



PSImetals Newsletter



*** Production management for metals *** 01/2006

Dear Sir or Madam!

As the leading German supplier for production management software we are pleased to present you our first PSImetals Newsletter. To keep you informed about our latest projects and orders as well as new topics and functions within our PSImetals solution we will send you this newsletter quarterly.

Topics of this newsletter:

Successful projects & implementations

Process management for blast furnaces at Salzgitter

Coil size optimization at ThyssenKrupp Steel

Functional subjects

Integrated planning with SAP APO & PSImetals

Quality-assured production in the steel works

Latest orders

Slab scheduling at voestalpine

Central steel ordering at ThyssenKrupp Steel

Rolling program generation at EKO Stahl

Revamping converter model at Mittal Steel

Study energy management at Sotel

Events

PSImetals UserGroup (for customers only)

Hoping that we have chosen interesting subjects for you we would be very pleased to receive questions or helpful suggestions from you. Please don't hesitate to give me call (++49-30-2801-1881) or send me an E-Mail (rrzepka@psi.de).

Yours sincerely Rainer Rzepka
Solution & Product Management

P.S.: Please have look at our homepage www.psi-bt.com as well!



On top with PSImetals

Successful projects & implementations

Process management for all the blast furnaces at Salzgitter

Salzgitter Flachstahl GmbH operates three technically different blast furnaces for pig iron production at its Salzgitter site. As a standardized production management system, PSImetals manages the processes for all the blast furnaces. Production management based on process data is supported by automated burden calculation and model algorithms for blast furnace control. Furnace characteristics captured online enable permanent monitoring of process and production. The requirement of 24-hour system availability was fulfilled by redundant data archiving and the design as a hot-standby system.

Please ask us about the reference sheet on this subject!

PSImetals optimizes coil sizes for cost reductions at TKS

ThyssenKrupp Steel AG (Bochum and Dortmund works) was able to boost production performance in many respects, for example, with fewer coil movements, reduced space requirements, minimized tooling and preparation times, as well as increased production speed thanks to the formation of large coils with higher coil weights and the resultant smaller numbers of coils.

At the heart of this approach is the calculation of optimum welding parameters in front of the pickling line and/or of cutting parameters at the delivery end of the pickling line. This optimization function is performed by PSImetals AL which automatically determines the welding/cutting specifications on the basis of complex rules (technical/geometric parameters, quality requirements, customer specifications).

Please ask us about an article on this subject published in 'stahl und eisen' Vol. 12/05 (in German language available only)!

Functional subjects

Integrated planning with PSImetals & SAP APO

In future, advanced planning systems, such as SAP APO will be able to address production interests even better than before by taking the concrete on-site situation of a plant into consideration. In steel production, this specifically concerns the complex tasks of plant utilization planning and operative material flow control. Lack of detail in the planning model – currently a frequent problem - can cause serious consequences in the supply chain.

Together with SAP, PSI BT is working on a solution to this problem for the production of flat steel within the framework of the "Best practices for flat steel" project.

Work focuses on integrating the planning algorithms of SAP APO into the plant-specific optimization algorithms of PSImetals. The planning orders generated by the planning process in SAP APO are exported from SAP APO when plant utilization is planned by PSImetals. Following plant resource planning by PSImetals, the planning orders that have been optimized by splitting or re-scheduling are then directly changed and fixed in SAP APO. The result is a plan which is adapted to the technical parameters of the plant and the concrete operative situation.

The technological basis of PSImetals powered by SAP NetWeaver enables direct integration into the system environment of SAP. The system-spanning planning process between SAP and PSImetals is an important step towards an enterprise service architecture.

For further details please contact:

Mr. Bernd Gimbott, E-Mail: B.Gimbott@PSI-BT.de

Quality-assured production in the steel making plant

The quality of extra-high-quality steel grades is determined to a significant extent during the production process in the steelworks. A heat must have achieved defined quality level parameters as far as possible before it is poured. PSImetals performs forecasting control of quality targets and qualitative evaluation of the actual situation in the heat metallurgy. For this purpose, all relevant quality and treatment requirements are stored in PSImetals and steel-grade-specific recipes (best-practice recipes) for production in the liquid phase are configured. During the production process, PSImetals sets the necessary treatment

steps and parameters and checks the quality specifications (such as temperature, chemical analysis, additions, treatment times, ...) online for compliance. In the case of deviations, updated recipes are generated on the basis of the rules stored in order to achieve the production targets.

PSI BT is currently working on this topic within the framework of a project at voestalpine Stahl GmbH in Austria.

For further details please contact:

Mr. Heinz-Josef Ponten, E-Mail: HJ.Ponten@PSI-BT.de

News & Events

Latest orders

Voestalpine Stahl GmbH (Austria): *PSImetals* for the material logistics between steel making plant and hot wide strip mill; optimization in order to increase overall logistics performance of slab transports with unchanged transport resources and reduced storage space.

ThyssenKrupp Steel AG (Germany): Implementation of *PSImetals* for *Central steel ordering* for integrated planning for the Duisburg-Beeckerwerth, Duisburg-Bruckhausen and HKM steelworks for demand-conformity supplies for all hot wide strip mills; standardization of steelworks planning, introduction of a new casting sequence planning system; flexibility in the future integration of further steelworks thanks to customizing.

EKO Stahl GmbH (Germany): Implementation of *PSImetals* for the generation of the rolling program at the cold rolling mill; automatic planning in consideration of the rolling program rules; rolling program planning as the base for the line sequencing of the preliminary pickling line.

MITTAL Steel Galati (Romania): Analysis of the current logistics situation and identification of logistical, metallurgical and quality problems; re-adjustment of the converter model with improved data basis as calculation basis, scrapyard management, temperature planning

Sotel (Luxembourg): Study on the benefits of an energy management system for the three electric steelworks of PROFILARBED S.A. in Luxembourg.

Upcoming events:

PSImetals UserGroup (for customers only)

19th-20th of June 2006

located at our customer-site of AG der Dillinger Hüttenwerke

Imprint:

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