

Press release

*nova-Institut GmbH (www.nova-institute.eu)
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**Worldwide WPC production in 2012
reaches 2.43 million tonnes - Double-digit growth,
North America leads China and Europe**

The Fifth German WPC Conference was held on the 10th and 11th December 2013 in Cologne. It lived up to its claim to be Europe's leading WPC event, with over 270 participants from 25 countries, as well as 30 exhibitors. Renolit (Germany), KET (China) and Langmatz (Germany) won Innovation Prizes.

For the fifth time, nova-Institut invited professionals to the German WPC Conference in Cologne, and anyone who is anyone in the field of wood-plastic composites (WPC) worldwide was in attendance on the 10th and 11th December 2013 at the Maritim Hotel in Cologne. Over 270 participants from 25 countries gathered to learn about the most recent data, worldwide trends and the latest technical developments. Discussion was lively, not just in the breaks and at the exhibition, but also after the various presentations. Alongside a large number of German and Austrian companies, representatives from China, Finland, the Netherlands and the USA were also a noticeable feature of the conference.

After a few words of introduction from Michael Carus, Managing Director of nova-Institut GmbH, and Dr Peter Sauerwein from the Association of the German Wood-based Panel Industries e.V. (VHI), the managing director of Europe's leading WPC manufacturer Novo-Tech GmbH & Co. KG from Aschersleben (Saxony-Anhalt), Holger Sasse, took a critical look back over the last few years of WPC development in Germany and Europe, as well as assessing the future development prospects of WPCs.

Dr Asta Eder of Asta Eder Composite Consulting (Austria/Finland) and Michael Carus presented their new joint study "Wood-Plastic Composites (WPC) and Natural Fibre Composites (NFC): European and Global Markets 2012 and Future Trends" to the public for the first time. This study will be available from the end of January 2014 and can already be ordered at www.nova-shop.info

According to their market research, worldwide WPC production will rise from 2.43 million tonnes in 2012 to 3.83 million tonnes in 2015. Although North America is still the world's leading producer with 1.1 million tonnes, ahead of China (900,000 t) and Europe (260,000 t), it is expected that China (1.8 million t by then) will have overtaken North America (1.4 million t) by 2015. European production will grow by around 10% per year, reaching 350,000 tonnes in 2015.

The main fields of application for WPCs worldwide are the construction industry – especially decking, fences and façade elements – and the automotive industry with WPC interior components.

One particularly dynamic sector at the moment are WPC granulates for use in injection moulding to make a large range of different finished products (furniture, casings for

household appliances, technical parts) as well as in automobile interiors. Several major cellulose and paper companies such as UPM (Finland), Mondi (Great Britain/South Africa) and Weyerhaeuser (USA) brought competitively priced WPC granulates to market in 2013. The next few years will show whether these new materials will survive on the market and whether the WPC injection moulding – “the sleeping giant”, to quote Michael Carus – will really come to life.

For the very first time, the conference was presented with comprehensive life-cycle assessments carried out by the South German Plastics Centre (SKZ) and the Institute for Energy and Environmental Research (IFEU) comparing WPC decking with other materials. Cassandra Derreza-Greeven from IFEU gave the following summary of the findings: Thermowood made from home-grown timber came first, followed by German hardwood. Decking made of indigenous softwoods and WPC came out roughly equal, whereas tropical wood comes out of the life-cycle assessment worst. Although WPC score worse than home-grown timber for greenhouse gas emissions and cumulative energy consumption, it does well for land use and eutrophication. Yet the durability of the various materials is a key factor – and there has been too little experience to date for any conclusions to be drawn.

Although there has not yet been sufficient research into this, discussions revealed that WPC scores well in just about every category as a substitute for plastics. In a nutshell, this means that WPC is more environmentally friendly than fossil-fuel-based plastics and tropical hardwoods, but finds it hard to pick up points against home-grown timber.

In a special session Dr Hans Korte of Innovationsberatung Holz & Fasern gave an overview of the current findings of the “Comparison of 13 different compounding technologies for WPC” research project. Together with the Institute for Polymer Technologies (IPT) and the Thünen Institute for Wood Research (TI), they tested the main plant designs for manufacturing WPC granulates that are available on the market. The study’s findings give plant manufacturers detailed guidance on how to optimize their technology, while providing users with tips on choosing the right compound method.

As always, one of the event’s highlights was the choice of the WPC Innovation Award winner.

WPC-Innovation Award - Renolit (Germany), KET (China) und Langmatz (Germany) honoured with Innovation Awards

“We have never had such a large number of high-quality WPC entrants as this year,” said Michael Carus, Managing Director of conference organizer nova-Institut, with great satisfaction. Nearly 20 products from 10 countries were entered into the competition. They were tested and evaluated by a jury of WPC experts. The advisory committee considered six of them particularly innovative and nominated them for the Innovation Award. The relevant companies presented their new WPC products to an audience of professionals on the first day of the conference. The 270 participants at the Fifth German WPC-Conference (www.wpc-conference.de) selected the winner of the 2013 WPC Innovation Award from among these six nominees. As in previous years, the award was sponsored by BASF Color Solutions Germany GmbH. The prize was presented by Dietmar Geiser (BASF Color Solutions Germany) and Michael Carus (Managing Director of nova-Institute) at a special ceremony during the evening gala buffet dinner, which featured live music on WPC guitars.

You will find links to photos of the event (conference and awards ceremony) at the end of the press release.

No. 1 RENOLIT SE, Germany: RENOLIT GORCELL thermoformable WPC-sheets

RENOLIT GORCELL is a thermoplastic lightweight panel with a honeycomb structure and with WPC-sheets on the top and the bottom, which are giving an aesthetical and natural character to the panel in addition of having high stability and stiffness. Further strengths are resource and energy efficiency due to the continuous inline-process in manufacture of the panels. A very good thermoformability, easy processability, resistance against water and various chemicals as well as a 100% recyclability are additional advantages of this new kind of WPC lightweight board.

No. 2 Kappes Environment Technology Co. Ltd. (KET), China: ECOLIFE® – Planet Protecting Profiles

The new WPC window system ECOLIFE® offers an eco-friendly alternative to PVC- and Aluminium-windows and is made of wood-fibres and recycled plastic. The novel combination of a co-extruded WPC-profile with a weather-resistant bonding (laminate) of a thin and coloured aluminium band protects the profile from sunlight and rain. For the first time worldwide, a WPC window profile meets all complex technical demands. It was certified by the Chinese Ministry of Housing and Urban-Rural Development in 2012. Market entry of the window will take place in 2014, first in China, then worldwide. Therefore production- and licence-partners are looked for.

No. 3 Langmatz GmbH and SKZ KFE gGmbH, Germany: Structural foamed WPC for modular cable manholes

The new structural foamed WPC for modular cable manholes significantly reduces both the cycle times of production as well as the transport weight and offers easy assembly. Both partners worked together in order to develop a new WPC material that consists to a large extent of renewable resources (45% wood) and is suitable for the injection moulding of complex, foamed cable manholes with a lower density than the plastic alternatives.

Find detailed information about the winners at www.wpc-conference.de/award; for printable pictures of the WPC-products, please contact Mr Janpeter Beckmann janpeter.beckmann@nova-institut.de.

After the award ceremony and in the course of the gala buffet dinner introduced Jukka-Pekka Karppinen of Flaxwood Oy, Finland, introduced his high-quality guitars. These instruments are injected moulded of special WPC and can soundwise keep up with the best guitars made of tropical timber – unlike them they don't need to be tuned when temperature changes. A local studio musician entertained the audience with three rock music pieces on different WPC guitars. For quite a while discussed interested guitar fans qualities and marketing opportunities for this new generation of guitars with Karppinen.

All presentations of the WPC-Conference are expected to be available in January – free of charge for participants and for 150 € for all interested parties not able to attend. Find more information at www.wpc-conference.de

The Sixth WPC-Conference will take place December 2015 at the Maritim Hotel Cologne.

The following pictures are available for you to use:

- 13-12-10 WPC-Conference participants_1.jpg; Fifth German WPC-Conference, Maritim Hotel Cologne (source: nova / PvP-Fotodesign)
- 13-12-10 WPC-Conference participants_2.jpg; Fifth German WPC-Conference, Maritim Hotel Cologne (source: nova / PvP-Fotodesign)
- 13-12-10 WPC-Conference participants_3.jpg; Fifth German WPC-Conference, Maritim Hotel Cologne (source: nova / PvP-Fotodesign)
- 13-12-10 Innovation Award presentation.jpg; Presentation of the Innovation Award at the Fifth German WPC-Conference; f.l.t.r.: Michael Carus, CEO nova-Institut GmbH; Dietmar Geiser, BASF Color Solutions Germany GmbH, sponsor of the Innovation Award; Axel Kulke, RENOLIT GOR S.p.A., first place Innovation Award (source: nova / PvP-Fotodesign)
- 13-12-10 WPC Innovation Award Winner 2013.jpg; The Winner of the Innovation Award 2013 (source: nova / PvP-Fotodesign)
- 13-12-10 WPC-Guitar Solo Robby Mildenberger.jpg; WPC-E-Guitar solo by Robby Mildenberger, guitar provided by Flaxwood Oy (Finland) (source: nova / PvP-Fotodesign)
- 13-12-10 badge first place.eps; Innovation Award first place badge RENOLIT GOR
- 13-12-10 badge second place.eps; Innovation Award second place badge KET
- 13-12-10 badge third place.eps; Innovation Award third place badge Langmatz and SKZ-KFE

You can download photos of the conference at this link:

wpc-kongress.de/media/WPC Conference and Innovation Award 2013 nova.zip
(29 MB)

Responsible under press legislation (V.i.S.d.P.):

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