

# SimPlan Newsletter



November 2010

## News from the world of simulation

### SimPlan News

- [SimPlan China on course for further success](#)
- [SimPlan Customer Event 2010](#)
- [Current Dates](#)

### Simulation in practise

- [Kennametal Extrude optimises the construction of a spreading cathode using finite element analysis](#)
- [Production without the involvement of genetic engineering requires complex material planning](#)

## SimPlan News

### SimPlan China on course for further success



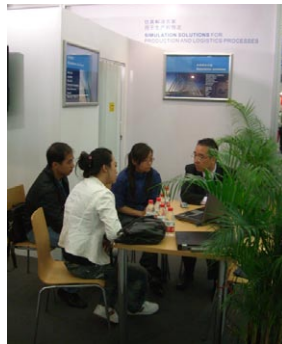
Plaza Tower Shanghai

Our new subsidiary in China, established in June this year, was already able to acquire two of China's largest automotive manufacturers as well as a renowned pharmaceutical company as its customers.

With acquisitions like this the signs continue to point to fast growth.

At the end of October, the team, which has already increased by two staff, was able to present itself successfully at the most important logistics trade fair in Asia, the CeMAT in Shanghai.

Our expectations of the trade fair were rather humble. We had hoped to primarily gain an insight into the Chinese material flow and logistics market and intended to present our company for the first time on this market within the scope of a trade fair.



SimPlan booth

We were surprised to be able to establish good contacts, in a similar fashion as we do at the German material flow trade fairs. This confirms our belief that we have taken the right step when launching our subsidiary in China.

Several representatives of renowned companies expressed their intention of starting to plan new factories and distribution centres over the coming months. Our simulation service for safeguarding the planned investment attracted great interest.

"The CeMAT Asia enabled us to establish a good sales basis for the further corporate development in China," according to Dirk Wortmann, Member of the SimPlan AG Board of Directors and Executive Director SimPlan China.

### Your contact persons in Shanghai

Dirk Wortmann / Executive Director  
Yong Chen / Managing Director  
Ian Zheng / Sales Manager  
Stella Zhang / Sales & Marketing Assistant

### Contact

1366 Nanjing West Road, Plaza 66 Tower 2, 15/F,  
Shanghai, China 200040

Tel.: +86 21 6137 6046

Fax: +86 21 6137 6138

[info@SimPlan-China.com](mailto:info@SimPlan-China.com)

[www.SimPlan-China.com](http://www.SimPlan-China.com)

### SimPlan Customer Event

**Success with Simulation** – this was the motto of our customer event on 28 October in Frankfurt-Mörfelden.

In a relaxed atmosphere in the NH Hotel Frankfurt-Mörfelden, around 40 guests were able to learn more about how customers of the SimPlan Group use simulation successfully in their companies.

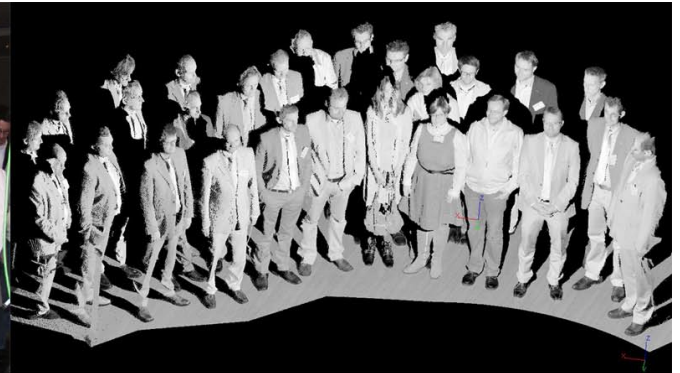
In addition to user presentations by the companies Schaeffler Technologies and E/D/E (Einkaufsbüro Dt. Eisenhändler – Purchasing Association of German Hardware Dealers), two representatives of the VDA (German Association of the Automotive Industry) introduced the Automotive Library, which is based on Plant Simulation; furthermore a degression was made on the issue of online optimisation within logistics.

Elocution expert Dr. Matthias Schwarz took a humorous look at the pitfalls and stumbling blocks of in-house communication.

In the accompanying trade exhibition, SimPlan as well as the companies Siemens PLM, GEFASOFT, Kuttig Computeranwendungen, induSim GmbH, RSI Roboscanning GmbH and the VDA Arbeitsgruppe Ablaufsimulation (VDA Process Simulation Working Committee) introduced their services and products. In addition to the Demo3D animation, the 3D laser scanner by the RSI Company was a highlight. It was used to “take” a 3D group photo during the subsequent networking.

We would like to thank all guests for attending and all speakers and exhibitors for the great success of the event!

Further pictures can be seen at our [Facebook](#) page.



### Current Dates



International Trade Fair for  
Distribution, Materials Handling  
and Information Flow



Motto 2011:  
Sustainability in  
Intralogistics

Visit us in **hall 5** at **booth 202**.

All events of the SimPlan group can be found at  
[www.SimPlan.de/Dates](http://www.SimPlan.de/Dates).

## Simulation in practice

### Kennametal optimises the construction of a spreading cathode using finite element analysis



Simulation projects do not necessarily have to be large and time-consuming studies.

At times it is possible to offer clients solutions that can be developed within a few hours. For example, over a short period of time induSim GmbH – a company of the SimPlan Group – tested the loads that occur during deburring for a subsidiary of the Kennametal Group and was able to contribute to improving the material processing.

Kennametal is a leading global company in the fields of metalworking and the development of wear components. The division of Kennametal Extrude Hone, with its head office in Erckheim near Memmingen, develops solutions for deburring and polishing surfaces for the most varied materials among other things.

An electrolytic deburring device uses a special spreading cathode. It is employed in fast moving tools and spreads increasingly as the number of revolutions rises.



networked spreading cathode with the original geometry

To ensure that the cathode always reliably has contact at the correct number of revolutions, the material must never be overloaded – the cathode must be designed to have fatigue strength.

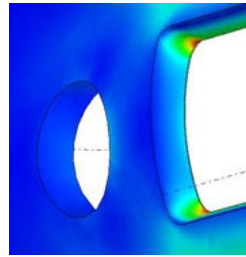
induSim – which specialises in mechanical calculations and virtual product development – was commissioned to test the loads that occur and to provide suggestions for improvements if necessary.

### Software trainings

We offer different training courses in our several offices or at your company:

- Software training courses for Plant Simulation, Enterprise Dynamics, SimView, AutoMod, Simul8 and Demo3D.
- Specific applications like project-specific model instruction, project-related training („training on the job“), modular kit instruction or individual training on questions relating to simulation.

To this end Kennametal used the CAD system Solidworks. The calculations were carried out as nonlinear studies using the calculation tool in Solidworks Simulation.

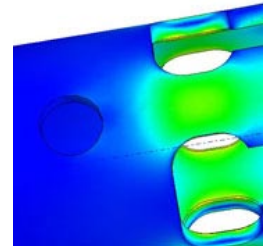


Stresses in the loaded original geometric form

Initial results have shown an overload of the material in the rounded edges between the spreading base parts. In order to transfer the stresses more evenly to the material, the suggestion was proposed to the customer to enlarge the roundings and to offset the clearance hole for the anti-twist device.

The stress curve is significantly more favourable with almost the same physical properties of the spreading cathode.

However, provisions must be made to ensure that the required spreading force does not change considerably. To this end the appropriate comparative calculations were carried out, which proved true in practice at a later stage.



Stresses in the modified geometric form

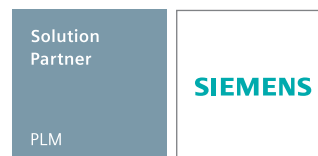


[Website of induSim GmbH](http://www.indusim.de)

If you are interested in a training at your company please ask for an individual offer:

[www.SimPlan.de/Training](http://www.SimPlan.de/Training)

*SimPlan is official Solution Partner of Siemens PLM Software.*



## Simulation in practice

### Production without the involvement of genetic engineering requires complex material planning



Using simulation, SimPlan Austria reproduced the Graz compound feed plant for Garant Tierfutternahrung GmbH – Austria’s market leader in the compound feed industry – in order to adapt the material flows to the requirements of GM-free production.

GMO (genetically modified organisms) and their secondary products are not permitted for use in GMO-free programmes, the same as for organic products. As a result of the global spread and application of GMO in conventional agriculture and food manufacturing, there is an increased risk of unwanted contamination of products that are declared GMO-free through GMO produce.

In order to prevent contamination or spreading, the material flows of GMO and GM-free products must be strictly separated from one another.

Using simulation, SimPlan Austria reproduced the Graz compound feed plant for Garant Tierfutternahrung GmbH – Austria’s market leader in the compound feed industry – in order to adapt the material flows to the requirements of GM-free production.

In compound feed plants this circumstance brings about numerous restrictions in terms of material planning for the production planning and control with regard to the manufacture of animal feed.

Simulation shows influence and impact of restrictions. With the aid of computer simulation, the Garant company used a model to represent the entire Graz compound feed plant, with an annual production output of almost 60,000 tons, in order to make evaluating the influence and impact of these restrictions easier.

The expert’s report carried out by SimPlan Austria focused on the identification of the maximum capacity and the evaluation of a concrete investment in the field of the compound feed cells.

The **contact data** of all subsidiaries can you find at [www.SimPlan.de/Locations](http://www.SimPlan.de/Locations).



### SimPlan helps

This year SimPlan AG is supporting children and people in need with a donation to the German charity [HeBa Hilfe e.V.](#) and the [Stiftung Lichtblick / Hanauer Tafel](#).

We wish all our customers and partners a peaceful pre-Christmas season and look forward to many exciting projects in the New Year!

Your SimPlan Team.

### Follow us:



### Imprint

#### SimPlan AG

Edmund-Seng-Str. 3-5  
63477 Maintal/GERMANY  
Phone +49 6181 40296-0  
Fax +49 6181 40296-19

[info@SimPlan.de](mailto:info@SimPlan.de)  
[www.SimPlan.de](http://www.SimPlan.de)

#### Board of Directors:

Dr. Sven Spieckermann, Dirk Wortmann

#### Supervisory board:

Peter Gangl (Vorsitz), Prof. Dr. Ulrich Noack,  
Robert Maas

AG Hanau HRB 6845  
USt-ID-Nr. DE 154 989 277