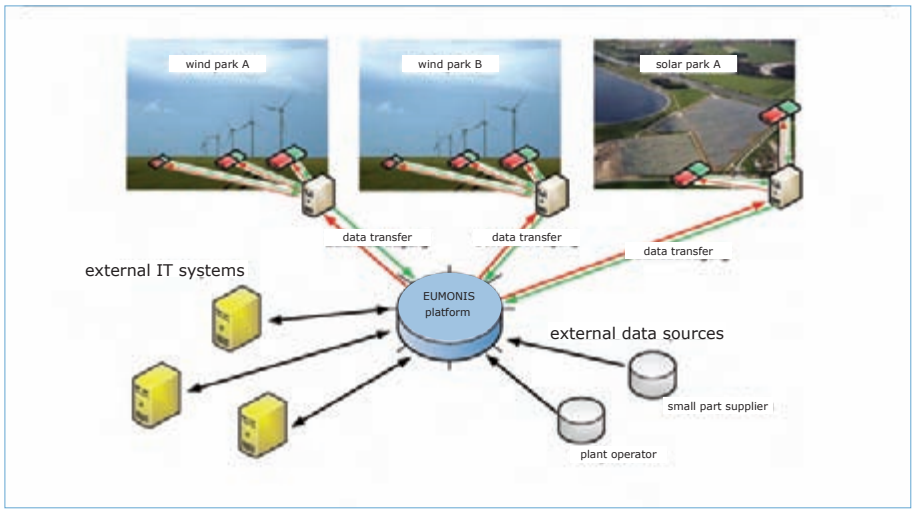
PSI Logistics will map the processes for order management, transport planning, scheduling, transport performance including a telematics solution, and transport completion on the basis of flexibly configurable sets of rules and process definitions that will allow future transport structures and processes to be designed and optimised dynamically.

The extensive catalogue of criteria helped PSI Logistics to compete successfully against large international corporations in the WTO tender procedure for the Swiss Post Office order.

Products & Solutions: PSIPENTA investigates forward-looking IT solutions

Hand in hand with research and industry

Remaining in close contact with its customers and keeping abreast of the latest scientific discoveries and developments are the mission of PSIPENTA Software Systems GmbH, which the company has performed successfully for many years. At the moment, PSIPENTA is actively involved in three pioneering research projects.



Systems for generating renewable energies require new maintenance concepts Source: RWTH Aachen

Project 1:

EUMONIS

As part of a consortium working on the EUMONIS research project (a software and system platform for energy and environment monitoring systems), PSIPENTA Software Systems GmbH is chiefly responsible for carrying out IT-supported planning and control of maintenance processes. The project is sponsored by the German Federal Ministry of Education and Research (BMBF).

The purpose of this research project, which was launched in Munich on 7 September 2010, is to design and create operating concepts for industrial plants that will generate renewable energies in the future. It will be essential to find ways to reduce the life cycle costs of renewable energy plants and to enable them to be operated efficiently, particularly in terms of installation, maintenance, and failure compensation. To this end, EUMONIS plans to adopt existing maintenance processes and software modules from the field of industrial production and develop standard interfaces. PSIPENTA expects that its involvement will prompt important ideas for further optimising existing and future maintenance projects – also in the field of renewable energies. At the same time, the software company is drawing upon its experience in mechanical engineering and plant construction, and also taking advantage through smart grids of the expertise that is available within the PSI Group.

The project consortium is led by Siemens AG; other partners besides PSI include RWTH Aachen, Leipzig University, Nordex, SKF and Schott Solar among others.

Project 2:

WInD

The mechanical engineering and plant construction industry is extremely dynamic and demanding. Product individuality, delivery time and delivery reliability all have a decisive effect on purchasing behaviour. It must also be borne in mind that in the past production planning decisions have often been taken on the basis of assumptions or incorrect information. As a consequence, unrealistic throughput times in production or the failure to meet replacement schedules in the case of purchased parts have resulted in delivery delays. Difficulties also arise in the exchange of data between the various IT systems of network partners or different departments within the same company. These problems are often attributable to the quality or availability of data.

The WIn-D project - short for "Adaptable Production Systems through Integrated IT Structures and Distributed Production Planning and Control - is sponsored by the BMBF and addresses these challenges with the following objectives:

- to increase data availability by closing known standardisation gaps (ERP-MES, ERP-PLM)

- to improve data quality (reduce data ambiguity) by adapting the electronic product code (EPC) from retail for use in mechanical engineering and plant construction
- to develop an entirely new distributed planning and control logic (to replace the rigid, static MRP-II logic) that can switch between various planning methods depending on context and is able to process real-time data satisfactorily
- to expand the standard for intercompany order processing (myOpenFactory) to include more functions such as automated item data exchange or IT-supported supplier coordination


Source: photos.com

The WIn-D project can reveal factors that help companies to design their procurement processes for the long term, simplify coordination processes, improve collaborative relationships, detect risks early and guarantee end-to-end supply.

Project 3:

AACHEN CAMPUS

The PSI Group was one of the first companies to register with the nascent RWTH Aachen Campus. As a leading industrial partner in the logistics research cluster, PSI is concerned in this project primarily with production management solutions in the ERP Innovation Lab and the logistics theatre.

The scientific nucleus of the campus consists of a total of 19 research clusters, in which interdisciplinary partners from industry and university institutes work together for extended periods on specifically defined research questions.

In the logistics research cluster, a production line illustrates the interplay between processes and systems on the basis of a real-life value chain. Here, the PSI*penta* ERP solution has already been fully integrated in a virtual environment in the associated ERP Innovation Lab. The Innovation Lab consolidates all the knowledge gained from various projects and is dedicated to investigating issues such as standardisation, integration and adaptability raised by industrial clients as well as by the researchers themselves. Jointly with other providers, system houses, and the Forschungsinstitut für Rationalisierung e.V. (Rationalisation Research Institute), PSI develops solutions for users that enable companies to respond quickly and efficiently anywhere in the world.


Source: FIR / RWTH Aachen

The PSIpenta ERP system is used in the ERP innovation lab for teaching and research purposes.

► *Information*

Contact: Ulrike Fuchs,
PSIPENTA Software Systems GmbH
Telephone: +49 30 2801-2029
Fax: +49 30 2801-1042
Email: ufuchs@psipenta.de
Internet: www.psipenta.de

Höfler produces grinding machines using a modular system that enables machine modules from different series types to be combined in a wide variety of permutations. This flexibility is supported optimally by PSIpenta adaptive. Source: Höfler

User report: Unprecedented flexibility with PSI*penta adaptive* ERP system

Automated production

When it starts getting difficult to create order structures, when inventories reach levels that are out of all proportion to sales and are beginning to affect liquidity, it is time to take action. Höfler Maschinenbau GmbH shows how these problems can be overcome with the right software and professional consulting.

Höfler Maschinenbau GmbH was founded in 1959, and has grown to become a global provider of high-precision gear grinding machines. Besides the production facility in Ettlingen, it has service subsidiaries in the USA, China and India. 80 percent of its production is exported. With over 300 employees, the company recorded sales of 100 million EUR in 2009, despite the global economic crisis.

New flexibility needed

Since the mechanical engineers from Ettlingen found themselves needing to respond more and more flexibly to global markets, over the last few years they have developed a modular system that enables machine modules from different series types to be combined in a wide variety of permutations. Martin Koch, production planning and scheduling manager at Höfler, explains: "Although we have to generate our machines very specifically for each individual customer, now we can still use the same module in many cases, and this has caused a considerable increase in variant frequency." Components from large machines can be included in the construction of smaller machines, and vice versa. The range of parts can be expanded almost infinitely. But this system also demands much greater flexibility.

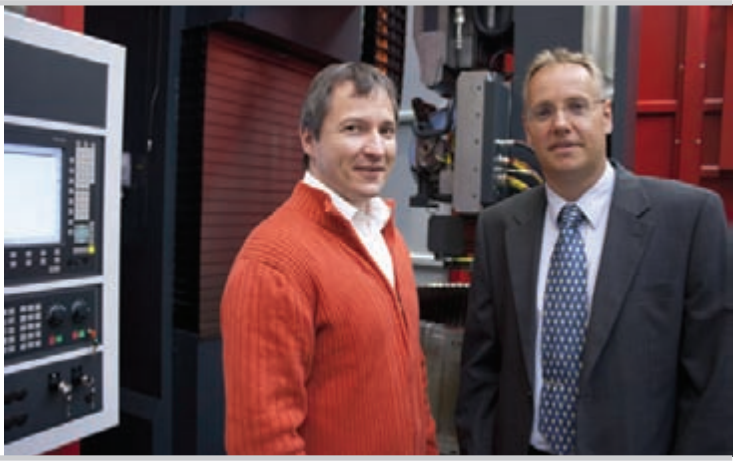
Penta-PLuS project

Previously, they bought a certain amount of flexibility by constantly increasing stock levels, but these were eventually out of all proportion with sales. Thorough analysis revealed that to some extent the company was making things difficult for itself by trying to reflect the production plan as closely as possible in the ERP system with fixed orders. As a result, most of the effort was expended right at the start, and this had to be modified later at the cost of more considerable work.

Accordingly, one objective was to reduce this high workload. Frank Bissinger, head of Höfler information systems, arranged a meeting with his ERP software partner PSIPENTA Software Systems GmbH, based in Berlin. The company had been using the Berlin supplier's ERP system since 1989. Working with PSIPENTA's system partner Berghof, they looked for solutions, for which the main reference points ultimately lay in material planning, order planning and purchasing. And so the Penta-PLuS project was born. PLuS stands for Process speed, Liquidity and Stability, representing project stages that use different PSI*penta* adaptive modules and are incorporated in the heart of the ERP standard to guarantee these objectives. Originally, two milestones were defined for the project: 1. Achievement of optimal automated material planning, and 2. Backlog processing.

Frank Bissinger (right) — IT manager, Höfler
Martin Koch — PP&S manager, Höfler

"We were able to reduce our warehouse inventory by millions. And we have not yet finished the process."



Not just a piece of software

In general, if someone wishes to create production orders within a defined ordering horizon, an automatic determination of requirements forms the basis, and this checks the requirements in the system with due consideration for replacement times, and then generates orders in reasonable batch sizes. "To do this, we did not just install a piece of software. Instead, we gradually added a lot of small functions and programs to the subordinate processes and the data that is used for controlling the system, until we had automated absolutely everything," explains Bissinger.
One such add-on program is ABC classification. In this program, all parts are classified as A, B or C parts, and then classified within these categories as x, y or z parts. Certain fundamental material planning rules in the system can be derived from this. For example, an assembly that costs EUR 10,000 must be assigned to a specific machine. On the other hand, small parts that are used in various machine types can be requisitioned in larger production runs without specifying a machine. If a price is changed, the item is moved to a different class and is scheduled differently. If an item that was previously only used singly or in small series is suddenly used in volume production, demand increases abruptly. The system detects this and responds accordingly.
The outlook for estimated annual purchasing requirements has now been replaced by forecasting. A purchasing planner helps the purchasing department to make requirements estimates long before the ordering horizon. Thus, not only the absolute numbers, but also the distribution of these demands – based on the current planning instructions for the components – represent a vital element for the purchasing department.

Changing deadlines automatically with standard algorithms

If the backlog is processed with a date change, PSI*penta adaptive* changes deadlines according to previously defined parameters. This has a significant effect on delivery reliability, which is subject to an enormous variety of factors. For example, a customer reports that because of the economic crisis, it will not need the machine for another six months. When this information is entered in the system as a parameter, PSI*penta adaptive* automatically takes into account all changes that have been instigated externally. Nothing needs to be entered manually any more, the standard algorithm returns correct results automatically.

Quantifiable success

The implementation of the PSI*penta* adaptive modules was begun in early 2009 with the Self-Regulating Mechanism (SRM) module, which is primarily tasked with automatic demand calculation and hence also with automated materials planning. "By the end of 2009, everything — including the Höfler in-house additions — had been assimilated into the daily routine," says Martin Koch, production planning and scheduling manager at Höfler when describing the first phase of the project. Elimination of the backlog has been ongoing since the beginning of 2010, and this too will be completed very soon. Bissinger is able to present his conclusion, which is quite evident: "We have already succeeded in reducing the size of our stock by millions. And we have not yet finished the process." So Höfler will integrate more modules from PSI*penta adaptive* in the near future.

► *Information*

Contact: Ulrike Fuchs,
PSIPENTA Software Systems GmbH
Telephone: +49 30 2801-2029
Fax: +49 30 2801-1042
Email: ufuchs@psipenta.de
Internet: www.psipenta.de

Event: First conference for logistics customers

Successful start for PSI Logistics user group

The main themes at the first user group meeting were practical examples and the latest modules and functions of PSI*wms*. The need and demand for the user group were emphasised by the lively discussion.

PSI Logistics GmbH pulls together with its customers. Source: photos.com

About 30 participants attended the first meeting of the PSI Logistics user group in the Logistics Centre at Hettich Logistik Service GmbH in early November. The Logistics Centre at Bünde is managed by PSI*wms*. After a short welcome speech by Wolfgang Albrecht, Managing Director of PSI Logistics, the Managing Director of Hettich, Hartmut Friebertshäuser explained the special features of PSI*wms* for processes with order production in scheduled time frames, such as the ones often encountered by manufacturers of furniture fittings. Then, Martin Toepfer, Product Development Manager at PSI Logistics, introduced current developments and tools for IT control centres in a live presentation of the dialogue functions. Dirk Kästingschäfer, IT Coordination Manager at Hettich, then led a tour of the Logistics Centre, explaining how the special tools of PSI*wms* such as Case Calculation, Forklift Control System and Yard Management are applied in real life.

After lunch, which attendees enjoyed as guests of Hettich in the staff restaurant, the full agenda for the user group continued with a presentation by Rainer Mönnig. The DP process manager from Nosta Transport GmbH used a number of impressive real-life examples to illustrate the options and advantages for custom configuration of PSI*wms*. The presentation of application options for resource management by Hettich IT Coordinator Mr Kästingschäfer was equally illuminating for the participants. After a coffee break, the third section of the day offered those attending the first user group meeting their first glimpse of major release 2.0.0 of PSI*wms*. The release will be introduced to the public at CeMAT next year. Finally, there was a lively discussion, centring around the many new modules and functional extensions. Detailed questions, some of which the participants were able to answer for themselves with helpful information and tips, and useful ideas for adding to the innovations presented, emphasised both the need and the demand for the user group.

"An extensive programme covering a wide range of topics, which provided plenty of points for further discussions," was the verdict of PSI Managing Director, Mr Albrecht. "A plenum like the user group must take shape thematically as well as in discussions among the participants. In this respect, we were very satisfied with the proceedings, the results and the subsequent feedback from this first meeting."

Customers of PSI Logistics can view the agenda, photos, helpful tips and results of the first user group meeting as well as the calendar of upcoming events, ideas organised by topic, summaries and discussion points in the forum on PSI's website at www.psilogistics.com.

► *Information*

Contact: Anja Malzer,
Head of Marketing,
PSI Logistics GmbH, Hamburg, Germany
Telephone: +49 40 696958-15
Fax: +49 40 696958-90
Email: a.malzer@psilogistics.com
Internet: www.psilogistics.com

Event: 2010 annual PUI conference

Planning a successful future together

The keynote speaker, football legend Paul Breitner, was given an enthusiastic welcome. Source: PSIPENTA

The location of this year's annual conference of the PSIpenta Users' Interest Group (PUI) represented a home match for many of the 180 directors, managers and decision makers who attended. Footballing legend Paul Breitner was not alone in discussing the secret of success with PUI users. Organised around the theme "Team spirit – succeeding together", the event which took place from 11 to 13 November provided ample evidence that cooperation between users and PSI has resulted in new and successful routes in 2010.

In his opening remarks to his customers in Munich, Alfred Keseberg, Managing Director of PSIPENTA declared, "It is manufacturing companies that have led Germany out of the crisis. What you have achieved in the last few months is astounding." PSIPENTA has dedicated itself unreservedly to this branch of industry and has refined its software solutions for manufacturing enterprises. Release 8.1 is now ready to use following a minor delay. Martin Pauli, DP Manager of Wilhelm Schwarzmüller GmbH, was already able to report on initial experiences and successes during the workshop he led at the annual conference. Based on the result of last year's round table, this year the Executive Round Table was held as a separate event in its own right. This enabled executives to attend workshops for the current release, new research projects or working groups and practical examples. The main topic of discussion at the exclusive executive meeting was method competence so that satisfactory process design assistance could be provided not only to new users, but particularly to existing customers.

As in previous years, there were plenty of opportunities at this IUP annual conference for participants to exchange information and network in a relaxed atmosphere outside of the work sessions. Whether at the get-together, on a visit to BMW World, on coffee breaks between workshops or during the evening programme – users and employees of PSI and its partners wholeheartedly seized the opportunity get to know each other personally. In a parallel exhibition, the broadly experienced partners showed that, whether in quality management, product data management, customer relationship management or even document management, integrated solutions can be used to create comprehensive, consistent solutions with a synchronised portfolio.

Andreas Liebe, member of the German IUP management board and responsible for organisation and IT at FELSS Holding GmbH, declared that this year's annual IUP conference was a very constructive event. As the result of their involvement in the work groups, experienced users have reached joint findings, which will be available to everyone in release 8.1 with effect from today. The value creation process in manufacturing businesses must also be the focus of its IT infrastructure. This has been understood in Berlin and Munich. Accordingly, the conclusion of the 2010 annual IUP conference is: "The best way to be able to predict the future is to get involved in shaping it."

► *Information*

Author: Stefanie Philipp, freelance journalist
Contact: Ulrike Fuchs,
PSIPENTA Software Systems GmbH
Telephone: +49 30 2801-2029
Fax: +49 30 2801-1042
Email: ufuchs@psipenta.de
Internet: www.psipenta.de

Group sales increased

PSI also increases sales and EBIT after three quarters

In the first nine months of 2010 the PSI Group increased its EBITDA by 24 % to 8.5 million Euros and the EBIT by 17 % to 5.4 million Euros. The Group net result was, at 3.6 million Euros, slightly below the previous year, as a result of the temporary effect of higher deferred taxes. Group sales increased by 13 % to 113.5 million Euros. New orders increased by 6 % to 122 million Euros compared to the previous year.

Energy Management (electricity, gas, oil, heat) achieved 4 % higher sales of 45.1 million Euros. The EBIT for the segment increased to 4.6 million Euros. The business unit oil and gas continued to develop positively and managed to initiate new major projects in Russia. In the business unit electrical energy, investments were made in the framework of an export project for the development of protocols and interfaces for station technology and smart meters using the American standards.

Sales in Production Management (raw materials, industry, logistics) were, at 48.7 million Euros, 12 % over the figure for the previous year. The EBIT decreased to 0.2 million Euros and was therefore significantly below the budget. The segment was primarily encumbered by investments in the new mining control system in the pilot project and accelerated depreciation from purchase price allocation. For the 4th quarter the management expects the initial licensing earnings from the marketing of the new product.

In Infrastructure Management (transportation, security, telecommunications) sales increased by 50 % to 19.7 million Euros. The EBIT increased again to 1.3 million Euros. Investments in the communication solution Cellls were concluded in the 3rd quarter; the talks with marketing partners were intensified. Above all, the subsidiaries in Southeast Asia and Poland and the transport and telecommunications business contributed to the results. PSI expects major contracts from the Middle East in the coming quarters.

As a result of targeted recruitment with an emphasis on export, the number of employees in the Group increased as of 30 September 2010 to 1,407. The order book volume in the Group decreased to 107 million Euros compared to the previous year's quarter, the cash flow from business operations improved to 4.9 million Euros.

Within the framework of focusing and internationalization, PSI added the mining business in 2010, made initial investments for entering the growth market Turkey and began bundling US activities in a new company. With the new graphical user interface, the major portion of the Group's new, uniform product platform has been released for use in customer projects.

Along with new developments and market entries, in the first three quarters of the year PSI also completed low margin projects from the first half of 2009, which was characterized by the crisis. Currently PSI is also noting a significant increase in requests for proposal in the domestic market and in exports to Asia. For that reason, the management also expects a strong 4th quarter for new orders, sales and earnings. For 2011, the management expects significant increases in the EBIT as a consequence of improved operating margins as well as the elimination of costs and depreciation.

► *Information*

Contact: Karsten Pierschke,
Head of Investor Relations and Communication,
PSI AG, Berlin, Germany
Telephone: +49 30 2801-2727
Fax: +49 30 2801-1000
Email: kpierschke@psi.de
Internet: www.psi.de

Waehouse management system for Müller-Technik

PSIwms manages new logistics centre

PSI subsidiary PSI Logistics GmbH has been awarded by Müller-Technik GmbH with the delivery of the warehouse management system PSIwms, including a transport control system and radio data transmission, for its site in Steinfeld.

Müller-Technik's 10,000-pallet logistics centre, which is currently under construction, pools the storage capacities of the surrounding eight warehouses in Steinfeld, Lower Saxony. PSIwms controls production supply and disposal, from incoming goods and commissioning – including multi-order picking and inventory taking – to outgoing goods in the manual, and subsequently in the automated, high-bay warehouse.
Besides batch management, which is essential for the automotive industry, the new warehouse management system handles cross docking and comprehensive container management. The system also manages other external and consignment warehouses. PSI Logistics is already providing the necessary text data in the respective foreign languages for the roll-out of PSIwms in sites in Poland and the Czech Republic.

► *Information*

Contact: Anja Malzer,
Head of Marketing,
PSI Logistics GmbH, Hamburg, Germany
Telephone: +49 40 696958-15
Fax: 49 40 696958-90
Email: a.malzer@psilogistics.com
Internet: www.psilogistics.com

End-to-end planning and control

PSI wins successor project

The PSI Group has been awarded by Siemens Ermtechnika Kft. in Hungary with the delivery and implementation of a comprehensive software package for the support of production processes. The solution is part of the PSI Group's PEC strategy (Planning, Execution and Control).

PSI will implement a PEC solution for the continuous planning and control of the production processes in cooperation with the SAP system at the corporate management level. Along with MES components (Manufacturing Execution System) such as shop floor planning, production data acquisition access for all automated and manual working places, the service package also consists of the components order management and maintenance.
The project will be implemented in accordance with the principles of lean management – a corporate management philosophy that pursues the goal of eliminating of waste in any business units.
The order follows on the successful implementation of a similar IT project by PSI in the Siemens Gas Turbine Plant in Berlin-Moabit.

► *Information*

Contact: Ulrike Fuchs,
PSIPENTA Software Systems GmbH
Telephone: +49 30 2801-2029
Fax: +49 30 2801-1042
Email: ufuchs@psipenta.de
Internet: www.psipenta.de

PSI AG for IT products and systems

Dircksenstraße 42-44
10178 Berlin (Mitte)
Germany
Telephone: +49 30 2801-0
Fax: +49 30 2801-1000
www.psi.de
info@psi.de

PSI