

Wasa AG, 64293 Darmstadt, Germany

## Plastic production board with internal honeycomb structure now available in a revised version

After having taken over its former competitor Tecboard GmbH in August 2014, Darmstadt-based Wasa AG is now exhibiting the fully revised version of the Wasa Tecboard® at the bauma 2016. After Wasa AG's 54 years of market experience, the new-type board with its internal honeycomb structure is the fourth type of board in the broadly diversified product range of the manufacturer of production boards for the concrete block industry. In an interview the group's chairman Matthias Bechtold answers CPI's questions about the new product and his market expectations.

### CPI:

Little has been heard of Tecboard GmbH since its takeover by Wasa AG in summer 2014. Now you're presenting the Wasa Tecboard promptly at the bauma 2016 and are thus right on time in implementing the goal that you set yourself - and you're taking the wind out of the sails of the last of the doubters. At the time of the takeover you said that it would take time to turn the good Tecboard into a very good Tecboard. You were very well set-up for this task at your research and development site in Thuringia. What exact form did the further development take and what are the decisive differences between the old Tecboard and the new Wasa Tecboard?

### Matthias Bechtold:

*You have described the time since summer 2014 very well. It's true that I was continuously faced in many discussions with the accusation that Wasa had only taken over Tecboard in order to remove a competitor from the market. Wasa was accused of not being interested in the further development of the product, let alone selling it. We are now proving at the bauma that that is not the case. We have made extensive modifications to the product since taking over Tecboard. For example, we have revised the internal honeycomb structure and optimised both the geometry and the thickness of the ribs. Apart from that we have moved away from the previous material, a wood/plastic mixture, to pure plastics, which offer better technical parameters than the former compound material. The biggest innovation, however, is with certainty the steel reinforcing struts which are now to be found in every Wasa Tecboard. We took our inspiration here from steel reinforced concrete construction, in which the extremely high load-bearing capacity is ultimately achieved through the interaction of two components – concrete and steel.*

### CPI:

The greatest strength of the Tecboard was surely its low weight, made possible by the special honeycomb structure with its numerous hollow spaces. Despite that the board had a high bending resistance according to Tecboard GmbH, which was due to precisely this special internal structure. To what extent has your further development affected the weight and bending resistance?

### Matthias Bechtold:

*At the time of the takeover the original Tecboard did not have such a high bending resistance as was claimed. The modulus of elasticity was just 4,000 N/mm<sup>2</sup>. That was also the reason why we couldn't, or rather didn't want to go to market with the status quo ante.*

*It was only through the additional internal steel bars, which are sealed off from the outside and thus protected against corrosion, and the modified honeycomb structure that we were able to achieve a tripling of the modulus of elasticity in comparison with the old Tecboard; it is*



Matthias Bechtold, chairman of the board of Wasa AG

*now around 12,000 N/mm<sup>2</sup>. As a result, sagging is extremely low, even with heavy loads. Even with an enormous concrete load of 800 kg, the board sags less than 2 millimetres.*

*Of course this has had an effect on the weight of the board, but the effect is minimal in relation to the size of the board. A Wasa Tecboard measuring 1,400 x 1,100 x 60 mm with six internal steel bars weighs less than 60 kg. A steel sheet with a comparably high bending resistance would weigh a multiple of that.*

### CPI:

Tecboard ultimately found the ideal partner for the manufacture of the honeycomb boards in the company Georg Utz GmbH in Schüttorf (Germany), an internationally active company with 9 locations in Central Europe, Russia, China and the USA. The plastics specialist has amassed over 40 years of know-how and has the appropriate injection moulding machines. Are the Wasa Tecboards also manufactured together with Utz or have you taken another route?

### Matthias Bechtold:

*As you have said yourself, Utz is the ideal partner when it comes to injection moulding. Also, the people at Utz GmbH with whom my colleague from the executive board, Peter Webel, who is technically responsible for our products, and our employees from the Research &*



Development Department regularly deal are exactly what one would want: technically highly qualified, motivated, reliable and very pleasant to deal with. Why should we sacrifice such synergies without a reason? However, I should also mention the IAB in Weimar, which as an institute has given us great support in the question of research into and further development of the Wasa Tecboard. It is also thanks to the IAB that we have been able to create a further high-end production board in the new Wasa Tecboard.

**CPI:**

So do you view the co-operation with Utz as a permanent partnership or have you considered - naturally in conjunction with the corresponding investment in the necessary injection moulding machine - to relocate production to your own production factory in Thuringia?

**Matthias Bechtold:**

We have found such a reliable and competent partner in Georg Utz GmbH that we are not currently considering changing anything with regard to this type of co-operation.

**CPI:**

One of Tecboard GmbH's last developments was to integrate RFID transponders in the production boards if desired in order to enable permanent traceability of the concrete products manufactured on a production board. Are you sticking to this idea? Is there a frequent demand for such solutions in general?

**Matthias Bechtold:**

As a board with a honeycomb structure and therefore hollow spaces, the Wasa Tecboard is naturally ideal for installing RFID chips. There is also no great technical effort involved in meeting such customer requests. The customer only needs to tell us where the transponder should be placed in the interior of the board. This is then accounted for accordingly in our injection moulding tool. However, I can tell you from experience that RFID-based solutions have so far been in very little demand on the market - and that means not only in Wasa products, but in the board segment in general.

**CPI:**

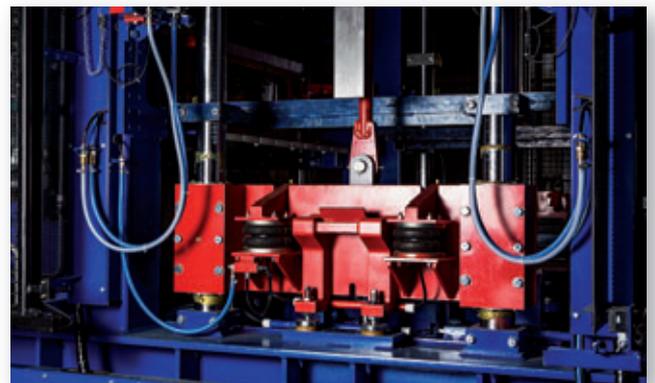
The three production board types Wasa Softwood, Wasa Woodplast and Wasa Uniplast Ultra that you currently offer are now joined by a fourth production board in the Wasa Tecboard. Where does the Wasa Tecboard fit into the range in comparison with the first three production boards mentioned and for which areas of application do you see the Wasa Tecboard as first choice?

**Matthias Bechtold:**

Wasa has always considered itself to be a full-range supplier that doesn't want only to be able to offer the customer a single product, but can also recommend and ultimately deliver the board that is, when properly considered, best suited to the respective individual application. That could be the Wasa Softwood board in the case of a price-conscious customer, a Wasa Woodplast in the case of a customer who values the advantages of a hardwood board, but can do without its disadvantages, or a Wasa Uniplast Ultra in the case of a concrete block making plant that attaches importance to extremely long service lives. This portfolio has now been joined by a fourth type of board in the Wasa Tecboard as a useful addition. The Wasa Tecboard certainly won't displace any of the aforementioned products, but will be of interest above all to those customers who would like to have a light-weight board with a very high bending resistance. The Wasa Tecboard is thus predestined for concrete products manufactured on the board that are very heavy and/or sensitive to bending – just



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Due to the new structure of the Wasa Tecboard it was possible to triple the modulus of elasticity in comparison with the old Tecboard. It is now around 12,000 N/mm<sup>2</sup>

consider kerbstones or the currently popular large slabs that have an edge length of slightly more than one metre and therefore must not be subject to great degrees of bending. The Wasa Tecboard with its modulus of elasticity of 12,000 N/mm<sup>2</sup> plays to its strengths in such cases. Apart from that the Wasa Tecboard along with the Wasa Uniplast Ultra is a pioneer where sustainability is concerned, because these boards are suitable for recycling at the end of their service lives.

**CPI:**

Like many other new products the Tecboard had a difficult start with painful setbacks following its market introduction in 2009. However, Tecboard GmbH quickly learned from its mistakes and succeeded in continually improving the product. At the end, the Tecboard gained a foothold in the market and was also able to gain well-known concrete plants as customers. That shows that the interest in a lightweight and completely new type of plastic production board was

greater for some concrete plant operators than the scepticism. There is therefore much reason to assume that the Wasa Tecboard will quickly establish itself on the market, especially since the trusted name of Wasa now guarantees quality. What are your expectations and how do you see the long-term development on the market?

**Matthias Bechtold:**

Up to now, about 25,000 production boards made of wood, plastic and wood/plastic composite leave our factory every month - that makes about 300,000 boards per year. On the basis of these figures and the need for boards on the whole, we expect to sell a moderate five-figure number of Wasa Tecboards in the second half of 2016 and the year 2017 together, following the market introduction at this year's bauma. Those who currently use a Wasa Uniplast Ultra and value its advantages - for example regrinding - will not switch to the Wasa Tecboard unless they have to. We know from research, however, that there are many block manufacturers on the market who are eagerly awaiting the revised Tecboard and its major performance features such as low weight and high bending resistance. These are the type of customers that we envisage buying the new board type.

**CPI:**

Mr. Bechtold, thank you for this conversation. We will be following the development of the Wasa Tecboard with great interest.

**FURTHER INFORMATION**



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