

production manager

Journal for Logistics & Production

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Experienced consultants come up with customised SCM concepts

Photo: Marco Rothenburger

Supply Chain Management

Optimum solution with Business Consulting

The PSI Group has acquired a new family member: 4Production. In addition to its Production Management System (PMS) for the aluminium and copper industry, 4Production also counts consultation expertise among its range of services. Every change is always preceded by setting objectives, analysis, the concept and planning. And when it is time to put changes into practice, every firm will

be glad to have an experienced consultant at its side. That is where 4Production comes in – a company specialising in intelligent, responsive and flexible Supply Chain Management (SCM) solutions for the metal industry.

Suppose you want to modify, extend or modernise your company. You'd like to

Read further on page 3

News ticker

+++ The Management Board of PSI AG passed a resolution on 4 May 2009 to buy back up to 800,000 of its own shares (i.e. some 6.7 percent of share capital) on the stock exchange. +++ PSI planning to pay a dividend from 2010 — PSI AG intends to distribute a dividend for 2009 and subsequent years. At the meeting immediately after the AGM, the PSI AG Management Board and Board of Directors decided to make a proposition at the 2010 AGM to pay out a dividend of at least 50 percent of PSI's profits for the year — the first time a dividend will be paid since going public. +++ A first: PSI offers RFID real-time tracking for public transport — radio-based tracking of buses and trams at Stuttgarter Straßenbahn AG +++

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Events

UITP – Mobility & City Transport Exhibition www.uitp.org	08/06–11/06/2009	Vienna, AUT Hall A, Stand 1C310
Aachen ERP Days www.erp-tage.de	16/06–18/06/2009	Aachen Stand 15
IBS – Expert's forum on lean manufacturing www.ibs-ag.de	02/07/2009	Stuttgart
inter airport europe 2009 www.interairport.com	06/10–09/10/2009	Munich Hall B5, Stand 1031
it & business www.messe-stuttgart.de	06/10–08/10/2009	Stuttgart
4th German Engineering Summit www.maschinenbau-gipfel.de	13/10–14/10/2009	Berlin Stand 4



HANNOVER MESSE 2009 exemplifies the determined attitude of the industry amid a serious economic crisis. The fair did not focus on the increasing gravity of the recession and its causes, but on ways of finding a solution. The exhibition in Hanover was attended by some 210,000 visitors, with one in four coming from abroad. In terms of exhibitor numbers HANNOVER MESSE was able to consolidate its position as the world's most important technology fair: 6,150 exhibitors from 61 nations displayed their wares on a floor area of 224,800 square meters.

Photo: Hannover Messe

Editorial

Dear readers,



In this edition of production manager we would like to tell you about the Business Consulting services offered by 4Production. Our team specialises in supply chain systems for metal producers and manufacturers processing semi-finished parts. This is home ground for our consultants. Their in-depth knowledge of processes and production allows them to identify bottlenecks, spot available potential and exploit it efficiently on a long-term basis.

The focus of their work is always market requirements, your own production and logistics network and optimisation of the financial result. The way to achieving an optimum supply chain is mapped out individually with our well-tryed and tested procedure models. As we are perfectly at home in the metal industry, we can contribute our many years of experience in this sector every step of the way.

Read about the strategy 4Production uses to develop the best possible solutions with its clients, and how we plan and implement change processes. Our field report from the forging plant Schmiedewerke Gröditz will give you a good idea of how this is carried out in practice.

We hope you enjoy reading this edition and would be delighted to receive any suggestions or queries on your part.

Yours, Erwin Bronk

Management Board, 4Production AG
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respond to change and meet the needs of the market faster and with greater flexibility. You want to boost production capacity or incorporate new equipment more effectively. Who do you contact? The perfect candidate is someone with years of experience who has already created and implemented many SCM concepts. Someone who knows and has developed long-term approaches in the market and works with well-tryed and tested procedure models. In other words, an experienced architect who can produce a realistic picture of your visions, take charge of the tender process and compare the available solutions. If necessary, they will also act as "Construction Manager" to ensure the client really gets what he wants.

Strategic application for a strong impact – that is the approach adopted by the consultants at 4Production when it is a question of optimising your supply chain and designing the most efficient structures for metal production, processing and manufacture. We can also contribute our specific knowledge of the sector. Our consultants ask the right questions and know exactly what to look out for. Where can potential for optimisation be uncovered at your company? How can you map out your overall industry concept and sales strategy in the supply chain? What investments and modernisation measures will have the greatest economic impact? What does the ideal steady-state situation look like? These are problems and issues the 4Production team confronts and answers on a daily basis. With this

in mind, we have developed consulting modules for both the strategic and the tactical, operative level.

The final objective of SCM strategy consulting is financial optimisation (EBIT, ROCE) of the supply chain. Here we simulate and compare different scenarios, taking into account the general strategic conditions such as the business model, market and product requirements, differentiation/investment strategies as well as the existing supply chain system.

Operative issues at a tactical level are addressed using consulting modules which are structured in succession to arrive at an optimum solution step by step.

We perform analysis to explore the potential offered by the various components in the supply chain. Based on the production resources and flows/stocks of material at the plant this potential is identified according to the objectives and quantified in a readily understandable manner. This provides the starting point for further action.

A customising process is used to reorganise the supply chain in line with the client's specific needs: this involves looking at product-related manufacturing processes, intelligent semi-finished part stages, distribution centres as well as market/product-specific service levels. Here the key issue is designing future processes and establishing how best to organise them. It finally becomes clear who decides what, where and when.

Inventory Design & Engineering is used to clarify the following issues: How much stock is needed in the supply chain, and where? What inventory is required depending on transport/production batch sizes (campaigns etc.), availability to deliver, service level, quality requirements and reserve stock as protection from shortages?

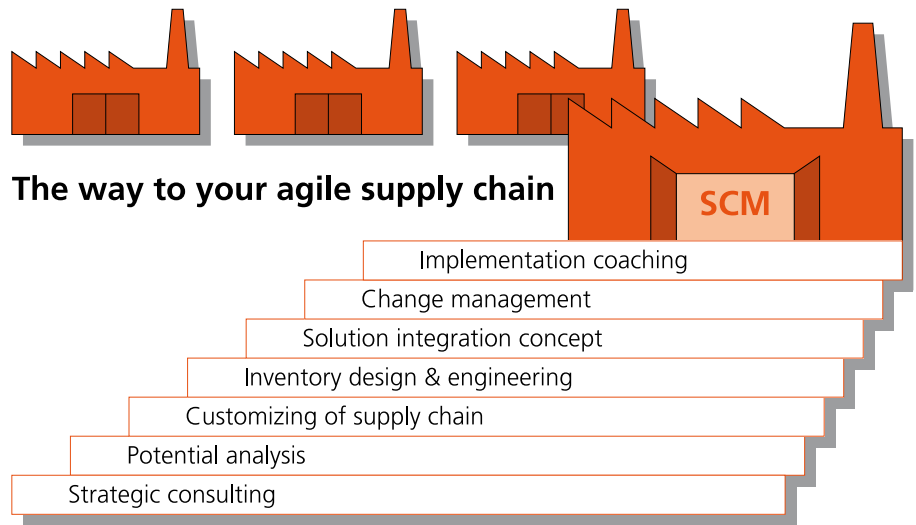
The Solution Integration Concept comprises:

- Mapping out processes onto solution architecture (which system supports which process?)
- Synchronising solution components, identifying interfaces
- Issuing specifications and tender documents for solution architecture
- Creating a benefit-oriented introduction strategy (processes and systems)
- Organising tender processes and assessing the level of cover.

This concept decides which steps are to be carried out, how and in what order.

4Production will act as your partner, helping you with Change Management in the introduction phase as well as with implementation. Changes are initiated using clear, well-structured procedures, including training for staff to get everyone involved on board. Step by step, functionalities are introduced, old planning and decisionmaking processes replaced by new procedures with lasting effect and a policy of continuous improvement set in place.

Finally, we should just like to briefly reply to a frequently asked question: are



there really any consultants who are truly independent in terms of providers? If at all, it is really only scientists who could be really independent – however, they are said to be often short of the practical experience and skills required for implementation.

For over 15 years 4P's consultants have managed to come up with feasible SCM concepts that are well-trying and tested and do not depend on specific tools or IT. If software solutions are appropriate in order to achieve lasting benefit, we make use of branch-oriented PSI products backed up by partner solutions. The 4P approach is endorsed by our clients: "When making our selection, it was particularly important that the primary product already matched our specific processes", declares Karsten Neumann, project manager at Schwermetall Halbzeugwerk GmbH in Stolberg, Germany, a world leader in the manufacture of prerolled copper and brass strips. "The simple mapping of our processes was confirmation of our selection strategy." "We can be measured by our results: A success-related bonus is almost

always included in our fees and contracts", comments Erwin Bronk, Managing Director of 4Production. "Our claim is that for every euro invested in our solution, the benefit will be tenfold."

4Production AG moved into new offices in Aachen/Würselen, Germany (Carlo-Schmid-Str. 12, 52146 Würselen) and looks forward to seeing you there soon.

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Supply chain consulting

Identifying bottlenecks, optimising the overall process, preparing for SCM

The forging and electric steel plants Schmiedewerke Gröditz GmbH and Elektrostahlwerke Gröditz GmbH first and foremost stand for an extensive portfolio of steel products. In 2006, the company decided that it wanted to be more flexible in responding to customer requirements and planned to introduce a continuous Supply Chain Management system (SCM) at the plant to achieve this good. But who would be familiar with the specific production processes and material flows used at a steel-producing and processing firm? What solutions have already been used successfully in the steel industry? The consultants from 4Production were asked to develop the right SCM approach for the business and make optimum preparations for implementation. This comprised a team of specialists with production expertise in metal production, processing and manufacture.

The Georgsmarienhütte Group is made up of 52 small and medium-sized companies based in Germany, Austria and Belgium. They are united by a common goal – constant search for new applications for steel, iron and aluminium and the use of these materials.

The forging plant in Gröditz takes the steel produced by the electric steelworks to manufacture open-die forgings and



Efficient production processes

Photo: Schmiedewerke Gröditz GmbH

rolled rings which are preprocessed or finished. Modern technology and a versatile portfolio of services allow the company to offer customised products weighing as much as 45 tonnes. The range of materials consisting of approximately 300 steel grades in more than 1700 analysis modifications illustrates the many possible applications – for example, in tool and mould making, the construction of large engines and energy systems as well as mechanical engineering.

To make more efficient use of plant capacity and to get ahead of the competition with better service skills

and quality, the management decided to optimise the entire supply chain – from procurement to delivery to the customer. Stock levels frequently became too high due to the complex production processes, enormous variations in demand and bottlenecks at the company. The objective was to bring about a marked improvement in flexibility and the reaction speed in response to specific customer requirements.

Faced with the essential engineering, the consultants of 4Production were asked

- to develop a functional operational and organizational structure



"With the continuous Supply Chain Management system we want to optimise our internal supply chain, improve delivery reliability, reduce throughput times and inventory levels while making our planning more reliable and transparent."

Klauspeter Dehnert, shop floor controller at Schmiedewerke Gröditz

- specifications for the invitation to tender
- and an optimum strategy for introduction


based on the company's specific requirements, strategies and industrial concept within a period of six months.

The future handling processes were assigned to the solution components and the decision-making authorities adapted within the organisational structure of the company. When selecting the best SCM solution, Gröditz opted for SAP APO.

The next step was to draw up a blueprint and put a prototype solution into practice.

"This allowed us to simultaneously map out the basic sub-processes by way of example and test critical sequences and alternative approaches. The aim is to obtain initial benefit from application of the SCM system as early as possible", comments Klauspeter Dehnert, shop floor controller at Schmiedewerke Gröditz. According to Dieter Deutz, Head of Consulting & SCP at 4Production, there is no doubt about it: "The benefit for the people concerned has been jointly formulated with such clarity

that everyone involved is now fully behind the imminent change process".

Implementation of the SCM solution based on the blueprint started in March 2009. In addition, a follow-up order for Change Management and assistance with the implementation process has already been issued to take further advantage of the experience and skills of 4Production. 



Optimal sequence planning

Photo: Schmiedewerke Gröditz GmbH

The blueprint demonstrates specific solutions for implementation of the requirements from the tender documents. Every sub-process it contains is jointly discussed with the subsequent users, documented and specified in terms of input information, procedures, results and acceptance criteria as well as links to other sub-systems.

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Green logistics

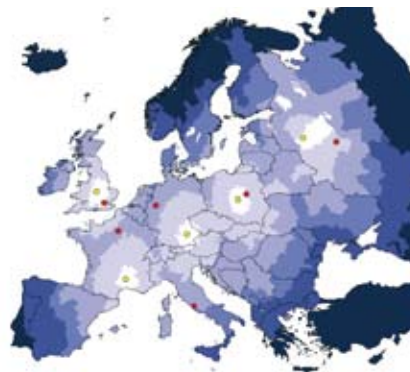
PSIglobal for green logistics in Supply Chain Management

A sustainable reduction in emissions thanks to optimum route planning Photo: Fotalia

Ecologically sustainable planning of logistics networks should not come at the expense of efficiency and costs. Thanks to the planning and control software PSIglobal, PSI Logistics is now offering a modern IT tool for green logistics in Supply Chain Management.

To keep a handle on cost and effort, transport logistics specialists rely on maximum capacity utilisation and optimum route organisation. However, merely optimising road transport costs does not make a logistics system green: Minimising the distances travelled automatically leads to lower emissions.

The "green" label should not therefore focus on economic aspects alone. The planning of transport and logistics networks should be based on sustainable



Routing: planning and optimisation of logistics networks Source: PSI Logistics GmbH

optimisation of the modal split, involving other modes of transport besides trucking. Trucks produce four times more CO₂ emissions per tonne-kilometre than rail transport and three times more than inland shipping.

And this is where PSIglobal comes in, the new software for logistics management. With PSIglobal it is possible to map, analyse, control and optimise multi-level, multimodal logistics networks. The software can be used to provide target-oriented, efficient solutions for strategic issues (such as location and structural optimisation) as well as tactical problems (e.g. transportation network planning and storage capacity utilisation) and the ecological aspects of logistics projects. It therefore fulfils the very requirements placed on sustainable green logistics when it is a question of optimising logistics networks.

The special feature of PSIglobal is that the software specifically offers optimisation functions based on ecological factors. The emission costs function or multimodal optimisation of logistics networks can be used to weigh up costs and service aspects against environmental factors such as sustainability and the reduction of emissions, thus achieving optimum weightings according to selected assumptions and parameters. It is only through the use of PSIglobal as a strategic

planning and optimisation instrument that it has now become possible to map logistics networks from the aspect of green logistics, incorporate ecological factors in the planning process and bring networks into line where necessary and to the required extent.

The functions offered by *PSIglobal* range from the simulation and analysis of logistics networks, through location and structural planning, statistics and controlling, stock and assortment optimisation, to central accounting, service comparison and performance evaluation of/in logistics networks. In particular, *PSIglobal* presents users with the option of linking geodata with logistical information, analysing their interaction and drawing the relevant conclusions for network optimisation.

The networks are displayed in a geographical map view. Users can also add area structures and geographical features and display them in different colours. The IT system also allows different logistics networks to be displayed and evaluated in parallel. The range of available software functions makes it easy to identify weak points in logistics networks, tap into savings potential and incorporate flexible weighting of ecological requirements for green logistics.

If required, *PSIglobal* can be used to correlate ecological impact with economic requirements according to individual user wishes and display the


relevant cost calculations. The logistics software accesses all the latest schedules, transport costs and service times to generate multimodal transport networks. It offers optimum routing for the required goods flows, broken down as wished according to costs, resources, dates/times or environmental aspects. During this



Analysis and modification of service times

Source: PSI Logistics GmbH

process, all elements of the calculation can be correlated at the touch of a button. This produces astounding results. Initial specific applications with *PSIglobal* have shown that the percentage of additional costs resulting from multimodal optimisation of a logistics network with a consistently green orientation will remain in single figures. And this is set to fall given the ever increasing energy costs, cost savings from the reduction in warehousing capacity and the positive effects in terms of image and marketing. Green logistics can ultimately even boost earnings performance.

Intelligent incorporation in existing IT landscapes using the planning and control system of PSI Logistics software will offer solutions that realistically map continuous process chains of green logistics and define tasks and responsibilities. This makes the software part of an overall concept, which can be used by logistics specialists to live up to their environmental responsibilities without neglecting economic aspects. The benefit accruing at different levels of the system means that an investment generally already pays off within a year. A solid basis for green logistics that goes beyond the overall supply chain. 

Customer Relationship Management

PSIPENTA with impressive presentation at Digital Factory 2009

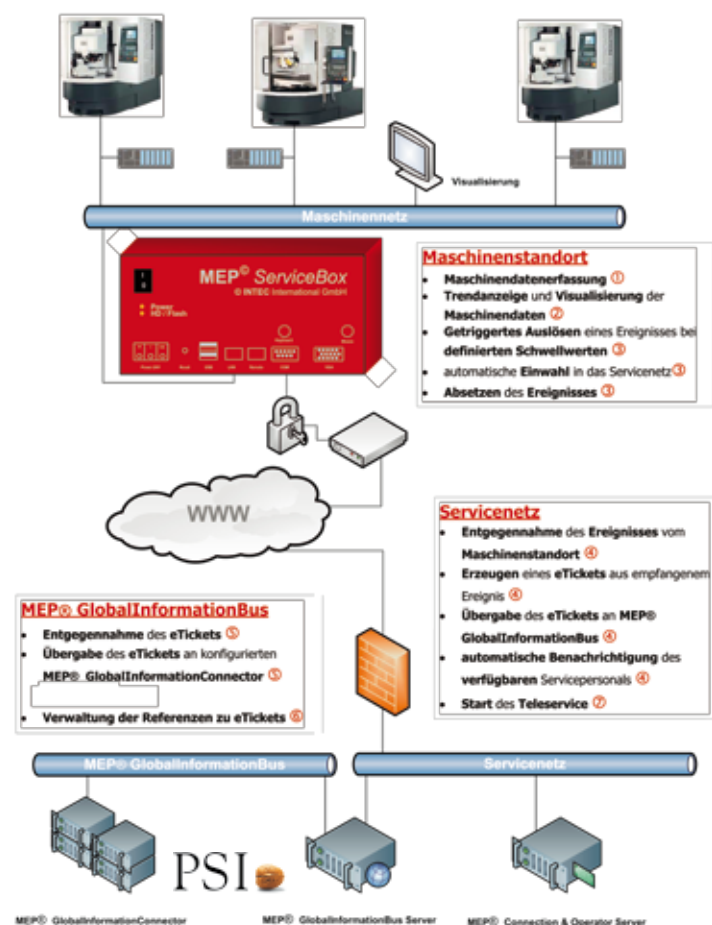
In the first four months of the year PSIPENTA had three major public trade fairs noted down in its diary. The programme kicked off with Vienna's ITnT 2009 in January, followed by a strong showing at CeBIT and just six weeks later, attendance of Digital Factory 2009. This leading international show for integrated processes and IT solutions in the manufacturing sector was staged by Hannover Messe.

The key theme of Digital Factory was Customer Relationship Management (CRM). At the show, PSIPENTA set up a complete scenario that illustrated a universal process for efficient business customer servicing and support. The presentation of integrated applications for customer relationship and service management showed "New paths to customers".

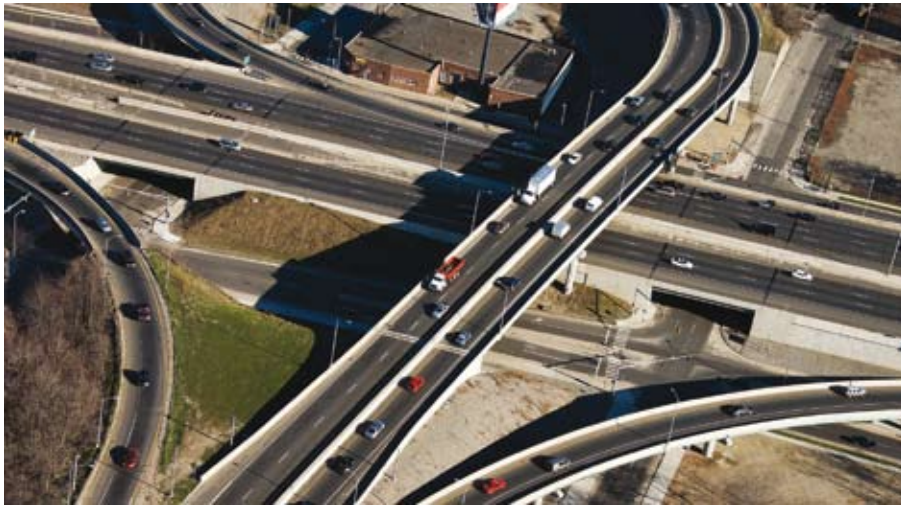
The competent visitors with in-depth engineering know-how, appeared very taken with the different options offered by the range of solutions at the Hanover industrial fair between 20–24 April 2009. In particular, the feedback from professionals was favourable regarding the scalability of the software and its high industry relevance. The scenario, which had been specially designed for the exhibition, featured all software-assisted applications, from contact management and after-sales processes in

the spare parts and service business to the integrated CRM solution. It portrayed a complete service process, starting with the registration of a fault, followed by the procurement of spare parts and request for customer service, specific resource planning of skilled staff and finishing with invoicing of the end customer. One crucial benefit of the PSIPenta service module is that it forms an integral part of the ERP standard, ensuring that modal fragmentation or interface problems are not a topic anymore.

It is mainly in difficult economic times that production plants only dealing with business customers have to raise their profile by offering an excellent level of service. As large-scale investment in machinery is the exception rather than the rule during a recession, service becomes a key source of revenue, a so-called cash cow. But if service contracts are to be handled economically, the centralised provision of all data is necessary, including the possibility of retrieval and feedback at any time along



Source: INTEC International



New paths to customers


Photo: Jupiterimages

the value chain. A business can obtain important competitive advantages from fast response times, accurate quotations, prompt requisitioning including the appropriate resource planning for service technicians as well as swift, straightforward involving for the relevant services. No matter what is involved – spare parts procurement, handling repairs or error messages – the aim is to shorten processing times and speed up invoicing, so ultimately also benefiting liquidity. This prevents loss of data, improves access to information and cuts costs while boosting levels of customer satisfaction and loyalty at the same time.

PSIPENTA Software Systems GmbH also supported the special show staged by myOpenFactory e.G., a registered cooperative society aiming to standardise data transmission in the mechanical and plant engineering sector. This objective involves intelligent, low-cost supplier incorporation via a web-based integration platform for the purpose of Supply Chain Management.

Despite the general sense of crisis, the organisers and exhibitors at Hannover Messe were very satisfied with the event. PSIPENTA and its partners were likewise pleasantly surprised. Despite global software suppliers such as SAP and Microsoft pulling out this year, the fair provided many new contacts with a specific interest in investment. Above all, "we were once again impressed by the quality of these contacts", remarks PSIPENTA Managing Director Alfred Keseberg. The evening event laid on for guests of PSIPENTA as part of the celebrations for the 40-year jubilee of its Holding likewise proved very popular. The festivities were enjoyed by all invited, including journalists, representatives from leading universities and associations as well as long-standing customers and prospective buyers. The highlight of the evening was the appearance of Bodo Deutschmann, IT manager at vehicle manufacturer Kögel and a PSIPenta customer for many years. Deutschmann, who was recently

voted "CIO of 2008" by the magazine Computerwoche, outlined five theories explaining the special importance of data processing in difficult economic times and the opportunities that result.

Condition Based Services: the way out of a service vacuum – this title could be used to describe the approach towards finding a solution that was jointly developed with INTEC International GmbH. During its appearance at Digital Factory, INTEC demonstrated the coupling of the Condition Monitoring System with the PSIPenta service module. This resulted in an advanced solution, which, with Condition Based Services, fits in perfectly with the services portfolio of mechanical engineering companies as well as major maintenance units (at Volkswagen for example). Users have at their disposal a highly effective, integrated software package thanks to the consistency of data and information regarding machine incidents, planning, implementation and invoicing. Condition Monitoring thus becomes an integral part of service management, so creating for the first time a universal concept from machine to modern maintenance. 

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PSImetals WTM at Ilsenburger Grobblech GmbH

In and out: Logistics optimisation for heavy plate production



Plate refining on the heat treatment line

Photo: Ilsenburger Grobblech GmbH

Knowing where each plate is at any point at time is quite a challenge when producing 800,000 tonnes of plates per year. Ilsenburger Grobblech GmbH is part of Salzgitter AG and produces a major share of the Group's requirement for quarto plates. The company, whose main plant is located in Ilsenburg, also includes a production facility in Salzgitter. Around a third of the heavy plate rolled at Ilsenburg is refined in Salzgitter due to more stringent quality requirements. At both sites, the finished product is loaded onto trains or trucks for shipment to the customer. PSImetals, a system designed for warehouse management, material tracking and dispatch optimisation, supports production logistics at the plate finishing departments in Salzgitter and dispatch in Ilsenburg.

Spotlighting the individual plate

Knowing exactly where a plate is located and when it will be finished and delivered is the basic requirement for improving the company's availability to deliver, order throughput and adherence to delivery dates. Although the legacy plate information system was provided for inventory management at the respective stock locations and stacks, it failed to include the position of each plate in the stack.

With PSImetals comprehensive material tracking is based on a full description of all systems (furnaces, quenching and tempering station, furnace unit, cut-to-length shears, leveler etc.), in addition to the transport routes/equipment used (overhead and gantry cranes as well as trucks, freight cars, platforms, trolleys

etc.) and the available storage areas with their associated restrictions.

The precise location of a plate is determined using a Symeo Local Positioning Radar system, which acquires the relevant data from a total of 16 overhead cranes based in Ilsenburg and Salzgitter. Whenever the crane sets down a plate, PSImetals uses these coordinates to graphically display its location within the stack (essential for warehousing) as well as the position of the plate in the layer, e.g. with two plates in one layer or with materials of different dimensions in a stack.

To ensure plates do not get lost, PSImetals works with dynamic stock locations, which are automatically cleared after usage. Such locations make it possible to trace plates which during operations have been incorrectly left in areas without a stock location (e.g. on traffic routes). As PSImetals offers Ilsenburger Grobblech GmbH a complete overview of its stock of plates, there is no longer any need for manual searches.

Inventory count at the touch of a button

With PSImetals the inventory count takes place at the warehouse using mobile radio terminals which ensure it is completely up to date. It can be carried out for the entire warehouse or just areas of it (stock locations, rows or individual

stacks). At the same time, the software automatically checks whether plates have been assigned to the right stock location sub-area. All data from the inventory count can be output as lists.

The permanent inventory count function in *PSImetals* stores the date whenever a plate is moved as well as the movement type. Where the absence of individual plates was once only noticed on dispatch, it is nowadays possible to check which plates have not been moved since a specific date or time — just by pressing a button. This means a search for such plates can be made as soon as possible and only takes a moment.

Where staff once had to walk around counting plates while production stopped

for several shifts, the computerised inventory function in *PSImetals* can be performed without shutting down the plant. In addition, the data acquired is more accurate, and less time overall is required for the process.

Plant-optimised stacking

PSImetals generates the plant programs needed for refining plates in Salzgitter. They specify the exact sequence in which the plates have to pass through the stations of the heat treatment line (furnaces/quenching and tempering station). Here the software analyses the material according to the annealing specifications and the plate location in front of the line. The sequences determined are translated into automatic stacking instructions for the crane operators. The software also

takes account of any restrictions in force for the plant stations, transport systems and routes as well as the applicable health and safety criteria (e.g. permitted stack height). The objective of plant-optimised stacking is to minimise restacking operations from the outset. One way of achieving this is to ensure that the plate sequence required in Salzgitter is already known when loading the freight cars in Ilsenburg. This has provided for a major reduction in order processing times for refined plates.

In addition, furnace bed planning has been carried out for the Ilsenburg plant, thus ensuring optimum distribution of the plates in the furnace beds. Furnace lots are formed automatically depending on the type of furnace treatment, plate data and its location in front of the station. This optimises utilisation of the furnace beds while minimising the number of restacking operations.

What is the shortest route?

Typical processes at Ilsenburger Grobblech GmbH involve putting plates into storage after production so they can cool down or for further processing at subsequent stations. However, they also include transporting them to supply the processing stations and any stock transfer necessary when switching between plant programs or loading plates for dispatch. *PSImetals* will work out the shortest possible route for all stock movements, allowing order processing times to be shortened.



Optimum furnace bed utilisation

Photo: Ilsenburger Grobblech GmbH



Plant grounds of Ilsenburger Grobblech GmbH

Photo: Ilsenburger Grobblech GmbH

Optimised loading

Thanks to PSImetals, load planning, which used to be carried out manually, is nowadays more or less automatic using PSImetals. The plates to be shipped (shared/similar delivery dates, consignees, terms of shipment etc.) are grouped into load units by the load planning function and assigned to the relevant modes of transport (freight cars, trucks). Plates are stacked onto the transport system taking into account any restrictions such as maximum load capacity, grouping of wide loads and pyramid formation (plates stacked from large to small). Crane transport is optimised by shortening paths as far as possible and minimising crane usage. All results from the optimisation process can also be adjusted manually if required. The use of PSImetals has facilitated a major reduction in loading times as well as cutting down on crane transport.

Reduced hire charges for freight cars

Plates are always transported to Salzgitter by rail, and to customers as well in some cases. The freight cars required for this purpose are supplied by Deutsche Bahn AG. To minimise transport costs, PSImetals takes into account the cars available during load planning. Its aim is to effect all shipments by the required deadline using the smallest number of freight cars. This has brought about a major reduction in demurrage charges. ☺

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Brief overview of achieved goals:

- Complete overview of plate stock at all times
- Major time savings thanks to automatic inventory count without stopping production
- Missing plates located quickly at the touch of a button → no need for a manual search
- Reduction in order processing times due to plant-optimised stacking
- Shorter loading times by means of optimised load planning and maximum utilisation of transport system
- Improved furnace bed utilisation
- Lower crane usage levels
- Reduced overall car hire charges due to optimised utilisation of available freight car capacity

Operative cash-flow tripled

PSI increases 2008 EBIT by 50%

The PSI Group more than doubled its group net result in financial year 2008 to 4.1 million Euros. The earnings per share increased to 0.34 Euro. The EBIT increased to 6.2 million Euros. Group sales reached 128.9 million Euros, new orders, at 152 million Euros, clearly exceeded the target and the annual sales. The cash-flow from operating activities tripled to 9.9 million Euros (2007: 3.0 million Euros), liquidity at the end of the year rose to 23.7 million Euros despite the payments for two acquisitions.

PSI started 2009 with a very high volume of new orders of more than 25 million Euros in January. The focus of the new orders is on rationalisation investments in major industries and utilities. PSI foresees concrete opportunities in the export business as a result of the speeding up of infrastructure investments with the stimulus programs in China, Russia and Eastern Europe.

The management is optimistic, albeit cautious in view of the general climate,

that this year's targets of 7.5 million Euros for the EBIT and 140 million Euros sales can be achieved and possibly exceeded. Should the market situation again lead to a similarly drastic undervaluation of the PSI share price as was the case in the fourth quarter of 2008, the management will continue the buy-back program.

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Production planning system

PSI Awarded Steel Contract from SMS Siemag for India

PSI has been contracted by SMS Siemag, a company in the SMS Group, with providing planning modules from the industry sector solution PSImetals for the Visakhapatnam Steel Plant (VIZAG Steel) which is under construction. These will be integrated in the Level 3 solution of SMS Siemag. The object of the contract is the planning of all the systems from the desulphurisation through the converter, secondary metallurgy and continuous casting plants with the aim of optimising the throughput.

SMS Siemag supplies entire plants and single components for ironworks



Continuous casting system for plate slabs

Photo: SMS Group

and rolling mills. The Visakhapatnam (VIZAG Steel) steel plant belongs to the Rashtriya Ispat Nigam Ltd. and by

the end of 2011 will have expanded its capacity from the current 3 million tons to 6.3 million tons by means of building a second steel mill.

With this contract PSI has succeeded in entering the high-growth Indian steel industry. In 2007 India was the fifth largest steel producer in the world. The Indian government plans to double steel capacity to about 110 million tons by 2020.

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