

# production manager

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Production of three million tons of plate slabs per annum.

Source: Stahl-Zentrum, SMS

## Supply chain integration project for steel producers

### Planning solution unites plants

One of the leading steel corporations of Latin America is made up of several previously independent plants. This company history is also reflected by the inhomogeneous IT landscape. On the basis of a long partnership and vast experience in the steel industry, the Mexican company commissioned AIS Advanced Information Systems, a PSI company since August this year. The SteelPlanner solutions developed by AIS were used to gradually harmonize the processes of the different sites. The 75 percent reduction of cycle times is just one of the highlights of this integration project.

Following the acquisition of several steel companies, the company is now a new Mexican global player producing more than five million tons of steel per annum. The production processes range from CSP processes to hot rolling, painting lines and service centers. For histo-

rical reasons, the new group of formerly independent plants is using different IT systems to manage production at the different sites. One plant, for instance, uses STRATIX whilst another two plants use different SAP solutions.

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## News ticker

+++ PSI and RAG Mining Solutions GmbH agree on global partnership for marketing PSImining for mining automation +++ PSI receives follow-up order from ThyssenKrupp Electrical Steel in France – PSImetals for production control and quality monitoring at Isbergue site +++ PSI becomes world's leading production management software provider for the metal industry – acquisition of main competitor AIS +++ Rizhao Steel optimises production control for the 2150-mm hot-strip steel mill in China with AIS SteelPlanner MES-System +++ PSI solution plans smelting in the ThyssenKrupp Nirosta steel mill – successful implementation of PSImetals in stainless steel mills in Bochum and Krefeld +++ PSI provides site analysis for business enterprise Gebr. Heinemann – PSIGlobal management system analyses the entire logistics network +++ PSI delivers Warehouse Management System for logistics service provider NOSTA – PSIWms in use at Stadthagen site since June +++

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## Editorial



*Dear readers,*

*On 26 August 2009, PSI acquired all of the business shares in Austrian company AIS Advanced Information Systems, thereby consolidating its position as the leading IT solutions provider for the metal industry and becoming the biggest global provider.*

*AIS is headquartered in Linz, Austria, with additional offices in Belgium, Russia and India, as well as local agencies in South and Latin America. AIS has a total of around 100 employees. AIS provides solutions for the steel industry in the areas of Supply Chain Management (SCM), Manufacturing Execution Systems (MES) and Advanced Planning and Scheduling (APS), and is a global leader in this sector. Our products and solutions aim to improve competitiveness and efficiency along the whole production chain and are characterised by a short investment payback time in the region of several months. More than 60 satisfied customers in 25 countries are a testament to this.*

*Other focus areas for the future are customer satisfaction and the protection of investments. This is underlined by our commitment to continuing all existing product lines and ensuring technology platforms are upward compatible.*

*The combined strength and expertise of PSI and AIS will reinforce our global presence and our range of services — benefiting both our customers and partners.*

*In this issue you can read about our solution for a steel supplier in Mexico.*

Dr. Peter Nowak

CEO

AIS Advanced Information Systems

		Schedule
28/01/10	<b>IBS: Expert's forum on lean manufacturing, Vienna</b> www.psipenta.de	PSIPENTA
02/03–06/03/10	<b>CeBIT, Hanover</b> www.cebit.de	PSIPENTA Hall 5/Stand C04
11/03–12/03/10	<b>25th Aachener Stahl Kolloquium</b> www.ask.ibf.rwth-aachen.de	PSI BT Foyer
19/04–23/04/10	<b>Digital Factory – Hanover trade fair of industrial technology</b> www.hannovermesse.de	PSIPENTA Hall 17/Stand B53

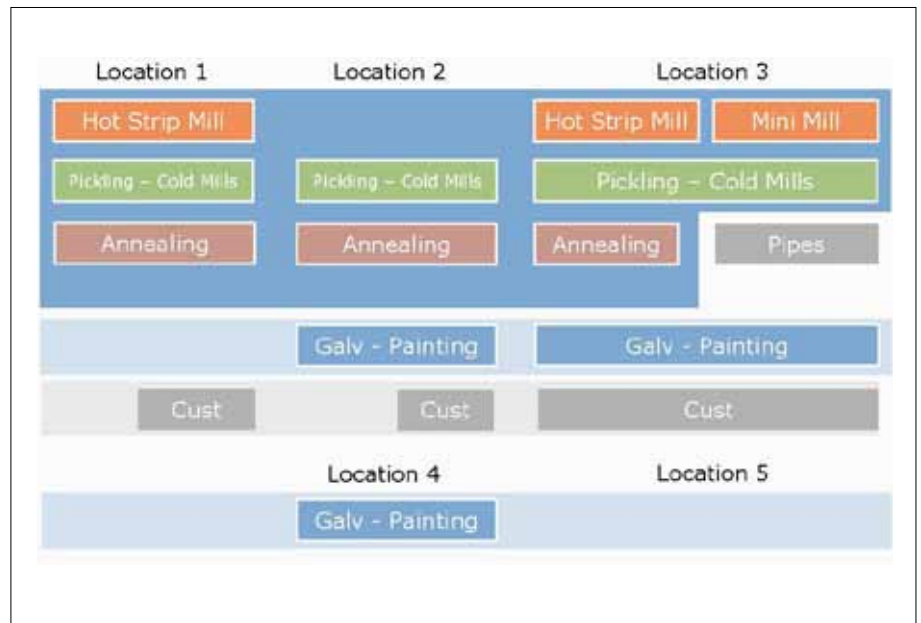
### Production planning and supply chain management

The PSI/AIS solution SteelPlanner was primarily meant to address the new challenges with regard to integrated production processes and supply chain management. The aim of the introduction was to coordinate and harmonize all production processes in order to achieve perfectly integrated production planning and management as well as synchronized material flows between the sites. In order to achieve greater customer orientation and improved delivery timeliness, it was also important to know the complete order pipeline of the group at all times and to warrant promised delivery dates for each and every order – customer orders and internal material supplies alike. For this purpose, the system had to be enabled to easily implement adjustments and updates of (sequence) planning strategies and to permit more transparency and flexibility should problems arise during production.

#### Intelligent implementation strategy

For supply chain management purposes, SteelPlanner was implemented on a higher level. In this way, a single model mapped different production units as one site with a new supply chain and the related operative processes. Tried-and-tested modules from the metals industry solve the different specific planning, sequencing and material supply tasks on a group level.

AIS's experts additionally recommended a gradual, modular approach which permits the introduction of new versions with new functionalities at shorter intervals. In this way, a first area of the plant was initially integrated, with downstream plants following step by step. In each project cycle, new targets



Multi-site Planning Solution

Source: PSI/AIS

were determined for the next version in order to identify priorities within the supply chain and to achieve applicable intermediate results.

The integrated solution is based on the introduction of different SteelPlanner modules which support different functionalities:

- Adaptation, harmonization and reconciliation of planning and sequence planning, linking of processes, jobs, material units and further information with the customer's production systems; linking of material units, production orders and jobs with the other modules of the solution.
- Sequence planning of the rolling mills on the basis of order backlog and production targets.
- Sequence planning of integrated plants (CSP plants); calculation of the sequence schedule for the two casters and the direct-charge rolling mill.
- Optimized material scheduling: On the basis of the order book, existing stock material (from a slab yard or several coil yards) is optimally assigned to the customer's orders, taking

the specific assignment rules into consideration.

#### Optimum material flow in the group

The task is to provide the customer with an overview of the material flow of the integrated supply chain. This includes a presentation of throughput, utilization and production routes for all sites as well as visualization of the material flows in relation to each other. SteelPlanner handles this task with its capacity planning solution which maps the plants via production lines or processes (in the case of identical lines) and jobs via product families. For each production line, the system supplies one plan a day with a time horizon of 60 days as well as the resultant inventory trend and the transport schedule for all production plants in the group.

The parameters considered include the delivery date, the work plan / production routes, including technical restrictions (such as cooling and transport times) and alternative routes, the plant capacity (availability of production lines, job-related performance restrictions,

campaigns). Warehouse and storage yard restrictions, target inventories as well as the higher-level commercial targets of the company are considered too. Within 20 minutes, the module develops a material flow plan which represents the ideal combination of the different targets. Transfers between the plants are evaluated and alternative production routes are identified for certain product families. The user can have several simulations performed in order to identify the optimum material flow plan for his application.

The results are convincing: Inventories and cycle times were significantly reduced. Scheduled plant downtimes are considered in the calculations from the very beginning so that alternative strategies can be developed and the required material flows between the plants simulated. The user can view and check the results in a user-friendly, graphically edited format on the intranet.

### Quick, flexible, transparent

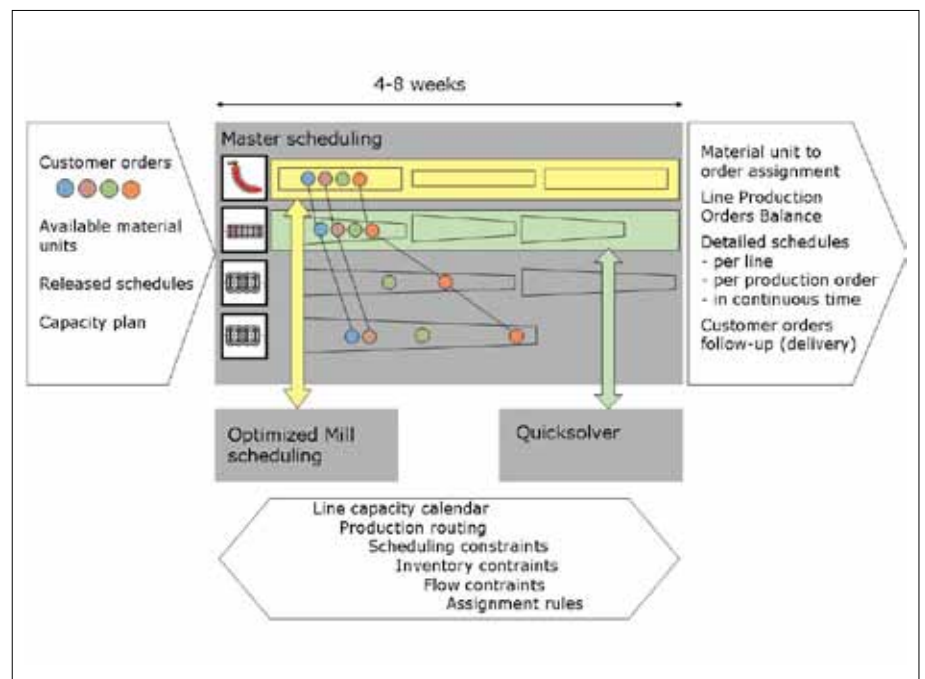
The higher-level order backlog and the general production plans form the basis for determining the expected delivery times for every job, i.e. both for customer orders and for internal material supplies. The sequence planning solution of SteelPlanner is used for this purpose. It maps the production routes of every order. The sequence plans of all materials to be processed are prepared with a view to the needs and parameters of downstream lines, and are oriented strictly towards the higher-level material flow plan. This enables not just more realistic delivery times, taking inventories into consideration, but also the development of short-term detail sequence plans for the rolling mills. The result is a tremendous reduction of planning times: The former manual process which took four days

was replaced by a calculation that can be carried out overnight.

### Sourcing management support

The steel producer ships more than three million tons of slabs to a host of customers and needs to agree to long processing times with customers with limited casting capacity, so that a corresponding slab supply schedule is necessary. This is

where a supporting SteelPlanner module is used which links the slabs to orders and prepares a demand calculation with a time horizon of three months. For this purpose, confirmed and planned orders as well as existing and planned slabs, including their positions, are fed into the system. Assignment rules determine which slab is assigned to which order, when it will be transported and where, and the production line where it will be



The plant situation is fed into the model and the production plan is generated according to the material flow calculated. Realistic delivery data is calculated for all orders. This data already takes into account the forecast stock. Additional modules undertake the short-term planning to control the steel mills against the background of the restrictions detailed.

Source: PSI/AIS

### Highlights of the integration project

- Coordinated (sequence) planning
- Optimized material flow – even between plants
- Optimized sourcing strategy
- 75% reduction of cycle times
- Reduced inventories
- Shorter planning times: from four days to eight hours
- Greater transparency, flexibility and speed for all processes
- Improved delivery performance
- Simple adaptation and updating of functionalities when framework conditions change

processed further. The system automatically considers the specific requirements, quantities and grades as well as the agreed delivery dates or restrictions of the higher-level supply chain. As a result and, taking all the sometimes conflicting targets into consideration, the system assigns all available slabs to the corresponding orders. Orders to which no slabs are assigned make up the net demand for slabs which then forms the basis for the further slab procurement strategy.

### Complex challenges mastered

The implementation of a higher-level planning solution on top of the different production systems of the previously in-

dependent plants leads to the mapping of an integrated supply chain which hence opens up a completely new perspective with regard to the utilization of resources. Optimization and synchronization of the individual production processes creates a potential for synergies and will be reflected in the profitability of the group.

Thanks to the modular approach of AIS, it was possible to resolve many planning and management tasks in a parallel effort. Inventories as well as cycle and planning times have been reduced significantly, plant downtimes can be taken into consideration, and the right strategy can be chosen from among several alternative options. This means greatly

enhanced flexibility and transparency. Thanks to its strongly improved delivery performance, the Mexican steel producer can expand its competitive advantages even further. ☉

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## Interview: CEO of PSI BT on the acquisition of AIS

### Synergies for a stronger, joint product

PSI has acquired 100 percent of the shares of the Austrian Group AIS Advanced Information Systems. AIS is a provider of IT solutions and services in the fields of advanced planning, production control and supply chain management for the metals industry. Sven Busch, CEO of PSI BT GmbH, will answer your questions concerning the acquisition of AIS.



**PM:** What is the legal relationship now between AIS and the PSI Group?

Advanced Systems Information GmbH & Co. with headquarters in Linz and

Leoben and its representation in Brussels are wholly owned subsidiaries of PSI BT GmbH.

**PM:** In your letter to customers, you stated that the existing product lines would be continued. Will you offer both production lines on the market in future?

In order to secure investments made by our customers, AIS and PSI will continue to offer the existing product lines. This acquisition, however, is also a unique opportunity to benefit from the technologies and experience of two leading suppliers, to exchange and

further perfect the best. In our effort to exploit synergies and create a stronger, joint production, we will hence merge our products in the long term.

**Is there a time schedule for the migration of the product lines?**

We already started a work council with experts from both companies. We are diligently working on a conceptual design describing the convergence and migration of the product lines. The resulting roadmap will lay out the possibilities for the maintenance of the current solutions and present our customers with options how they can benefit from future enhancements. The details of our product strategy will be carefully considered, with long term vision and emphasis on high quality. We expect to present our finalized plans to our costumers during the coming year. ☉

## User report: Integrated information system for production

### Holistic approach is recipe for success

Increases in orders force companies to optimise their entire supply chain and to adjust to the ever-changing, growing challenges of international competition. The Bavarian company ALPMA GmbH is tackling these challenges with the help of Berlin enterprise PSI Production Gesellschaft für Steuerungs- und Informationssysteme mbH and a new piece of software.

Everything revolves around cheese at ALPMA. ALPMA Alpenland Maschinenbau GmbH in Rott am Inn provides its customers with complete system solutions for the production, processing and packaging of dairy products. Its main expertise lies in the following fields of activity: process technology, i.e. milk processing and preparation for further processing, as well as cheese dairy, cutting and packaging technologies.

One particular problem arose in 2005: Customer deliveries had become rarely reliable as no up-to-date utilisation of capacities could be displayed in planning, for example. What's more, there was no continuous planning through to shop floor level. The material require-

ment planning system (MRP) "Swing" in use provided no or insufficient support for planning and controlling the workflow.

"We often have exceptionally large projects that involve a significant amount of project planning and designing even before any cutting operations take place in production", says project manager Peter Podhorodeski, talking about the problem back then. Processing times ranged from three months to one and a half years, depending on the size of the order. It always took a long time to call up customer information and a lot of co-ordination was required.

There could be up to 8, 000 orders in the MRP system, corresponding to 30, 000 operations. The orders were not subject

to logistics or planning with relation to capacity.

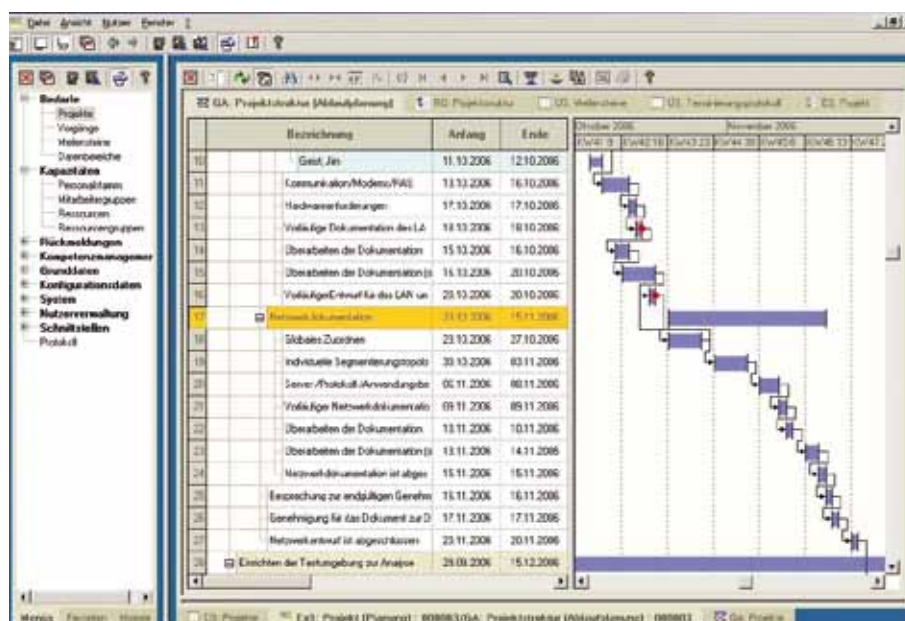
#### Improving adherence to delivery dates

The new IT solution, which made use of the existing MRP system, sought to improve adherence to delivery dates and enable integrated planning and control of order processing at all levels. At the end of the selection process, the machine manufacturer opted for the MES software from PSI Production. One of the decisive factors when making this selection was the fact that PSI*mes*, unlike its competitors, does not allow backlogs. The team at Berlin installed a productivity and test system with a control centre, Shop Floor Data Collection (SFDC) terminal, SFDC Client and an hourly sheet function for feedback and project-specific recording of hours during the design phase. The SFDC system runs on an IBM AS/400, while PSI*mes* and the test system are each installed on a separate server. Both are connected via an interface. The test system is used for training purposes and checking for updates.

#### Planning with workflow function

For the preliminary clarification of dates, office staff used to send out a Word document through Outlook and each department would enter their rough time intervals. Planners would determine capacities using existing occupancy schedules for similar machines. The vendor would then add this all together and create a quote.

Now, vendors enter their quotes in the MRP system, which automatically generates a template using PSI*mes*. This



Central planning module.

Source: PSI



ALPMA is also the world market leader for cheese packaging technology. Source: ALPMA

template completes a defined throughput in project management. So there is no longer one specific, sole planner, rather a decentralised throughput that is organised like a workflow system. This means that the first operation in a project is displayed on the monitor of the first planner. In the early phase, only rough planning is possible for the often very long design periods associated with special-purpose machine manufacturing. Once an operation is complete, it moves on to the next station via a workflow function.

When a customer order comes in, it is also recorded in the MRP system and it filters through to the individual departments. A template is automatically generated for each machine in the PSI suite which is displayed to the particular planner in the sequence of his work list. Planners therefore always know how many new operations they need to schedule. A throughput of this nature generally takes up to two days. The planners then correct any orders with delayed delivery times at a weekly planning meeting.

Production only receives the work orders when the machines leave the design phase. Schedulers can see a time bar on their monitor that they must verify according to the design specifications. Having been created in the MRP system, the orders then reach the PSI control centre included in their order network in accordance with the specified capacity settings. These work orders also appear in Project Management where this time bar "lives". If a project is postponed overnight due to rush orders, for example, the time bar for the subsequent projects is altered by the next morning at the latest.

#### Adherence to delivery dates increased by 60 percent

On the control centre and work order level, adherence to delivery dates in Assembly quickly rose by 30 percent "That is a significant amount that we would never have expected", commented project manager Podhorodeski. In Production, the volume of active work orders was reduced by 60 percent. The planning islands have been eliminated and the information available on delivery dates is of a much higher quality. You can always view the current capacity utilisations at the press of a button. Although this is of huge benefit to ALPMA, they see the main advantage as being all of their employees using the same software for their work. ☺

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#### Company

##### ALPMA

##### Alpenland Maschinenbau GmbH

Founded in 1947, the company is the world market leader in the manufacture of machines and systems for the entire range of equipment used in cheese dairies. These technologies are based on the principles of traditional cheese production and yet still enable fully automatic cheese production according to industry standards. ALPMA has subsidiaries in Switzerland, France, England, Russia and Spain, as well as agencies in over 50 countries.

#### Business areas:

- Process technology
- Cheese dairy technology
- Cutting technology
- Packaging technology
- Conveyor technology
- Wire-mesh cable tracks

#### Offices:

- Rott am Inn, Germany
- Dresden, Germany  
(process technology)

Employees: 500

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**Product solution: Innovation for intra-logistic RFID applications**

## "Recognition instead of scanning"

Radio Frequency Identification (RFID) is currently one of the most important basic technologies of modern, intelligent, material flow concepts. PSI Logistics GmbH is presently involved in an interdisciplinary RFID research project and has, as a result of this project, implemented a new type of recognition software for automated, RFID-based material flows of intra-logistics directly in their own product solution and in the functionalities of the PSI*ums* forklift control system.



*When used as mobile gates, forklifts enable automated information recording.* Source: NOSTA

### IdentProLog research project

"Recognition instead of scanning" — this was the slogan created ten years ago when the RFID standard became the basis for wireless data exchange. RFID now forms the basis for a multitude of product-related information systems. Nonetheless, in many ways there is still need for research and development. Thus there are currently several research projects underway concerned with developing application-specific solutions to increase efficiency and expand use of this tech-

nology further still. The latest example is the IdentProLog project supported by the Federal Ministry of Education and Research (BMBF) that will be completed in the coming months.

Out of the eight partners involved in this interdisciplinary research project where potential RFID applications were developed for internal material flows, PSI Logistics, as a leading technology provider, was responsible for the software components. The results of this project are now being integrated in future-oriented products and thus will directly benefit users.

### Unique recognition software

As a result of this research project, PSI Logistics has now integrated special recognition software for automated, carrier-specific, RFID-based recording in the forklift control system ("Transport Control") of the PSI*ums* Warehouse Management System. The new software for automated and standardised processes is in equal measures an innovation for intra-logistic RFID applications and a unique selling point for PSI Logistics. There is currently no competitor in the global market who is able to offer this software module.

What is it all about? As part of the IdentProLog project, industrial trucks were fitted with RFID recorders/readers. In doing so, the voucherless, RFID-based, automated information flow is linked to master IT systems in the warehouse. The most important component here is a software communications module in the forklift truck's data terminal. The industrial trucks are also fitted with an additional control device, the event box, which records the vehicle status data.

Special recognition software in the communications module transforms the forklift trucks into mobile gates. The route guidance system, developed by PSI Logistics, forms the interface between the hardware and the superposed IT systems through a direct connection via the PSI*ums* Transport Control module. Using the operating data, the software is capable of analysing the forklift truck's activities, generating the process status, recognising the carrier, triggering the required recording and processing procedures, as well as recording and forwarding its




information. In order to keep the amounts of data to a minimum and yet achieve continuous transparency, the RFID reader is not constantly active. Only the required flows of goods are automatically recorded.

The recognition software generates a relevant event when the speed of travel drops and during load pickup, for example. In this case, the event triggers identification of the load and, if applicable, the stock location. The recorded data is linked to the events and is sent to the PSI<sub>ums</sub> Transport Control module. With this configuration, the Warehouse Management System automatically receives online and real-time information about changes to the warehouse situation after every handling process (but only then).

The benefits include fast, automatic recording without process interruption and increased security for employees and material and data flows. The automated processes during stock transfers, when handling both incoming and outgoing goods, ensure faster, more efficient and transparent processes. As a mobile gate, the forklift truck becomes a direct link between goods and the information flow.

#### The future at a glance

The involvement of PSI Logistics in innovative research projects, such as the IdentProLog project, is not the only thing to substantiate the company's position as a leading technology provider. The results flow directly into future-

oriented solutions, increase the investment security of the PSI Logistics product portfolio, create development potential for new applications and, above all, can be put to good use by users in commerce and industry. 

#### ► Information

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# CeMAT

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Products and solutions: Quality Management Execution by PSImetals

## Everything under control? Heat analysis release

Up to now, users of heat analysis evaluation systems in many steel mills have been faced with the typical problems associated with manual decision making. Existing systems do not feature the option of maintaining technological know-how so that reproducible, recordable results can be generated at any time. What's more, application-related decisions and reevaluations are carried out manually rather than automatically, which can result in more frequent mistakes and delays. The PSImetals Quality Management Execution (QME) function for the rule-based release of finished material is now being used in the liquid phase for heat analysis release.



Quality control begins at the production unit.

Source: Stahl-Zentrum, SMS

This enhanced functionality is used to standardise manual decision-making processes in view of the numerous different product requirements, and to implement an automatic heat analysis evaluation and release. In conjunction with the heat release system, PSImetals supports all business processes related to production and

automatic quality management in the liquid phase.

### Automated and online usage decisions

Master data and aim analysis relating to the qualities to be produced are maintained centrally and version controlled by

PSImetals. The test criteria and conditions for compliance with the aim analysis and the associated usage decisions and heat release are maintained in PSImetals as a set of rules. This set of rules is easy to create and configure, and can be maintained and expanded at any time by the quality engineer. In addition to the rules for evaluating the tundish analysis, there are also additional rules for the production-related online checking of interim analyses. Based on these rules and in the event of deviations, possible alternative grades and the appropriate heat production orders are automatically determined using the production program and are suggested to the user. For target-actual comparisons, the rule editor contains both the analyses and all of the heat data so that content-sensitive rules can also be created based on the current heat status.

### Target-actual comparison of finished-product analysis


Once the finished product analysis is available, PSImetals automatically performs the rule-based target-actual comparison and the application-related usage decision. If all limit values have been complied with, the heat is automatically released. If one or more limit values have been exceeded, an attempt is made to convert the heat to an alternative grade using the saved set of rules. If this is not possible, the heat and related material is blocked from moving on to the next stages of production. In this case, the quality assurance department must make a usage decision.

### Evaluation of interim analysis using the traffic light function



Automatic evaluation and approval of molten mass

Source: Stahl-Zentrum, SMS

optimised operations for steel production and also rule-based, automated usage and heat release decisions. These are available online, even during ongoing production, with checking of each individual analysis, from the primary facility and secondary metallurgy through to the casting of the heat. Using the automated system, heats are approved and released in a timely, reproducible manner using the configurable set of rules, thus reducing warehousing capacities and costs for the starting material as well as expenditure on staff. The PSImetals QME component can be integrated into existing manufacturing execution systems as an independent module. It is also an integral part of a complete PSImetals solution and is therefore another module added to PSImetals for the rule-based management of technological steelmaking know-how, treatment practices and ladle usage restrictions. 

The support for production-related quality assurance provided by PSImetals is consolidated through the online evaluation of interim analyses. These can be either facility-specific, complete, sub-target analyses or individual target-values for special elements. This is displayed to users in the steelmaking in the form of a traffic light. If the values of all relevant elements fall within the target range, the traffic light turns green. If the actual-value analysis does not comply with the target-value analysis and if the analytical specifications of the current quality are also no longer attainable in the subsequent treatment steps, the traffic light turns red. Based on the rules saved in the system relating to regrading or degrading, PSImetals then automatically generates suggestions for alternative grades that can still be achieved under the given conditions. In addition to the current availability of facilities, the existing

pool of orders for the currently scheduled production program is also taken into consideration so that users have the best support for any conversion-related decisions.

#### Improving process structures

The Quality Management Execution system by PSImetals supports both

#### ► Information

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## 25th Aachener Stahl Kolloquium

### Metal Forming

Global Challenges: New Markets for Metal Forming

11th and 12th of March 2010, Eurogress Aachen



Interview: Karl Tröger, head of product marketing for PSIPENTA, on lean production

## Lean production — a holistic philosophy



*The idea of "lean" will no longer end at the limits of a plant or company, rather it will be used throughout all value-added chains.*

In these times of rather meagre profits in the manufacturing industry, a number of software providers have long been praising cost-saving solutions, with names such as lean management or lean production, as a remedy. Karl Tröger, head of product marketing at PSIPENTA Software Systems GmbH, explains what this is all about and what proposals the Berlin-based company is making.

**PM: Mr Tröger, where does the term lean production come from and what does it mean?**

The idea originates from the Toyota Production System. It involves consistently avoiding waste in value-added processes and supporting processes. Lean production is not a stand-alone method or toolkit — rather it's a holistic philosophy for managing and controlling a company. The basic idea is to eliminate anything that does not contribute to added value, i.e. anything the customer does not pay for, such as surplus stock, waiting times or unnecessary transportation.

It is also about meeting the customers' requirements quickly and at the specified quality level. Other important topics include the continuous monitoring and improvement of processes, as well as an efficient problem-solving culture and adaptation to changing conditions. The implementation of lean production involves a constant transformation of the organisation, production methods, planning, control and the persons involved.

**PM: What is the structure of the lean production programme at PSI?**

Unlike most lean production experts, we don't just provide consultancy services or, if you will, training services, but we are also a one-stop supplier of hardware and related software. Thanks to the ERP standard *PSI<sub>p</sub>enta adaptive*, we have a tool that contains a control loop for the gradual readjustment of push to pull production and that automatically responds to changes and disruptions. Specified target values such as capital commitment or delivery capacity control the availability of materials and capacity. Bottle necks are identified and planning is corrected accordingly.

The results are displayed and show the effectiveness of the measures taken and other fields of work. The implementation of this tool is accompanied by a reduction in batch sizes, a decrease in stock levels, a shortening of processing times and a reduction in current assets. Production is streamlined, steadied and increasingly converted to just-in-time manufacturing.

**PM: What is the cost of lean production for a company?**

The main expenditure is on organizational matters. Apart from that, there are no special costs involved. It is clear that the control loops implemented will only work if the current state of production can be fed back promptly into planning. This is where SFDC/MDC systems or mobile data acquisition systems come into use. With relation to hardware, it is important to bear in mind that in many cases the production technology will need to be adapted too. An investment in machines, systems and tools is often necessary when it comes to removing bottlenecks.

**PM: PSIPENTA is already talking about lean production 2.0. What innovation or progress has been made?**

Up to now, mass producers in the automotive industry have mainly been linked to lean production methods. If you look a little closer, you can see that "lean" often stops at a company's limits. Suppliers take on the buffering and, when it comes to it, also the risk. This is where the control loops of *PSI<sub>p</sub>enta adaptive* can significantly help to minimise risk.

Contract manufacturers and one-off producers can make use of lean produc-

tion principles too. A holistic view of resources enables backlog-free planning right from the start and helps you to succeed even when there are disruptions. All processes required for production flow are synchronised with the goal of compliance with delivery dates. The involvement of external partners in planning procedures ensures delivery dates are met. Well-aligned material planning and production results in optimum utilisation and reduced stock levels with considerably shorter processing times. Disruptions to the process are automatically corrected and the order networks are geared towards the target dates. The aim is to provide constant delivery capacity with minimum capital commitment.

**PM: Are there any further developments and what are they seeking to achieve?**

Lean production cannot be a personal undertaking. When companies focus on their main areas of expertise, this leads to a dramatic increase in the need to co-operate. Value-added chains extend around the entire world. Slumps in demand no longer affect only individual regions, rather their effects can be felt around the world. It is increasingly important that companies are able to adapt to these dynamic conditions. Lean production methods are important here too. The idea of "lean" will no longer end at the limits of a plant or company, rather it will be used throughout all value-added chains. ☉

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**CeMAT network**

**A strong network for intra-logistics**

**The CeMAT network combines intra-logistics activities, provides information on current and future developments in the industry and unifies their networks, all under one roof.**

In addition to the CeMAT events in Hanover, Shanghai, Mumbai, Dubai and Moscow, the network launched by Deutsche Messe AG, currently under construction, will also offer industry-relevant events organised by CeMAT network partners and associated institutions such as the VDMA (Association of German Machine and Plant Manufacturers), BVL (German Logistics Association) and the VDI (Association of German Engineers), as well as various contact and co-operation opportunities. International associations will follow soon.

The basis for activities is the Internet platform [www.cemat-network.com](http://www.cemat-network.com), here

all CeMAT news and CeMAT events are bundled. Here CeMAT network partners are also able to publish industry-relevant events and information. CeMAT network partners are co-operative associations and leading manufacturers in the intra-logistics industry that are committed to the CeMAT network. The result is a unique international event platform for the industry that offers opportunities for developing business links and maintaining contacts even when trade fairs are not taking place. ☉

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CeMAT network — a meeting place for the intra-logistics industry.

Source: Deutsche Messe

## PSIPENTA IPA annual customer conference

### "Customer proximity is our top priority"

Over 200 customers from the mechanical engineering and automotive supplier industries, as well as partners and research institutes, accepted the invitation to the 23rd Annual PIUSS-O and PSIPenta User Community of Interests Conference (IPA) held at Hotel Grand Hyatt, Berlin. It was an occasion for the software company to celebrate the 40th anniversary of parent company PSI and was the largest user conference in the history of the company.

"Strike a balance" was the title of the speech given by the monk and former cellarer of the St. Boniface's Abbey in Munich and Andechs, Anselm Bilgri, at the end of the first day, talking about the ability to transfer Benedictine rules of life to corporate management. "In times when buzz words such as rationalisation, lean processes and resource optimization are treated as gospel, we felt it was important to remember that the people are the focus of any company", says Manag-

ing Director of the Berlin software company, Alfred M. Keseberg.

During the two-day conference, numerous talks, workshops and a roundtable for managing directors were held to provide information on and discuss the PSIPenta ERP solution and partner products. A day before the conference had even begun, those interested had the opportunity to visit a major international customer in Berlin and to see for themselves the integrated production planning and control system that uses PSIPenta in conjunction with SAP. "Customer proximity is our top priority. We take criticism and suggestions very seriously. We are also committed to developing our solutions in close co-operation with our customers in the future", says Alfred M. Keseberg.

The Competence Customer Award, being bestowed for the third time, was accepted by Achim Stapf on behalf of FIBRO GmbH.

During the conference, POLY-TOOLS GmbH announced their decision to opt



The Managing Director of PSIPENTA, Mr. Alfred M. Keseberg greets guests. Source: PSI

for the PSIPenta ERP solution and the PSIPenta adaptive expansion. The Managing Director of this specialist in mould making and blow moulding, Mr Arnold Schura, had already had excellent experiences with the Berlin software company's solution at his former employer. The system will provide particular support for sequence planning and standardisation in mould making. ⦿

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Over 200 customers accepted the invitation to the user conference.

Source: PSI

Group net result increased by 39 percent to 3.8 million Euros

## PSI increases sales and profit in the first nine months of the year

The PSI Group has increased its operating result (EBIT) in the first nine months of 2009 by 11 percent to 4.65 million Euros in comparison to the previous fiscal year. The group net result was enhanced by 39 percent to 3.8 million Euros and group sales rose by 9 percent to 100.1 million Euros. The volume of new orders at 115 million Euros was slightly below that of the previous year and order backlog increased by 10 percent to 116 million Euros.


The segment of Energy Management attained 11 percent more sales at 43.5 million Euros; with an operating profit of 3.0 million Euros, this segment delivered the largest contribution to operating income.

Sales in the Production Management segment were 4 percent higher than last year at 43.5 million Euros. Operating result was almost the same as the year before, in spite of the economic situation and higher write-offs, at 1.7 million Euros. The industrial sectors of metal production and mining above all

developed positively while the recognition of license revenues from the sectors manufacturing and logistics was shifted partially into the fourth quarter.

Infrastructure Management saw an increase of 21 percent to 13.1 million Euros. Operating profit of 0.3 million Euros was slightly more than the previous year. Incoming orders in the Energy Management sector were significantly lower in the third quarter as opposed to the previous year, which was characterised by quite large individual orders.

Orders received for Production Management were slightly higher than last year and orders received for Infrastructure Management were significantly higher than last year. The number of incoming orders for the entire fiscal year is expected to be as high as that of last year's strong performance.

The management of PSI expects a fourth quarter EBIT increase to achieve a record-high of about 3 million Euros. The number of employees went up as of 30 September 2009 to 1,387. 

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PSI wins KRÖGER WERFT as new customer

## Premium yacht builder decides in favour of PSIPenta ERP solution

PSI has been awarded by KRÖGER WERFT GmbH & Co. KG to deliver and implement the PSIPenta ERP package solution. The aim of the project is the harmonisation and integration of all the business processes. In a joint development partnership, the specific processes of the project-related, make-to-order production are to be completed in PSIPenta Standard.



KRÖGER WERFT is part of the LÜRSSSEN Group in Bremen and is active in both merchant and naval shipbuilding. It is specialised in the construction and repair of mega-yachts, naval ships and research vessels. 

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PSIPenta will be used as a complete solution and will cover the entire business process, from offer to acceptance and handover, including planning, controlling and production control. The support

of the comprehensive project structures and the service management are especially important for KRÖGER WERFT. The company will put the new solution into operation in 2011.

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