

## YOUR SOLUTION for edge processing at the LIGNA 2017

<b>Highly flexible edge technology: For workshop concepts and networked batch size 1 solutions .....</b>	<b>2</b>
<b>Zero joint and PU in every performance category .....</b>	<b>2</b>
Tandem plant for edge banding with PU in batch size 1 .....	2
Highly flexible edging cell with new “laserTec – Next Generation” .....	3
Available even for entry-level machines: .....	4
New airTec method and standardized glue application system .....	4
Maximum edge quality for entry-level users .....	5
Door rebate gluing with zero joint and thick edges .....	5
<b>Corner processing and groove changeover de luxe .....</b>	<b>5</b>
Transformation of the profile trimming unit into a multiple-stage unit .....	5
Quick groove change for many variants .....	6
<b>Innovative feature for machine operation .....</b>	<b>6</b>
New wireless hand-held operator terminal .....	6
<b>Floors with extreme profile accuracy .....</b>	<b>7</b>
New double-end tenoner series FPR 500 .....	7

## Highly flexible edge technology: For workshop concepts and networked batch size 1 solutions

The diversity of panel and edging types is continuously on the increase – as are the demands made on individual furniture. To address these demands today, cabinet makers, joiners and industrial producers require edge banding machines with the greatest possible flexibility using innovative technologies. HOMAG will be presenting these at the LIGNA in the form of stand-alone machines – integrated into workshop concepts and flexible production cells – and in a batch size 1 plant. One focus at the fair will be on edge banding. Here, HOMAG is now offering new zero joint technologies and PU gluing technology across every performance category.

## Zero joint and PU in every performance category

### Tandem plant for edge banding with PU in batch size 1

The new plant concept for flexible production of kitchen elements comprises two K 610 edge banding machines. The core is formed by two power jointing-trimming units mounted one behind the other. These are equipped with hydraulic tools for highly precise, splinter-free workpiece jointing trimming. The gluing section is capable of processing 48 different edging types in automatic alternation without manual intervention. All edges are glued using PU to ensure optimum fulfillment of the special demands made on kitchens in terms of humidity and heat resistance. Grooves can be produced in any individual width, depth and position. The plant is configured for edge processing of **5,000 parts** in two shifts. An **offsetting station with unprecedented workpiece circulation** reduces the space required compared to previous

concepts.

### Highly flexible edging cell with new “laserTec<sup>1</sup> – Next Generation”

The zero joint experts at HOMAG have taken the experience gathered from several hundred supplied laserTec systems and used it as the basis for further development of this proven technique. The result: “laserTec – Next Generation” which goes into series production from the LIGNA 2017. The unit is available in two performance categories and offers zero joint quality for industry both in batch size 1 and also in series production.

#### The benefits:

1. Performance optimization with the new diode technology
2. Simple structure for a smaller, more robust design
3. Extended service life and improved servicing and maintenance quality due to easy control system and new cooling concept
4. Reduced set-up time and less space at the machine
5. Optimized beam profile at the edge and even less susceptibility to faults

At the LIGNA, the “laserTec – Next Generation” is mounted on a KAL 370 profiLine whose equipment includes the **new servo-driven snipping unit SK25**. The “soft” contact of the snipping stops makes this ideally suited for snipping sensitive materials, as it minimizes any risk of damage or shiny marks. It can ideally be used for rough snipping wherever there is a coating ply overhang.

The KAL 370 **profiLine** working in conjunction with the TFU 521 edition from HOMAG Automation creates a highly flexible overall solution, with the TFU 521 edition taking charge of automated part flow.

---

<sup>1</sup> Under patent law in Germany only usable with Rehau edge!

### Available even for entry-level machines:

#### New airTec method and standardized glue application system

- **Ambition 1650 airTec:** Anyone wishing to manufacture an optical zero joint can use the new airTec method on this machine. The mounted version – unveiled for the first time in the fall of 2016 – is equipped with a rotary air heater which makes the process significantly more efficient and quieter as well as saving resources. airTec is available for edge banders with a feed rate of 8 to 25 m/min. The energy requirement has been reduced by 10-30 %. The method can be used right from the Ambition series 1400 through to the high-end machines of the KAL 370 series.
- **Ambition 1230 airTec:** Even in the basic version it offers an array of automation features and is considered the optimum machine for ambitious entry-level users.

Alongside airTec for zero joint production, this machine can also be equipped with **glue application using an application roller as standard**.

After the LIGNA, homogeneous glue application technology using the Ambition 1230 airTec will be used through to industrial manufacturing. Due to its resistance to water and heat, PU adhesive processing is a key issue for furniture manufacturers. To offer this facility to users across the board, from the LIGNA onwards a **standardized top-mounted glue application system** will be available.

The application unit comes with a special coating which permits the processing of all kinds of adhesive (including PU).

Another benefit: In terms of easier cleaning and emptying, the application unit offers a similar level of convenience to the larger series. With this innovation, HOMAG is opening up industrial standard equipment to woodworking shops.

### Maximum edge quality for entry-level users

- **Ambition 1120 FC:** Here, HOMAG is exhibiting a machine from its highly successful entry level series. A jointing trimming unit prepares the edge, a 2-motor snipping unit takes care of the perfect cut. The trimming unit provides impressively simple adjustment between the radius, chamfer and flush trimming unit. The flexible finishing zone features two free spaces which have been equipped for the LIGNA with a profile scraper blade with standard quick-change heads and a glue joint scraper blade. A profile trimming unit is also mounted – for the complete processing of workpieces including corner trimming. The machine is operated using the 7" easyTouch control system with its clearly arranged graphic display and 20 individually storable programs.

### Door rebate gluing with zero joint and thick edges

Rebate edges with the optical zero joint: The airTec method for door production is now in successful use by a number of customers. This is primarily in answer to rising quality expectations imposed on white doors – an ever more popular choice. The manufacture of an optical zero joint is possible here using melamine and ABS/PP edging material. The use of ABS edging materials (now also for rebate edges) with a thickness of up to 3 mm also means that longitudinal edges are now less susceptible to impact.

### Corner processing and groove changeover de luxe

#### Transformation of the profile trimming unit into a multiple-stage unit

- **Ambition 1650 airTec:** This machine offers the perfect combination of a superb zero joint, simple handling and complete automation. It is fully equipped with multiple-stage technology at the trimming unit and scraper

blade (2 radii or flush trimming).

A new feature on this machine is **extended functionality for workpiece corner processing**. From the LIGNA onwards, the profile trimming unit will be transformed into a multiple-stage unit. Multiple-stage capability will be achieved using a new tool which can be simply switched over during the interruption between work steps. It is now possible to change between 2 profiles. This means that the entire machine is equipped with multiple-stage technology, allowing users to change over freely as required.

For optimum handling, the machine on show in Hanover is fitted with the **TFU 140 return conveyor** from HOMAG Automation.

### Quick groove change for many variants

Grooving unit SF30 will be showcased on one of the demo stations at the LIGNA, and is ideal for flexible batch size 1 production. The unit is equipped with a sliding tool which allows different groove widths to be achieved using a single tool within a groove width adjustment range of 4–7.5 mm. This unit, which can also be optionally swiveled by means of axes, can help save both machine length and costs.

## Innovative feature for machine operation

### New wireless hand-held operator terminal

**Ambition 2474:** This edge bander will be equipped at the LIGNA with the new wireless hand-held terminal, which is used for running-in operation or in shut-down situations. In the past, trailing cables could pose a trip hazard. When working with long machines, dragging a cable up and down the length of the machine during operation can also be inconvenient. Users can now dispense with all of that.

## Floors with extreme profile accuracy

### New double-end tenoner series FPR 500

The new double-end tenoners feature a modular configuration and a more rigid, stable design. This combination guarantees flooring production to the very highest standard of profile accuracy and precision. The machines of the new FPR 500 series cover every conceivable application, are compact and offer flexible solutions for the longitudinal and transverse processing of wide-ranging materials. The double-end tenoners comprise processing modules mounted in-row at the module carrier. The machines are easy and intuitively operated using powerTouch.

## Pictures

Pictures courtesy of: HOMAG Group AG



Fig. 1: “laserTec – Next Generation” on the KAL 370 profiLine

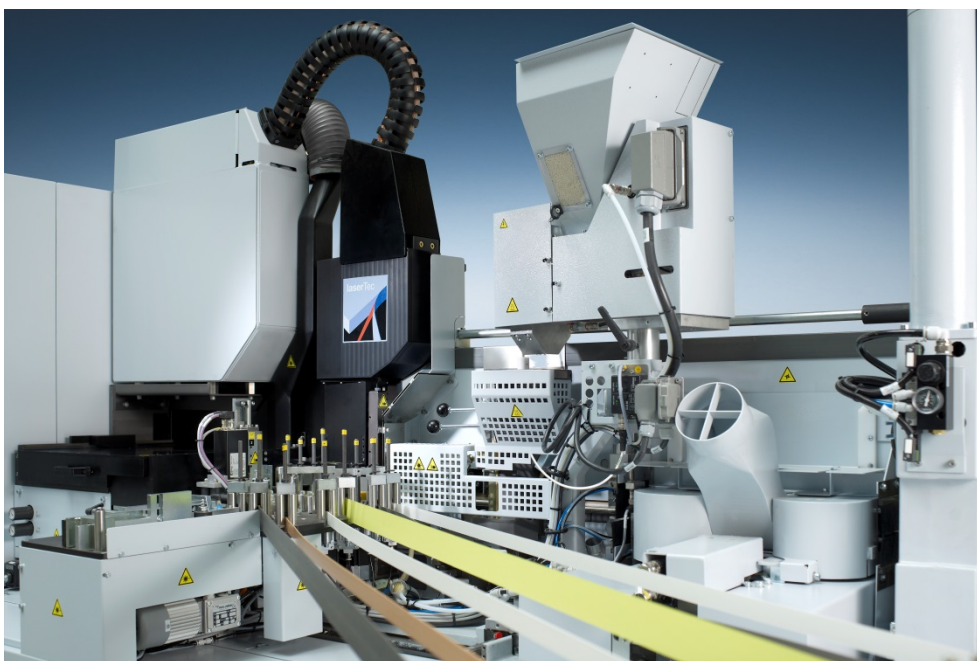


Fig. 2: “laserTec – Next Generation” with hot-melt gluing section

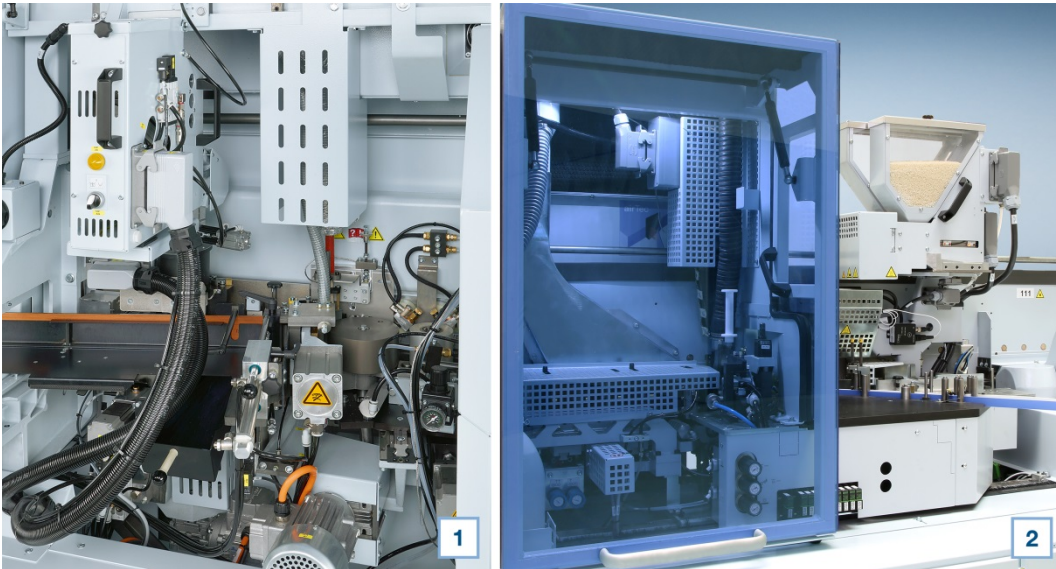




**Fig. 3: Edge cell: KAL 370 profiLine with “laserTec – Next Generation” in conjunction with Portal-Type Return Conveyor TFU 521 edition**



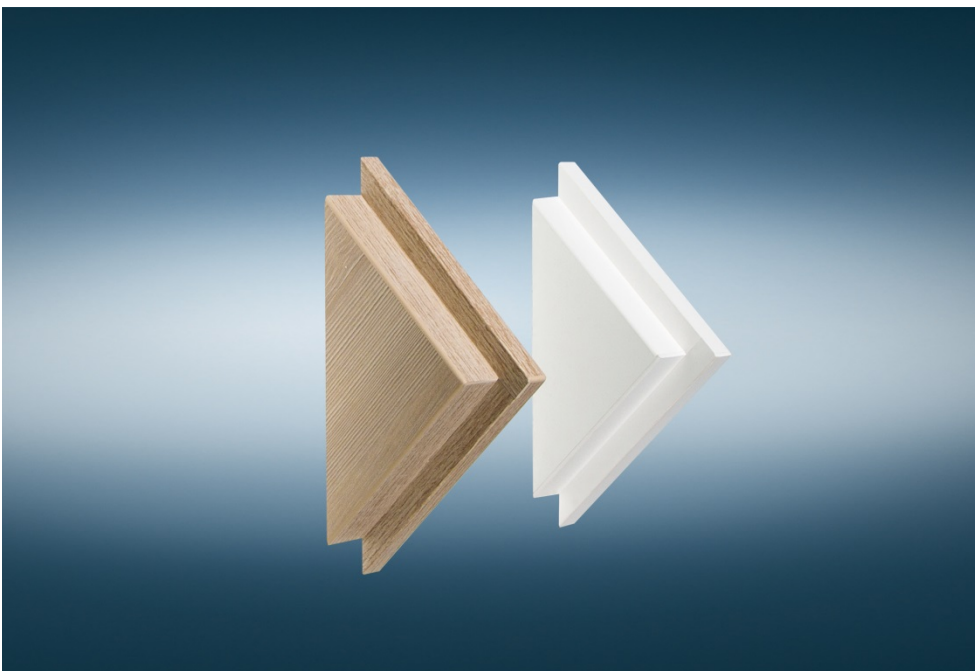
**Fig. 4: Ambition 1120 FC – Maximum edge quality for entry-level users**



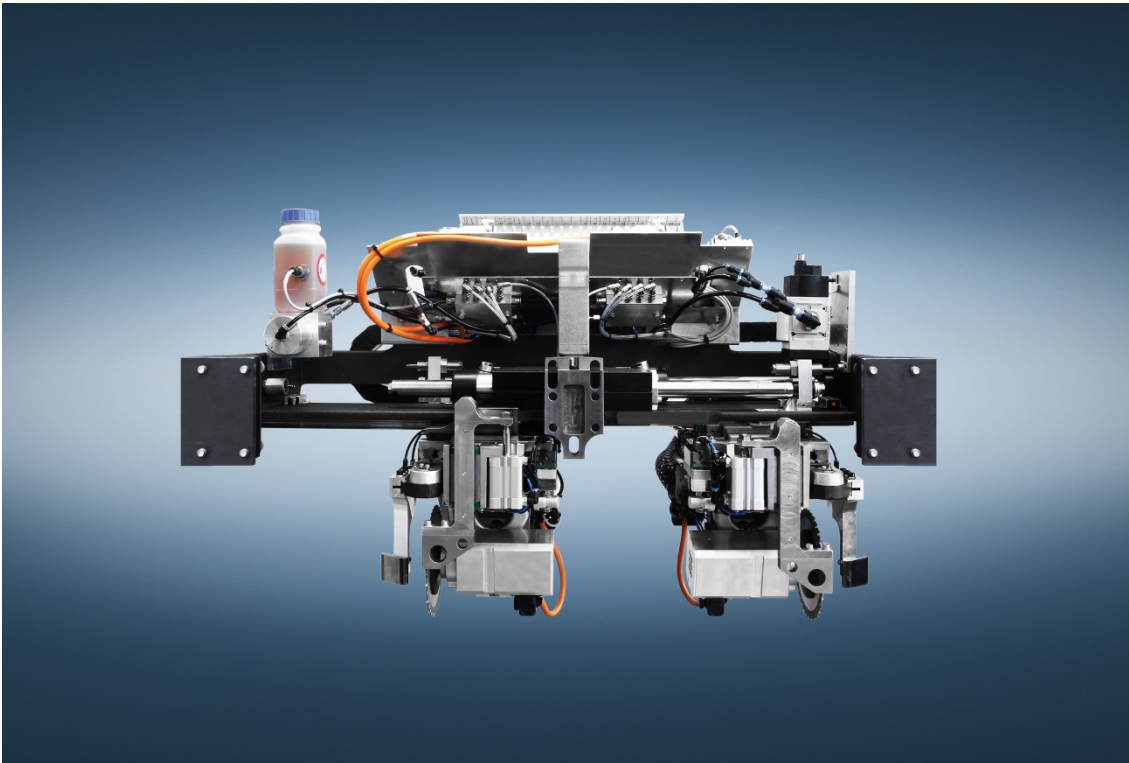
**Fig. 5:** airTec with rotary air heater

**Fig. 5.1.:** airTec unit on the Ambition / Highflex 1400–1800 and profiLine 1600/1800

**Fig. 5.2:** airTec unit on the Ambition 2200/2400/2600 and KAL 370 profiLine



**Fig. 6:** Door rebate gluing with zero joint technology



**Fig. 7: Servo-driven snipping unit SK25 suited for snipping sensitive materials and rough snipping a coating ply overhang**

---

**For more information, contact:**

**HOMAG Group AG**

Homagstraße 3–5  
72296 Schopfloch  
Germany  
[www.homag.com](http://www.homag.com)

**Julia Weber**

Customer Communication Manager  
Tel.: +49 7443 13-2588  
Fax: +49 7443 13-8-2588  
[julia.weber@homag.com](mailto:julia.weber@homag.com)