

Design the Future. Tuesday, 6th December 2011

09:00	Arrival / Registration
10:00	Welcome and Keynote Speech
	Building in the Future, Visions from the Prefab Sector Challanges for the construction sector continue to grow and from all concepts, concrete prefabrication can face them best, the opportunity for prefab builders to increase their role in the future construction process. <i>A. van Acker / Belgium</i>
	Session 1 – Industrial Planning, Production, Construction / Chairman C. Prilhofer
10:40	BIM in Precast Construction – and Integration of Insert Part Catalogues Data consistency in the planning and production process is crucial for modern precast construction. The German association for building systems has set its goal to integrate part catalogues of suppliers directly into this process. <i>B. Firmenich / Cademia-Consult R. Neubauer / SAA Engineering</i>
	Industrial Planning in Reinforced Concrete and Pre-stressed Precast Construction Decrease costs and increase quality and productivity at a time – this can be achieved by consequent usage of 3D in CAD. A win-win situation for all partners in the process. Practical experiences from engineering bureaus. <i>M. Molz / Ingenieurbüro WMW F. Scheller / Nemetschek Engineering</i>
	Coffee Break
11:50	Integrated Planning and Control of a Precast Company with Distributed Production Facilities At the example of the multinational precast enterprise Oberndorfer/Austria the IT-supported planning and control of the operation is presented. The product range includes all types of precast elements. From an inquiry to the erection a project with its precast parts and processes is organized and controlled by an IT-solution. <i>F. Lorenzoni, T. Leopoldseder / i-PBS Production Business Solutions</i>
	Production Plants of the 90s are Equipped for the Future The growing requirements of the precast concrete elements bring existing plants to their limits. Answers based on concepts how to sort out this problem will be presented. <i>M. Obinger / Prilhofer Consulting</i>
12:30	Lunch Break
	Session 2 – Energy-efficient Precast Elements / Chairman R. Neubauer
14:30	Efficiently Designed – Insulated, Multilayered Wall and Cladding Elements With automated production lines, the request on CAD planning for sufficient data generation is increasing. At the same time, demand for insulated products is growing. These trends imply that an increase of planning performance is expected. A report about practical experiences with a recently developed software solution. <i>J. Eibl / Nemetschek Engineering</i>

From an Idea to the Realization

Automated Manufacturing of Insulated, Multilayered Wall and Cladding Elements

Energy-efficient construction is under discussion worldwide – with the consequence, that complex insulated elements shall be manufactured on pallet carousel systems, to achieve a maximum of productivity. By use of industrial robots the additional production processes are completely automated to guarantee high quality and performance.

A. Straßmeier, R. Braun / Sommer Anlagentechnik | C. Hanser, K. Panek / SAA Engineering

Efficient Production of Insulated Precast Concrete Components by the Use of Automated Production Processes

Due to the perfect-fit, automated drilling, milling, cutting and laying of the insulation - which until now has usually been done manually - productivity is significantly increased in manufacturing core-insulated precast concrete parts. The newly developed ISO-MATIC[®] processing station, that can also be integrated into existing production plants, enables the output of high-quality precast parts, in large quantities and in a short timeframe. *P. Marrié / Vollert Anlagenbau*

Coffee Break

15 High Level Insulation with Thermic Connectors

An energy-efficient alternative for the use of shear connectors are glass fiber reinforced plastics. First practical experiences from design to installation with ComBAR[®] in double-wall and sandwich panels. *A. Decker / Schöck Bauteile*

Building-integrated Photovoltaics – A Chance for Prefab Construction

Photovoltaics in the building envelope offer the chance for solutions with a high degree of prefabrication. They can be a competitive advantage in the future market, which will be effected by the energy turnaround. In the lecture the state of the art of building integrated photovoltaics is presented.

H. Hullmann / hwp - hullmann, willkomm & partner

17:00 How to Live Joyfully

Management of fat, burn out, sexual listlessness. Bernhard Ludwig shows in a humorous way how to manage the challanges of our time, even for people in the precast industry.

Bernhard Ludwig / Psychologist and Cabaret Artist

Evening

Evening Event

Session 3 – Product Innovations in Planning / Chairman W. Maresch Parallel to session 4

09:00

Inserts as "Intelligent Steel" in Precast Concrete Construction

Industrial planning by use of special solutions for connections of precast elements calculated according to corresponding engineering instructions and covered by approvals of the building authorities. *K. P. Geh / Pfeifer Bautechnik*

Hollow-core Elements - a Story of Integration

Hollow-core elements are precast parts that have been developed from common "grey" to engineering products: thermally active elements for heating and cooling and insulated elements for energy-efficient components. An insight into usage and features of such components.

S. Maas / Echo

Building Services – an Integral Part of Precast Elements

A new installation system for precast concrete elements allows connecting different media (current, water, heating, etc.) by taking into account known tolerances. A report about practical experiences with the system "Powercon-Multi" in several projects. *F. Prochiner / Munitec / H-Bau*

Drawings and Components – Available Duly, Exactly and Distinctively with TIM

Making optimal use of all available information by direct data transfer from design to work preparation and thus superseding additional manual input. Graphical methods ease up not only planning, but also manufacturing. The optimized work preparation with TIM (Technical Information Manager) at Klebl.

B. Heilmeier / Klebl | P. Kafka / Nemetschek Engineering

Coffee Break

11:00

Production Data Acquisition in the Concrete Precast Industry

Correct and actual production data guarantees a continuous and smooth operating process. At the same time they build the basis for continuous improvement. By means of examples the importance of PDA in the precast industry is illustrated. *R. Borowan / SAA Engineering*

On the Way to µm

Applications of "Ultra High Performance Concrete" based on cement NANODUR® in construction industry and mechanical engineering. *B. Sagmeister / durcrete*

Precast Elements with Ultra High Performance Fiber-Reinforced Concrete (UHPFRC)

Claddings, strips, roof elements – a lot of applications are known for this concrete. A report about practice in planning, casting and construction site. L. Heintz / Fehr Technologies

Lunch Break

12:00

Session 4 – Product Innovations in Production / Chairman C. Hanser

Parallel to session 3

09:00

Machine Technology for Manufacturing of High Quality Concrete in Precastand Concrete Goods Plants

Concrete batching plants are customized, however the components are part of a construction kit. The variety of options facilitates the fulfillment of customers' special requirements.

M. Barthel / Liebherr Mischtechnik

Contactless Systems for an Efficient and Transparent Production

Optical systems and mobile data communication open up new chances for optimization of processes, quality saving and production control. *W. Cieplik / Unitechnik Cieplik & Poppek*

Modernization and Increasing Efficiency in Existing Reinforcement Preparation Plants

There are different ways of adapting reinforcement plants to make them economically more efficient. Higher performance or personnel optimization could be the goals. A survey of recently realized projects.

H. Rapperstorfer / Filzmoser Maschinenbau

Synergies in Precast Plants

Realizing synergies is like a magic word, which promises economic advantages. Yes there are synergies! A lecture about scenarios, where a cooperation of precast plants simplifies processes and saves costs and resources. *D. Kienböck / SAA Engineering*

Coffee Break

11:00

Possibilities and Recent Developments in Robot Technology

Mainly details are responsible to make a robot in a precast plant efficient and feasible. By continuous development the performance of pallet carousel plants can be increased up to 6 pallets per hour.

H. Weckenmann / Weckenmann Anlagentechnik

Applications for Articulated Robots in Pallet Circulation Plants

Most of other industrial branches utilize articulated robots for their manufacturing processes, why not precast plants? By using the example of an ongoing project, possible applications and chances of success for this kind of robot systems are discussed. *K. Panek / SAA Engineering*

Investments Will Pay Off!

We will inform you about requirements which are economically crucial for the modernization of precast concrete plants. *H. Kunze / Prilhofer Consulting*

Lunch Break

Workshops Nemetschek Engineering

Industrial Planning in Reinforced Concrete and Pre-stressed Precast Construction

Deepening the lecture; examples and technical details on project organization, catalogues of insert parts, templates for automatic plans etc.

M. Molz / Ingenieurbüro WMW | F. Scheller / Nemetschek Engineering

TIM: Click & Know

The TIM (Technical Information Manager) software solution for multi-site, cross-disciplinary cooperation facilitates communication, work preparation, planning of delivery and erection. *M. Hofmann / Nemetschek Engineering*

Allplan Precast 2012 - New in

The new edition's key aspects and highlights. Future development. Questions and answers. J. Eibl, W. Maresch / Nemetschek Engineering

CAD: Planning Reinforcement (from 2D to 3D)

Practical examples. Data transfer to reinforcement robots (BVBS, UNI data) and to 3D mesh-welding systems. Y. Mesri / Nemetschek Engineering

Insulated Walls - Present Experience and Future Development

Deepening the lecture with plenty of technical details in regard to different types of walls. L. Heintz / Fehr | J. Eibl / Nemetschek Engineering

Workshops SAA Engineering

SAA-Robot Control – Applications, Functions, Features

The SAA robot control family for precast plants grows steadily – in addition to shuttering handling, tiles/bricks for claddings and insulation plates including connectors are now handled fully automatically.

P. Höchtl / SAA Engineering

IPS-Nesting – the New Pallet Optimization of LEIT2000

Introduced two years ago at the Engineering Days, successfully supplied since one year -IPS-Nesting – the new pallet optimization of LEIT2000. Many details, tips and tricks for your practice and experiences of our clients with the automatic placement algorithm. *R. Borowan, R. Paták / SAA Engineering*

News from "Intelligent Production Systems" (IPS)

IPS, the new family-name of the SAA master computer family, does not only stand for "intelligent" but also for "innovative" - which means: permanent development according to the requirements of our customers. A survey of release 2012 and time for feedback and suggestions. *S. Maier / SAA Engineering*

New Machine Visualization of SAA – Every Information at a Single Glance

SAA has been providing graphical process visualization solutions for more than 10 years. With our new visualization for pallet carousel we utilize a tool, which enables us to provide a realistic representation of machine components with its sensors and actuators. Operation in manual mode respectively function selection included – of course on a touch screen. As a web-based solution the operator can take it right to the spot in case of a failure.

R. Zauner / SAA Engineering

Workshop Prilhofer Consulting

Successful Investments Through Structured Planning and Tendering

The basis of any investment should be the exact business- and technical analysis. To implement the investment properly structured planning and tendering are absolutely necessary. *M. Obinger / Prilhofer Consulting*

Workshops Exhibitors

White Cements and Flowstone for Architectural Concrete

White binders and compounds for the preparation of optically unerringly sophisticated and high-strength concrete up to the UHCP. *S. Heeß / Dyckerhoff Beton*

Integrated Multi-national Planning and Control for Concrete Precast Enterprises

Deepening the lecture, examples of processes are presented, as they are implemented in the i-PBS Enterprise Suite.

F. Lorenzoni, T. Leopoldseder / i-PBS Production Business Solutions

The Thermic Connector of Schöck in Practice

Exchange of experiences in planning and installation of double-wall and sandwich panels. CAD planning details for using the Schöck ComBAR[®] thermic connector. *A. Decker / Schöck Bauteile*

Maintenance with Visions - ISPRO-NG Maintenance Software

The implementation of the concept of reliability centered maintenance (RCM) with the help of modern maintenance management systems. Active, reactive and condition-based maintenance, coordinated by ISPRO-NG maintenance management software increases your plant availability and reduces maintenance costs.

O. Hofbauer / H & H Systems Software

KAP - Steel - Wave - a Wave, Revolutionary for the Double-wall Building System

The KAP steel wave is a new connecting system to manufacture double walls without using lattice girders. For insulated double walls waves made from stainless steel or fiber glass can be used.

E. Kastner / Kappema

Interdisciplinary Planning of Precast Elements with Model-oriented BIM Systems

What is the impact of consequent use of a model in the design and detailing process? J. Fennema / Construsoft | D. Bernert / Tekla



Conference location

The Imperial Riding School Vienna, A Renaissance Hotel Ungargasse 60 / 1030 Vienna, Austria Tel: +43 1 711 75–0 www.imperialrenaissance.at

Information

- The conference language is German, the lectures "Design the future" will be translated to English simultaneously.
- Order and time of the workshops will be published at the conference.
- In parallel on both days: Exhibition of suppliers, consulting- & software companies.
- Reservation of rooms can be done easily using the direct link at the event homepage (Attention: limited contingent).

Registration form / Information: www.engineeringdays.at Engineering Days 2011 / 6th Dec. – 7th Dec. 2011, Vienna, Austria

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