

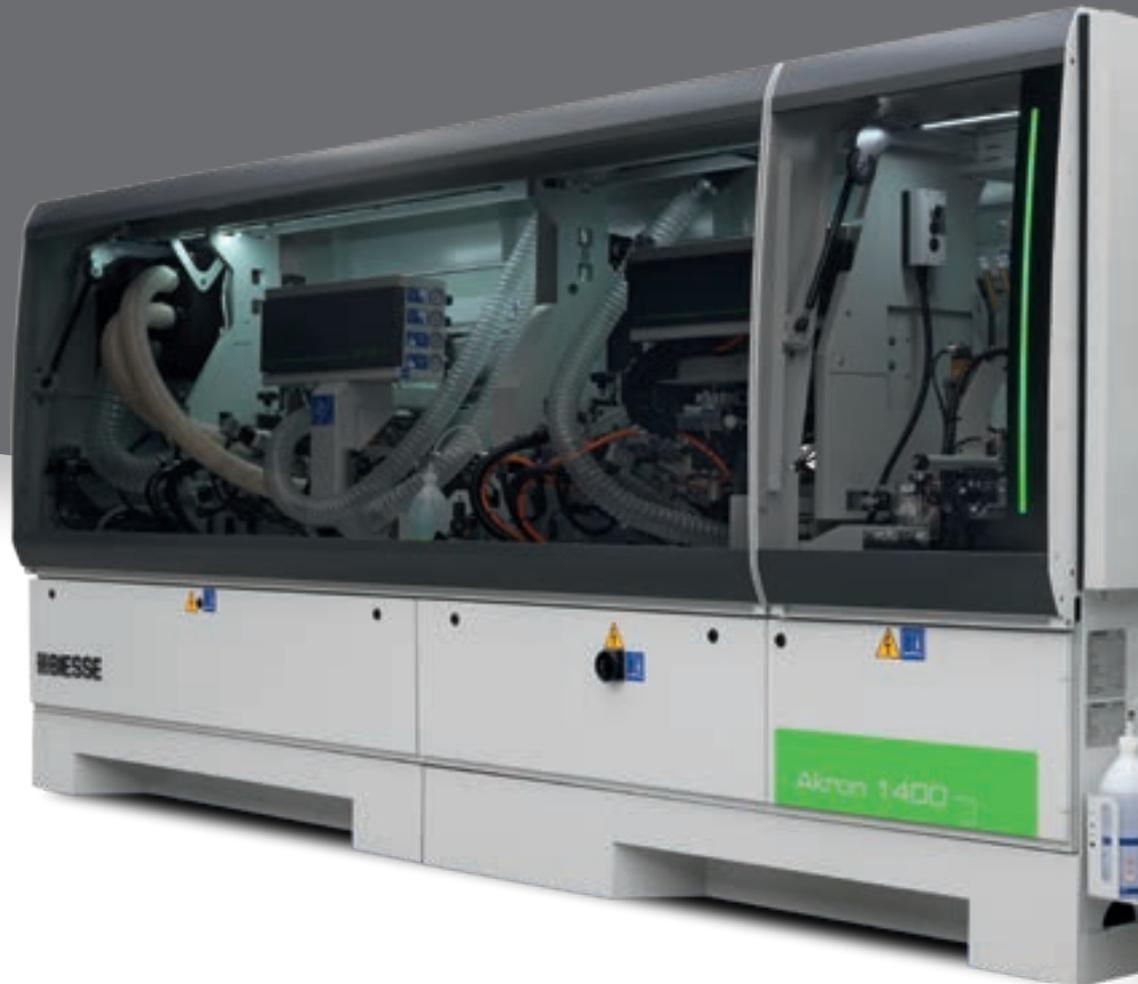
# AK RON 1400

AUTOMATIC SINGLE-SIDED  
EDGE-BANDING MACHINES



 Biesse

# THE IDEAL SOLUTION FOR INCREASING PRODUCTION



## THE MARKET EXPECTS

a change in manufacturing processes, enabling companies to **accept the largest possible number of orders**. This is coupled with the need to maintain **high quality standards** while offering product customization with **quick and defined delivery times**, as well as responding to the needs of highly creative designers.

## BIESSE RESPONDS

with **technological solutions** which underline and support technical expertise, as well as process and material knowledge. The **Akron 1400** is a range of single-sided edge-banding machines for the application of edging in either rolls or strips. Compact working units designed to simplify the preparation operations are available with various configurations to suit specific production requirements.



# AKRON 1400



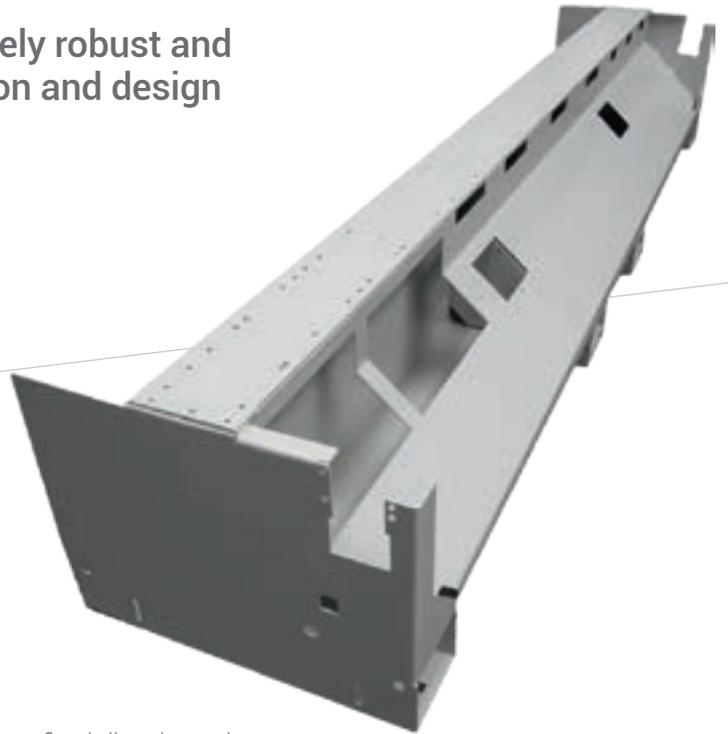
WATCH THE VIDEO

- ✓ BUILT ACCORDING TO THE SPECIFIC PRODUCTION REQUIREMENTS
- ✓ GROUND-BREAKING TECHNOLOGY, FOR TOP PERFORMANCE
- ✓ PERFECT FINISHES WITH EVERY TYPE OF PROCESS
- ✓ TOP QUALITY FINISHED PRODUCT

# AT THE HEART OF QUALITY

The structure of the machine is extremely robust and rigid, sized with cutting-edge calculation and design tools.

The **monolithic base** provides high stability and allows the machine to operate also over several work shifts while continuing to deliver high quality standards.



The sturdy columns, fixed directly on the base, fully absorb all vibrations generated during machining.



The **Belt Presser** allows the panel to run on the belt guaranteeing uniform pressure which is ideal even for more delicate coverings (opt. only on Akron 1440 and 1445).



# HIGH FINISH QUALITY



Perfect finish, due to the 2-motor Pre-milling unit with automatic intervention.



**HSD**  
MECHATRONICS

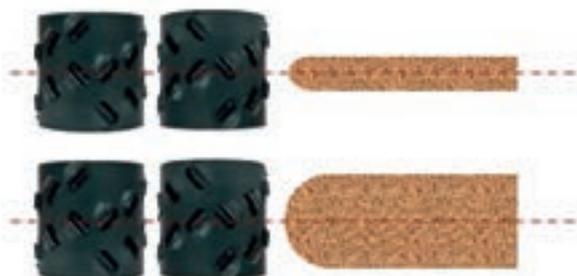


**Rotax**  
electrospindle

As standard, Akron uses only the electrospindles of the exclusive Rotax range on all the machines. These are electrospindles of the highest quality, designed and made by HSD (a leader in this sector); they guarantee optimum power, compact dimensions, and extremely high finishing standards.



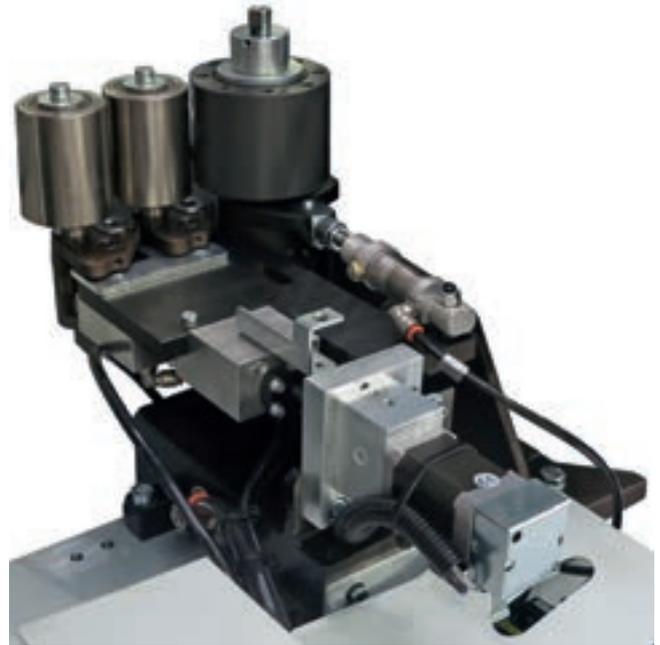
The **Pre-milling Autose**t device for the automatic centring of the tool on the panel improves quality whilst reducing set-up times.



# APPLICATION OF EDGE BANDING OF ANY SIZE



**Gluing unit** for the automatic application of edging in rolls or strips, from 0.4 to 12mm.



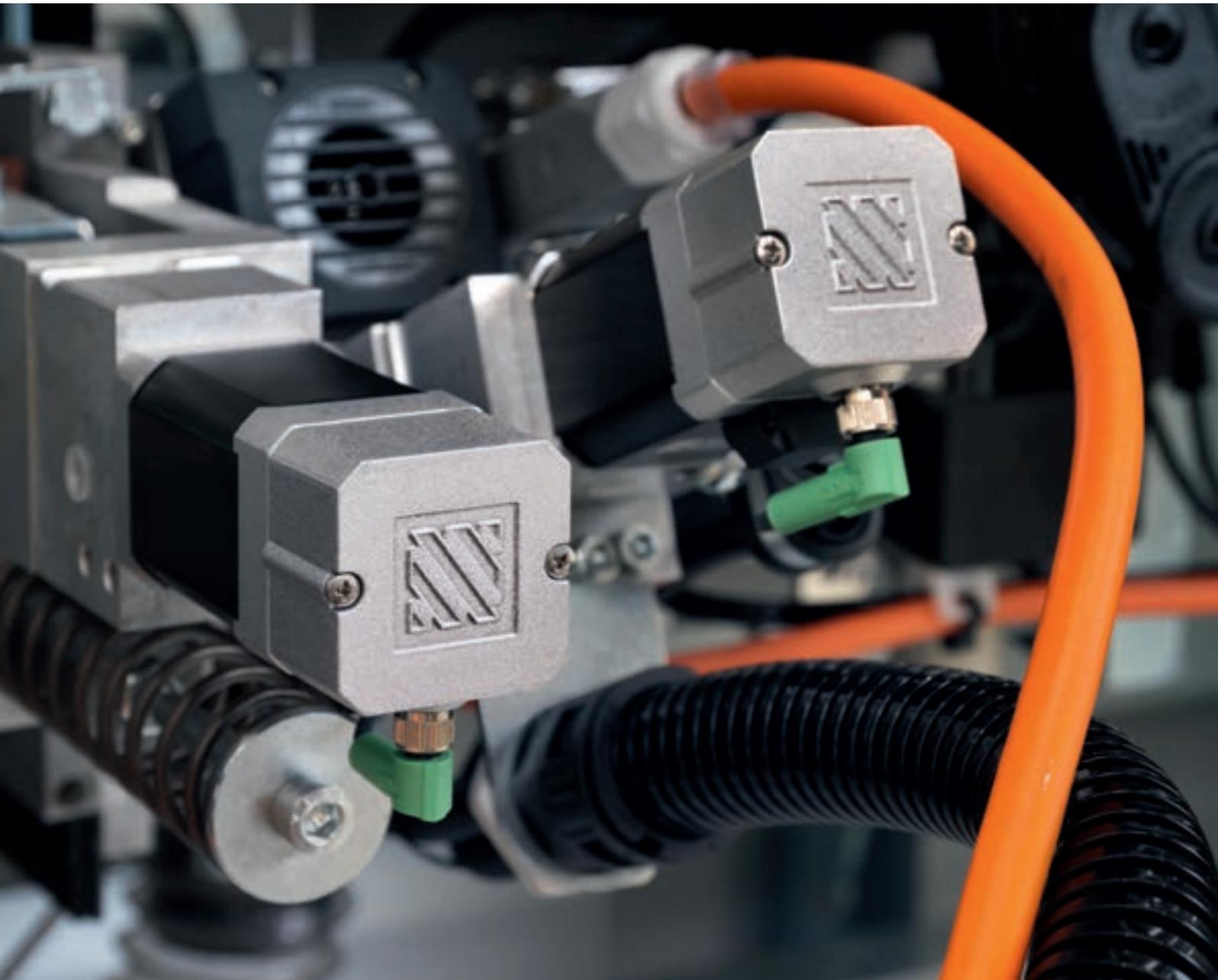
**Device for setting the unit automatically**, to suit the edging thickness (opt.).

**Single-roll automatic loader**, enables rapid change of the edging strip with no need to open the cabins.  
**Optic sensor** for detecting the correct positioning of the edging strip (opt.).



## TOP QUALITY CHARACTER

Unprecedented product quality and reduced machining times, thanks to technological solutions created for the specific day-to-day work.



The automatic axis of the working units have a reading system that allows the machine to know -at any time -if the setting is correct. They are fitted with motors with a positioning tolerance of 0.01 mm, for optimum machining accuracy. Their compact size considerably extends their range of application. Changeover time reduced by 75%.

# MANY SOLUTIONS FOR OPTIMAL MANAGEMENT OF GLUE



## Glue pot

The **glue pot** is equipped with a pre-copying system to prevent direct contact between the roller and the panel, preserving the surface quality of the machined panel whilst allowing for a smooth and even application of glue, without wear to the glue pot.



## New hybrid glue head for using EVA and PUR

- One single glue head that can work with both EVA and PUR in granules
- High flexibility thanks to the automatic system that drains the glue from below
- Automatic roller cleaning cycle on the basis of the panel length
- CN axis for glue quantity adjustment (optional)
- Glue level sensor, Pop up alert in the screen when the glue is finishing



## Pre-melter for EVA glue

To meet all the priority machining needs:

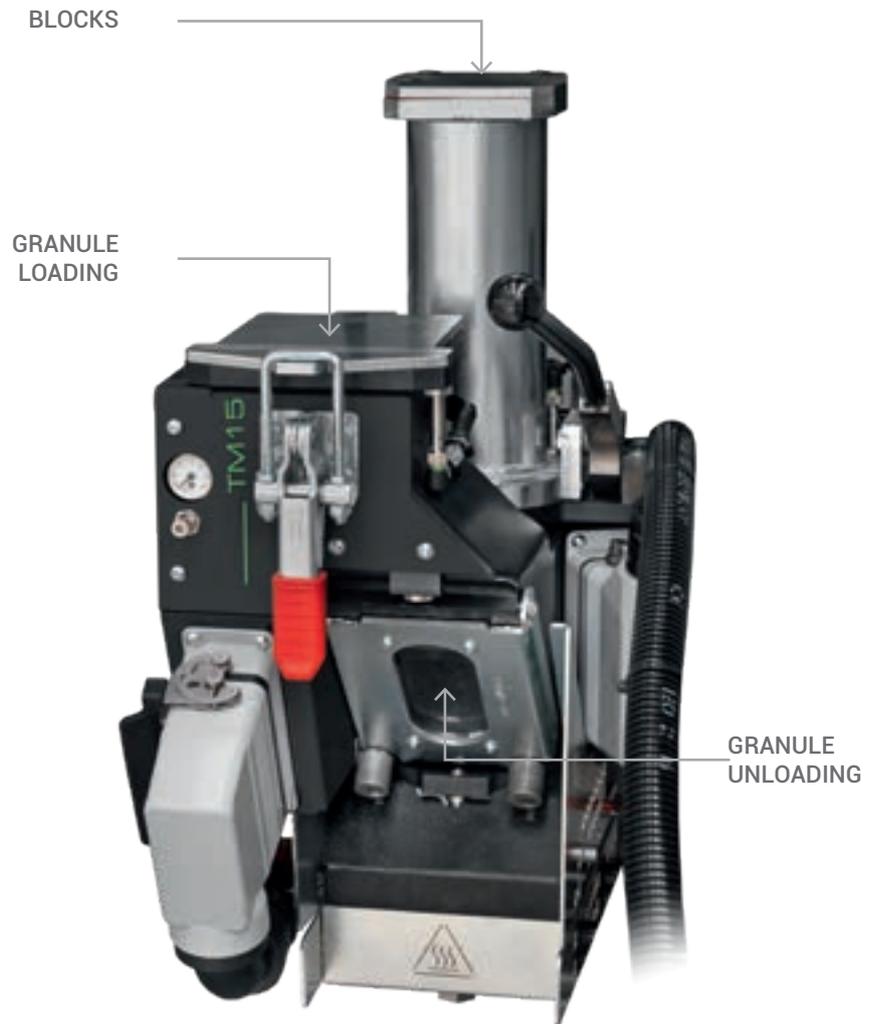
- More glue available
- Easy control of the glue level

# MAXIMUM MACHINING FLEXIBILITY AND EFFICIENCY

## TM15 Hybrid Top Melt pre-melter

New hybrid system for melting on-demand glue from above:

- ▣ Hybrid pre-melter for working PUR or EVA glue, to meet every possible need
- ▣ High flexibility thanks to the possibility to use glue either in granules or in small cartridges
- ▣ Hermetically sealed system for a long glue lifespan
- ▣ Quick and easy maintenance procedures that require no special skills of the operator and can be carried out following the dedicated tutorial videos



# AIR FORCE SYSTEM

## INVISIBLE EDGEBANDING

**No joints and no glue line, in perfect harmony with the panel.**

AirForce System, available on Biesse edgebanding machines, is based on the physical principle of convection. By using a compressed hot air system, the edge bonds perfectly with the panel guaranteeing resistance to water and heat and an excellent long lasting quality finish.



# FOR EXCELLENT PERFORMANCES

Maximum cutting quality and precision thanks to the End Trimming Unit, enabling any excess to be eliminated at both ends of the panel. Two versions available according to the machining needs.

## IN801

The edge trimming unit, on its THK double guide rail, guarantees optimal vibration absorption.



The IN801 unit includes, as standards:

- ✔ The dynamic suctioning system that follows the blades' every move
- ✔ Automatic blade tilting
- ✔ Copying system suitable for processing hinge holes



Unique innovations in this machine price range to meet productivity and quality requirements of the most demanding manufacturers.



The copying and tracing system guarantees optimal finish quality also on high-gloss edges.

**IT 70 S**

Linear end trimmer for a perfect finish in any type of processing.



# IDENTITY

## PRACTICAL DESIGN

**An innovative yet simple design is the hallmark of Biesse's distinctive identity.**

The transparent polycarbonate reinforced protection door is designed to guarantee maximum visibility for the operator. Fitted with 5-colour LEDs indicating machine status, it ensures that processing phases can be easily monitored.





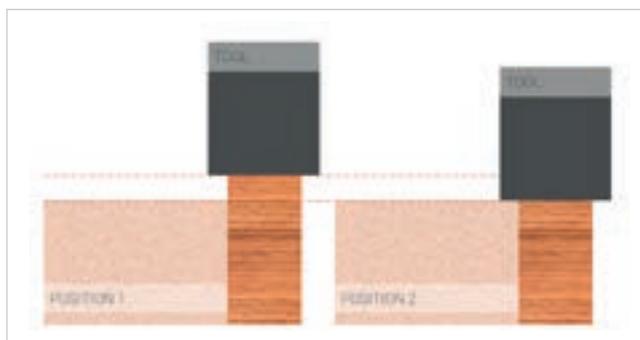
# MAXIMUM MACHINING PRECISION



A specific Research & Development team creates pioneering solutions to meet market requirements and offer cutting edge technology that is reliable and guarantees first-class results.

The Rough Trimmer reduces the excess edge on the top and bottom of the panel. It guarantees a perfect finish for solid wood, in one single movement (opt.).

**Duo System** is a device for the automatic changeover between the rough-shaping and finishing functions.



Akron 1400 offers personalized solutions that enable a reduction of set-up and machining times.



The Fine trimmer, for fine trimming of the top and bottom edges. Complete with 2 high-frequency motors and vertical/horizontal copiers with rotating disc.



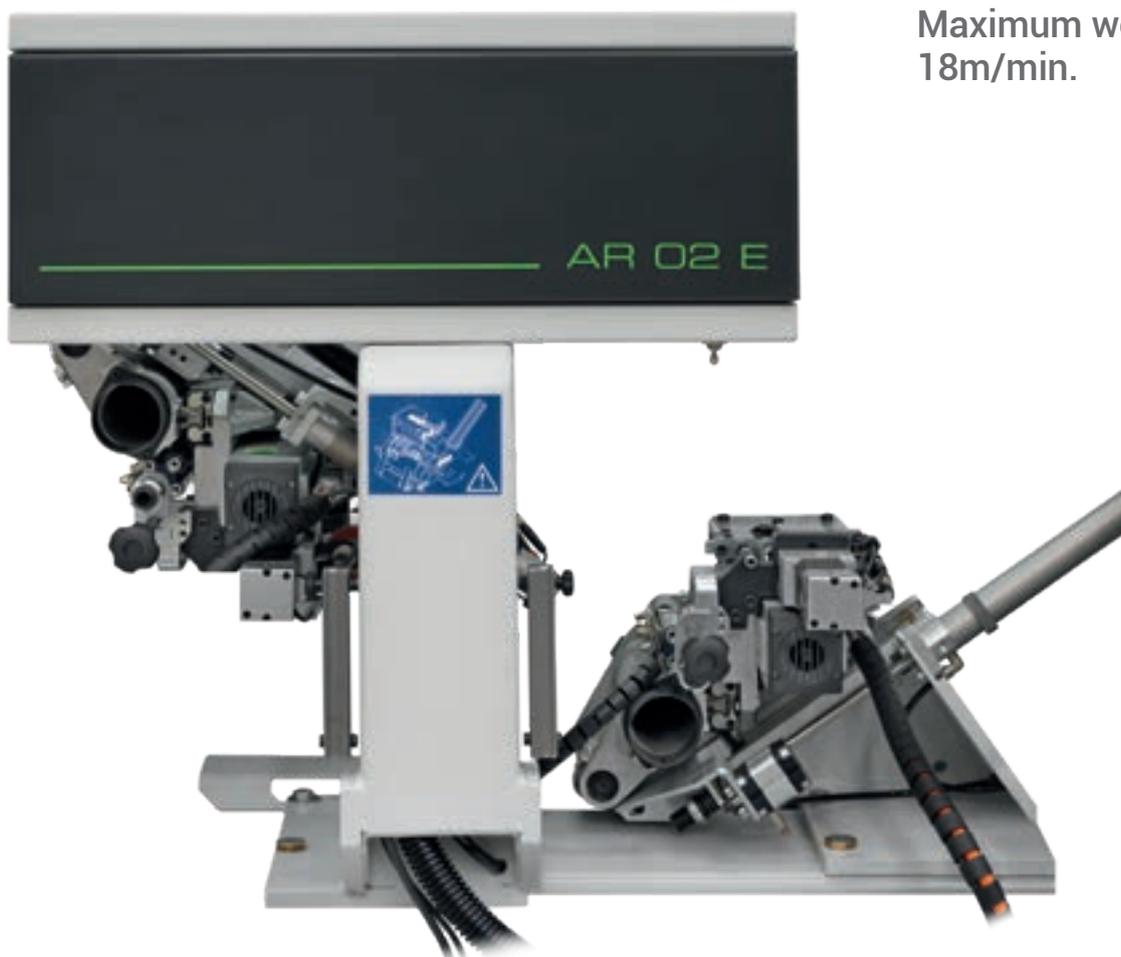
Multi-profile tools for various types of edgelanding strip.



**Fine trimmer unit** trims or cuts the corners on the upper and lower edges of the edgelanding strip applied. Quick and easy adjustment, thanks to 4 controlled axes able to switch between 5 different true profiles and endless other intermediate positions to ensure the highest work quality. Complete with 2 high-frequency 0.65 kW motors (12000 rpm each).



# HIGH QUALITY PRODUCTS



Maximum working speed  
18m/min.



The Multi-purpose corner rounding station with dual motors, forms a radius on both the front/rear and top/bottom edges.

Linear guides for precise movements and high quality standards.



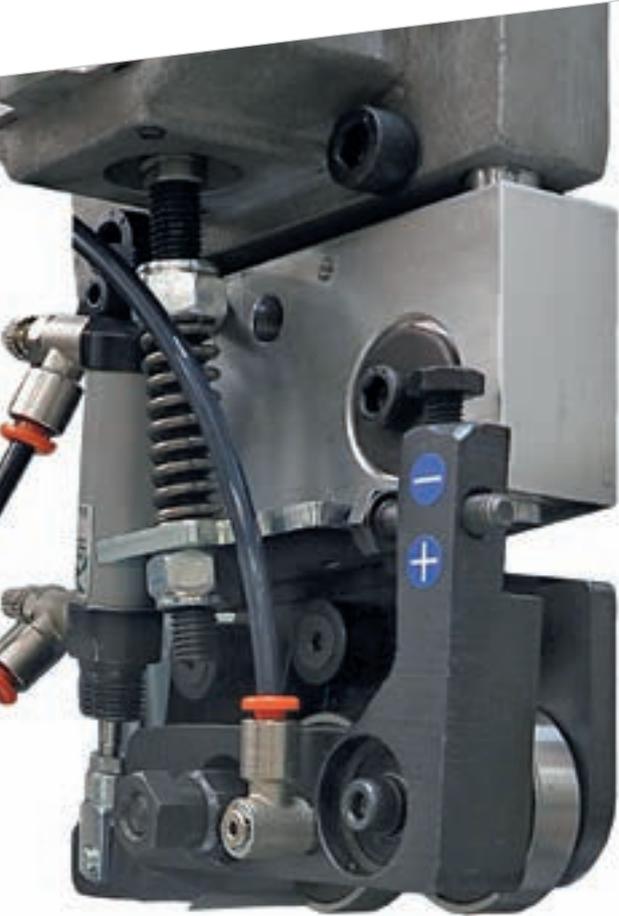
The **Edge scraper** eliminates the imperfections resulting from previous machining operations on the top and bottom of the edge.

The axes on the edge-scraper unit enable automatic positioning in an unlimited range of positions, in accordance with the thickness of the edgebanding strip (opt.).



The **Grooving unit** can be tilted from 0 to 90°. It produces grooves and milling on the underside on the edge of the panel.

# ULTIMATE RESULTS FOR FINISHED PRODUCTS



**Buffing unit** to clean and polish the edge and the panel.



**Hot air blower** for reactivating the color of the edges.



High quality results even with **high-gloss edged panels** with protective film.

# TECHNOLOGY AT THE USER'S SERVICE



Advanced Statistics for monitoring productivity:

- ▣ Different types of charts available to understand and improve edgebanding machine performance
- ▣ Sub-division of the production statistics on the basis of the batch or the time gap
- ▣ Mobile app for keeping in contact with the machine status at all times.



## New SMART TOUCH 23" control

Immediate, user-friendly programming thanks to the touch-screen control panel.

# MANAGING PRODUCTION IN A SIMPLE, USER-FRIENDLY MANNER

**SMART CONNECTION**  
Powered by Retuner



**SMARTCONNECTION IS A SOFTWARE PACKAGE FOR MANAGING JOB ORDERS WITHIN THE COMPANY - FROM THE GENERATION PHASE TO SCHEDULING AND PRODUCTION START-UP - IN JUST A FEW SIMPLE, INTUITIVE STEPS.**

**THANKS TO SMARTCONNECTION, PRODUCTION SITE MACHINES CAN BE LINKED UP TO TRANSFORM THE COMPANY INTO A 4.0 ENTITY..**



SmartConnection is a web-based solution that can be used by any device.



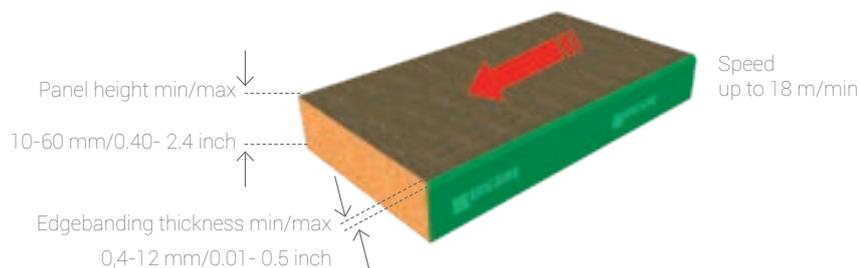
**i** Biesse is extending SmartConnection across all geographical areas.  
To check availability in your country, get in touch with your commercial contact.

# TECHNICAL SPECIFICATIONS



## AKRON 1400

		L
Akron 1430	mm/inch	4460/175
Akron 1435	mm/inch	5030/198
Akron 1440	mm/inch	5474/215 - 6009/236
Akron 1445	mm/inch	5946/234 - 6450/256



The technical specifications and drawings are non-binding. Some photos may show machines equipped with optional features. Biesse Spa reserves the right to carry out modifications without prior notice.

Weighted surface noise level A (Lp<sub>fA</sub>) 81,7 dB (A). Weighted noise level A (L<sub>wA</sub>) 100,5 dB (A). With AFS glueing device: Weighted surface noise level A (Lp<sub>fA</sub>) 84,98 dB (A). Weighted noise level A (L<sub>wA</sub>) 103,39 dB (A). Measurement uncertainty K = 4 dB (A).

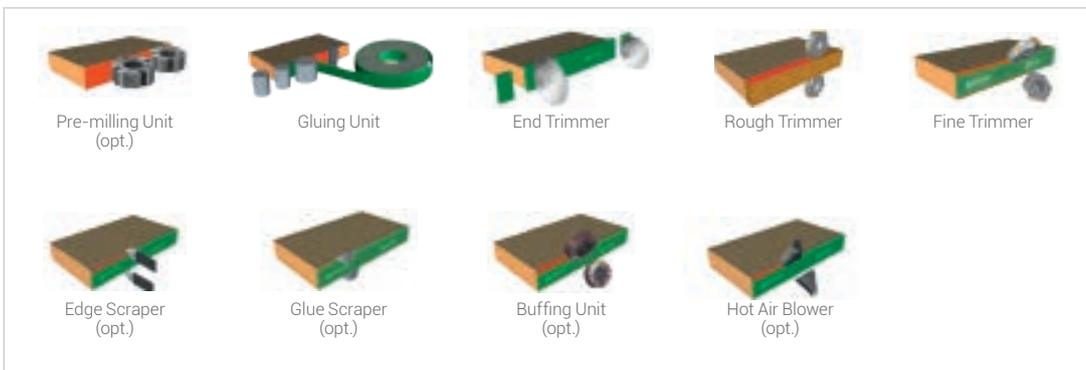
The measurement was carried out in compliance with UNI EN ISO 18217, UNI EN ISO 3746, UNI EN ISO 11202 and subsequent modifications. The noise levels shown are emission levels and do not necessarily correspond to safe operation levels. Even though there is a relation between emission levels and exposure levels, this cannot be used reliably to establish whether or not further precautions are necessary. The factors determining the actual noise levels to which the operating personnel are exposed include the length of exposure, the characteristics of the work environment, other emission sources (e.g. the number of machines and machining operations nearby). At any rate, the above information allows the operator to better evaluate dangers and risks.

# AVAILABLE CONFIGURATIONS

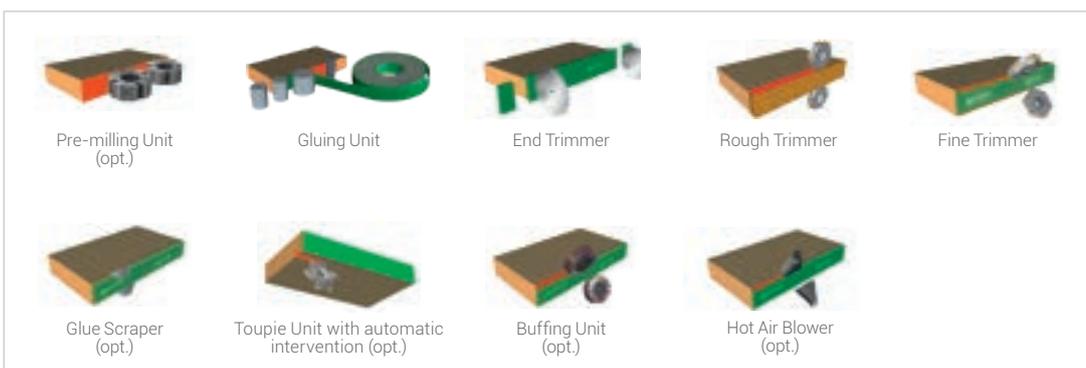
## Akron 1430-A



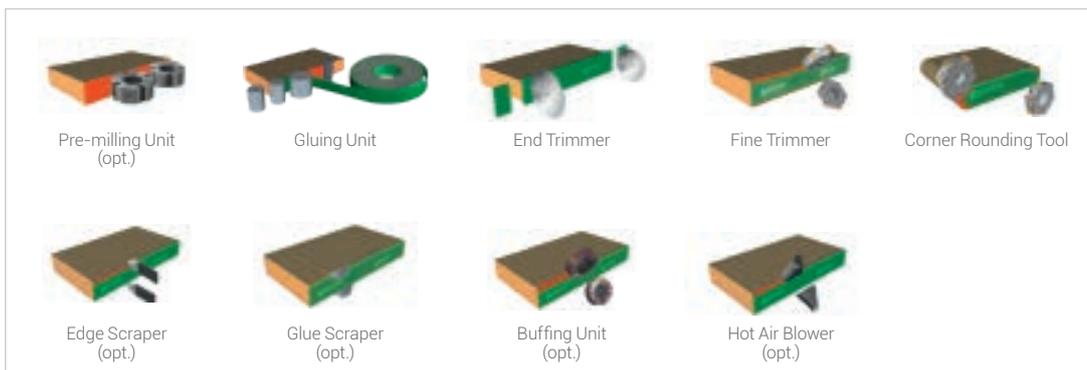
## Akron 1435-A



## Akron 1435-B



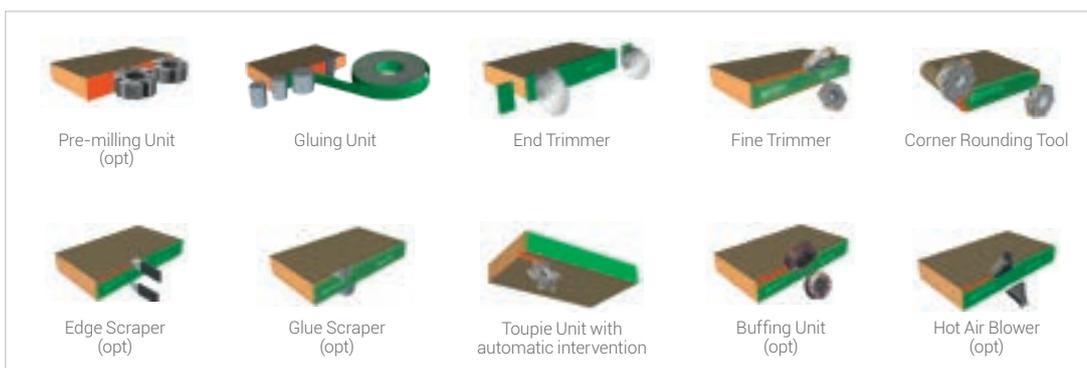
## Akron 1440-A



## Akron 1445-A



## Akron 1445-B



# OPTIMISATION OF STAND-ALONE PROCESS

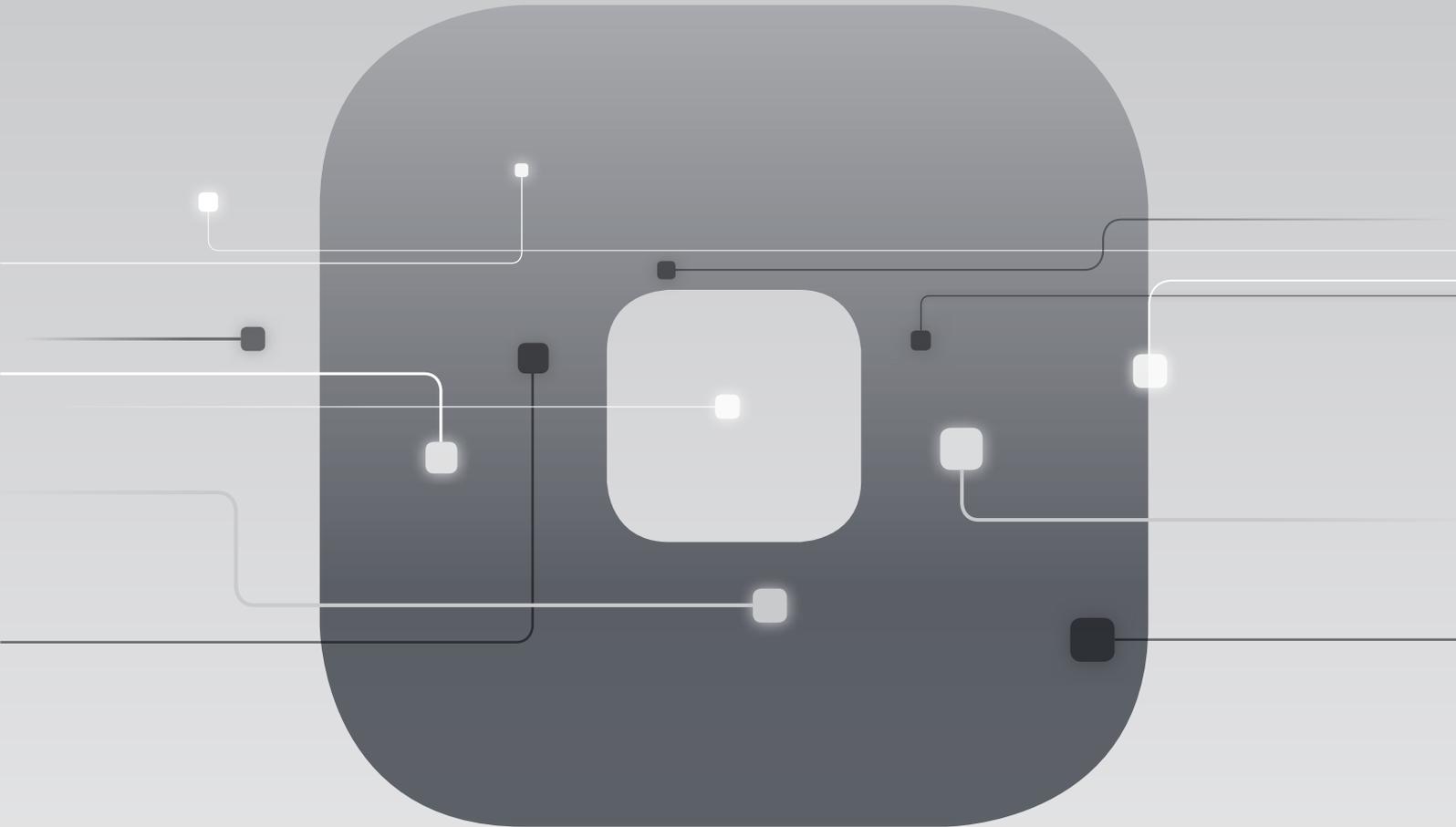


## PRS panel return

- Increased productivity in a stand alone context
- Management of entire edgebanding process with just one operator

# SOPHIA

**GREATER VALUE FROM MACHINES**



The Biesse IoT platform which enables customers to access an extensive range of services to streamline and rationalise their work management processes.

SERVICES

PROACTIVITY

ANALYSIS



# CUSTOMER CARE IS WHO WE ARE

**SERVICES** is a new experience for our customers, to offer not just excellent technology but the added value of an increasingly direct connection with the company, the professionals who work there and the experience they embody.



## **ADVANCED DIAGNOSTICS**

Digital channels for remote interaction online 24/7. Always ready to intervene on-site seven days a week.



## **A WORLDWIDE NETWORK**

39 branch offices, over 300 certified agents, retailers in 120 countries, and spare parts warehouses in America, Europe and the Far East.



## **SPARE PARTS AVAILABLE IMMEDIATELY**

Identification, shipping and delivery of spare parts for every need.



## **EVOLVED TRAINING OPPORTUNITIES**

Lots of on-site, online and classroom training modules for personalised growth.



## **VALUABLE SERVICES**

A wide range of services and software packages to help our customers achieve continuous improvements in performance.

## AN EXCELLENT LEVEL OF SERVICE

**+550**

HIGHLY SPECIALISED  
TECHNICIANS AROUND  
THE WORLD, READY TO HELP  
CUSTOMERS WITH EVERY  
NEED

**90%**

OF MACHINE DOWN CASES  
WITH RESPONSE TIME  
UNDER 1 HOUR

**+100**

EXPERTS IN DIRECT  
CONTACT THROUGH  
REMOTE CONNECTIONS  
AND TELESERVICE

**92%**

OF SPARE PARTS ORDERS  
FOR MACHINE DOWNTIME  
PROCESSED WITHIN 24  
HOURS

**+50.000**

ITEMS IN STOCK IN THE  
SPARE PARTS WAREHOUSES

**+5.000**

PREVENTIVE MAINTENANCE  
VISITS

**80%**

OF SUPPORT REQUESTS  
SOLVED ONLINE

**96%**

OF SPARE PARTS ORDERS  
DELIVERED IN FULL ON TIME

**88%**

OF CASES SOLVED WITH  
THE FIRST ON-SITE VISIT

# MADE WITH BIESSÉ

## LE BOONE INTERNATIONAL TOP PRODUCTION WITH INTEGRATION AND AUTOMATION

Le Boone International was founded in 1950 by Jan Van Hecke, and has since become a worldwide point of reference in the furnishing sector.

Over the last thirty years, the company has specialised in the design and production of furniture items that optimise the space in the rooms where they're used, from the home to the workplace.

Despite its growth within the market, the company has maintained its production site in Poperinge, Belgium.

"Our market includes various target groups, from people looking for space to those who want to transform it and those who want to live one single area of the home in a multi-purpose way" explains Jan Van Hecke. Le Boone International was set up in a period when house prices were growing all the time: "with the rooms getting smaller, I glimpsed an opportunity. Thirty years ago, I started

creating solutions for safeguarding space, fitting out small rooms with furniture items that had a dual function so the room could be a living room by day and a bedroom at night" says Van Hecke.

The market of Le Boone International developed enormously within a short space of time, and that's why the company soon began to feel the need for machinery that would help speed up the production process so that the many market requests could be met. It decided straight away to invest, purchasing a whole Biesse line that now allows it to greatly reduce production and shipment times.

"After thoroughly analysing the market and evaluating the various solutions, we turned to Biesse. We received substantial technical support during the initial phase of choosing the product, discovering the multitude of possibilities in the huge Biesse range. Six months ago, we opted for a complete solu-

tion with a number of machines that work simultaneously in a line. "First of all", continues Jan Van Hecke, "the Brema Eko 2.1, a vertical boring machine for real time panel machining, the Stream A lateral edgebanding machine, and the Selco WN6 - a panel saw that stands out from its competitors for its amazing flexibility. The extent of the range, the flexibility of the products and the integration of technologies are the factors that have confirmed the efficacy and validity of our choice. For us, this has meant notable time saving, to the extent that after just one month we went from 3-month delivery times to just one and a half weeks, or two at the most. And all this with a general increase in the quality level as well. As a result, we've purchased a total of three Biesse machines", concludes Van Hecke.



Founded in Italy,  
international native.

We are an international company that manufactures integrated lines and machines to process wood, glass, stone, plastic and composite materials and what will come next.

Thanks to our rooted competence nurtured by an ever-growing worldwide network, we support your business evolution – empowering your imagination.

Master of materials, since 1969.

We simplify your  
manufacturing  
process to make  
the potential of  
any material  
shine.



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Biesse world.

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