



## **The complete timber work range – innovative new product developments by WEINMANN**

**At the LIGNA, WEINMANN presented practical solutions for timber frame enterprises. As the only manufacturer who offers both solutions for beam processing and for element construction, WEINMANN has enhanced its products in every field. These further developments make the machines even more versatile and more flexibly applicable, and they offer timber frame producers some much more accurate plus faster element production. Both the carpentry machine WBZ 160 powerSIX and the multifunction bridge WMS 150, in combination with various table models, were presented live, and impressed with their flexibility and accuracy.**

## **Processing from six sides: More flexibility in beam processing through WBZ 160 powerSIX**

**Today, numerous carpentries use the WEINMANN carpentry machine that offers the highest capacity, the WBZ 160. This machine does not only open up countless processing options, but, at the same time, features a very high performance.**

But the WEINMANN designers have made great effort once more: The newly developed underfloor unit enables an even greater variety of parts to be produced, but still only requires an unchanged low amount of space. So most processing steps required are performed from all six sides without any tilting operation - so classic block house joints can now be created with ease. For example, blocking grooves and dovetail connections on both sides can be created quickly and easily on purlins and ridge beams. This not only allows a higher level of precision to be achieved, but also increases the processing speed and simplifies handling.

Not to be forgotten: The ease in terms of handling. The beam does not have to be transported out, rotated, and then transported in again. It is processed in the same position in which the processing is performed for the other work piece sides. This guarantees a much higher level of accuracy.

The wide range of applications of the WBZ 160 powerSIX was demonstrated using the sandpit that was developed by the WEINMANN application engineers. The sandpit consists of variously machined hip rafters, valley jack rafters, as well as log board connections, which all are produced without the need of turning the beam.

During the five trade fair days, several sandpits were produced, which could be bought by trade fair visitors. In favor of the organization HOMAG Cares, these

proceeds were donated, along with others of the HOMAG group, to mentally ill people in the district Calw “AOP” and Freudenstadt “Die Treppe”.



Fig 1: Carpentry machine WBZ 160 powerSIX



Fig 2: Sandpit developed and produced by WEINMANN

**The WEINMANN multifunction bridge impresses the visitors with its versatility and the new developments: automated frame work generation and fully-automated panel cut.**

The huge field of application reveals that the WEINMANN multifunction bridge WMS is a real all-rounder. From classical carpentry work to caravan production, the machine can be used for the automated fastening (nailing, clamping or also screwing) and processing (sawing, routing,

**drilling, marking, labeling, gluing and sizing) of the sheathing. Moreover, not only timber frame elements can be processed – materials like e.g. sandwich elements can be manufactured easily and efficiently. Carpenters esteem the multifunction bridge particularly because of its versatile range of applications, its low space requirements and easy handling.**

All that has been presented to the visitors on Ligna. Therefore WEINMANN showed different assembly table solutions, which can be used for many different applications. So the visitors could see which solution fits best to their requirements.

A roof element was presented on the self built assembly table Variotec WTV. The multifunction bridge fastened and processed the sheathing fully automated. On the console table WTP a gable element made of solid wood has been processed with the multifunction bridge, showing the fully automated formatting of outer contours, drilling and routing.

Furthermore the multifunction bridge surprises with the new developments – timber frames can be produced automatically. Studs and plates are inserted manual on the framing table WET. The WMS is equipped with a frame work stop system, providing the operator stops and clamps for exact positioning, and enabling the automated joining of plates and studs.

Integrated in the panel production line compact**PLUS** - consisting of the multifunction bridge WMS, the framing table WET and two assembly tables - wall, roof, floor and gable elements can be produced efficient on very small floor space.



Fig 3: Multifunction bridge WMS 150 with various table models



Fig 4: Automated frame work generation with the compact**PLUS**

### **Now fully automated panel precut and full nesting function are also offered with the WMS**

The innovation for timber frame producers, carpenters and anybody intending to process large-sized panels: Drilling, routing, nailing, clamping, sawing and full nesting functionality – all this is offered by just one machine, irrespectively of contour and panel size.

The nesting can be performed on a bracket table with vacuum suction cups or on a grid table - depending on customer requirements. The panel is placed on the respective table and processed fully automatically, fast and efficiently by the multifunction bridge.

The processing happens in such a manner that just a minimum of offcuts occur. This new function enables the multifunction bridge to take care of additional tasks which otherwise would have to be performed with a different machine.

This means enormous savings in terms of space requirements and investment costs for your enterprise.

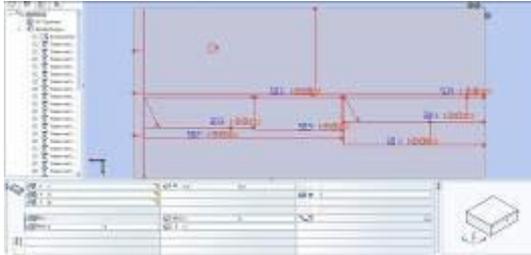


Fig 5: Fully automated panel pre-cut with the multifunction bridge

## **Solid wood portal WMP: now positioning sensor device included**

**A newly developed unit enables the WEINMANN solid wood portal WMP to automatically determine work pieces.**

The advantage: Even bulky and heavy work pieces don't have to be aligned, but can be placed anywhere on the working table. The raw part contours of bulky components as for example curved glulam are captured. A high-precision sensor measures the raw element and the thus determined contour is automatically brought into alignment with the data set concerning its position and bending.

In addition, the work piece and the data that have been corrected respectively their position are graphically displayed on the monitor of the control panel, so the operator can readjust the position of the data set manually. This may be necessary if the work piece is smaller than the data set, and therefore a reference edge must be selected manually. Then the processing can start immediately.

The solid wood portal WMP is used in both solid wood construction and commercial construction as well as for glulam.

With a working width of 5.6 m, and a length of 60 m, 5-axis technology and its multifaceted machining options, the WMP already raised the bar today.

In addition, it is the market's only solution for the machining of multi-layered solid wood and timber frame elements.



Fig 6: The solid wood portal WMP with positioning sensor device

## **Powerful CNC machine with 18.5 kW main spindle**

**All machines that are equipped with a tool changer now are even more powerful though the new 18.5 kW spindle.**

Both carpentry machine WBZ 160 power**SIX** and the multifunction bridge WMS 150 have been presented with the new 18.5 kW spindle.

This increased drive power meets the increasing demands of the timber industry - especially the requirements of solid wood machining. Power reserves for demanding operations will now be held, so that the machining can be performed at a high speed. What's more, a higher cutting efficiency is achieved, which means that per unit of time more material can be machined.

## 30 years of WEINMANN – 30 % higher performance

In 2015, WEINMANN performs its 30th anniversary. On the occasion of this event, the customers are offered three edition machines featuring significant time savings. The outcome of this is a much higher performance.

- Carpentry machine WBZ 160 power**SIX** – 30 % increased performance



Fig 7: Carpentry machine WBZ 160 power**SIX**

- Panel production line compact**PLUS** – 30 % increased productivity



Fig 8: Panel production line compact**PLUS**

- Butterfly Turning Table – 30 % saving of time



Fig 9: Butterfly turning table

Picture courtesy of: WEINMANN Holzbausystemtechnik GmbH

**Fig 1: Carpentry machine WBZ 160 powerSIX**



**Fig 2: Sandpit developed and produced by WEINMANN**



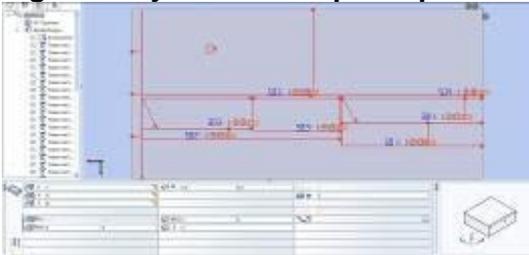
**Fig 3: Multifunction bridge WMS 150 with various table models**



**Fig 4: Automated frame work generation with compactPLUS**



**Fig. 5: Fully automated panel pre-cut with the multifunction bridge**



**Fig 6: Solid wood portal WMP with automatic positioning sensor device**



**Fig 7: Carpentry Machine WBZ 160 powerSIX**



**Fig 8: Panel production line compactPLUS**



**Fig 9: Butterfly turning table**



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