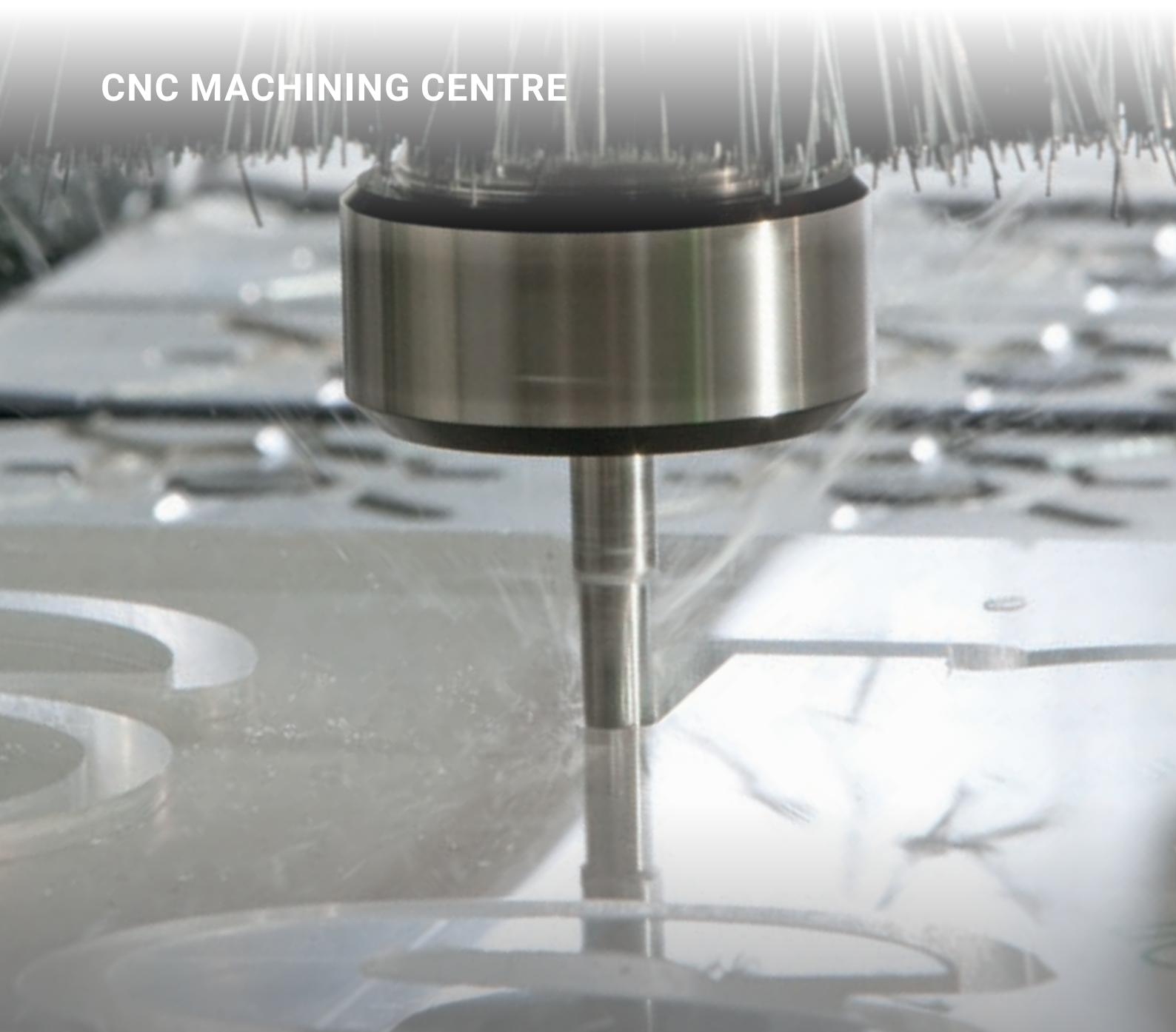


# PRO VER PLASTKFT

CNC MACHINING CENTRE



# COMPACT, HIGH-PERFORMANCE SOLUTION FOR MILLING AND CUTTING PLASTIC AND COMPOSITE MATERIALS



## 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 whilst offering product customisation **with quick and reliable delivery times**.

## BIESSE RESPONDS

with high-tech, innovative solutions for processing technological materials.

**Rover Plast K FT** is a Biesse machining centre with numerical control and a gantry structure, designed to machine plastic and composite materials. It's the ideal solution for companies that need machining flexibility and easy use in a limited production space.

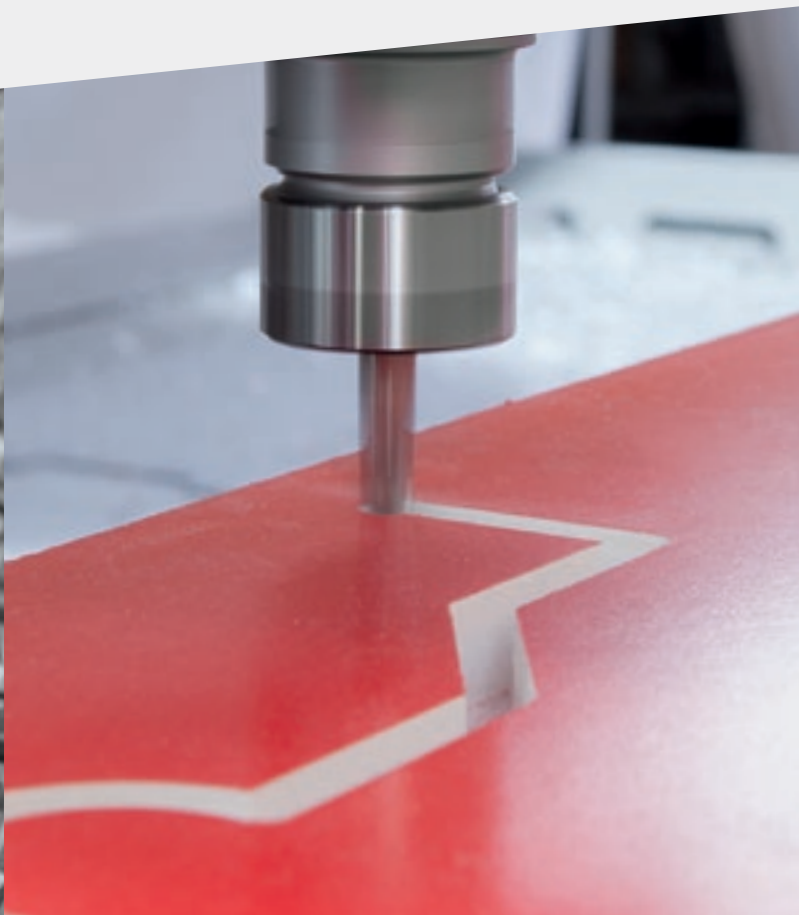
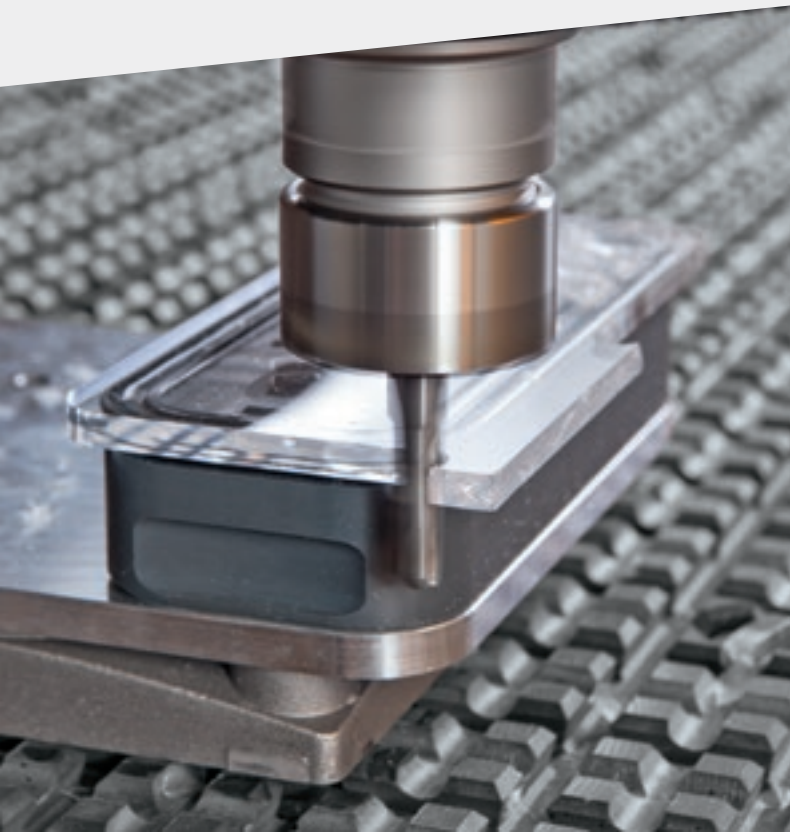


# ROVER PLAST K FT

- ✓ COMPACT AND ERGONOMIC
- ✓ FAST INSTALLATION AND START-UP
- ✓ EASE OF USE
- ✓ RELIABLE TECHNOLOGY
- ✓ FULLY INTEGRATED INTO PRODUCTION FLOWS



# A SINGLE WORK CENTRE FOR MANY TYPES OF MACHINING OPERATIONS







# COMPACT AND ERGONOMIC

**360°**

An extremely compact machining centre designed to adapt to the production space in which it is installed. Enables the operator to safely access all sides of the machine at all times, with no obstacles on the ground.



## PLUG&PLAY SOLUTIONS

The new Rover Plast K FT is designed to offer maximum performance in an extremely compact solution with the minimum working dimensions. Rover Plast K FT represents the first of Biesse's new quick-installation plug&play solutions.



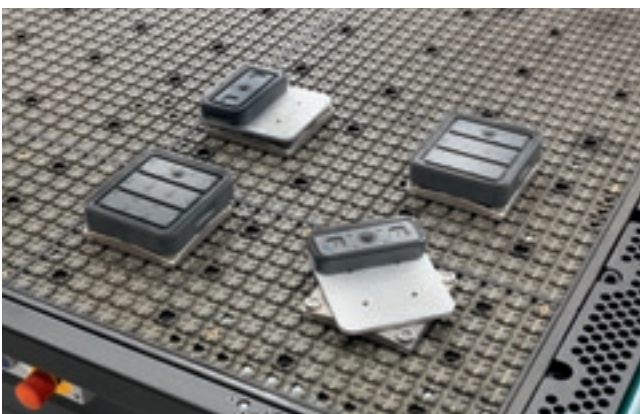
# MAXIMUM CUSTOM FLEXIBILITY

There's a wide range of sizes for processing materials of different formats, dimensions and thicknesses, so customers can choose the machine best suited for their own specific requirements.



Rover Plast K FT 1224  
Rover Plast K FT 1531  
Rover Plast K FT 2231  
Rover Plast K FT 2243

## THE TECHNOLOGY OF THE WORK TABLE IS DESIGNED TO MEET THE REQUESTS OF THE MOST DEMANDING CUSTOMERS



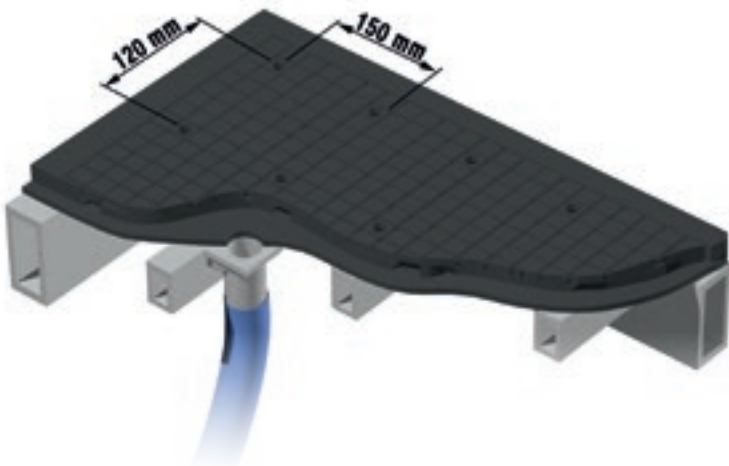
Work table in phenolic laminate with vacuum system.



The vacuum modules can be directly positioned on the support panel. The modules can be quickly and easily used, even without the auxiliary vacuum system.



## MAXIMUM PRODUCT SECURITY THANKS TO AN ADVANCED DISTRIBUTED VACUUM SYSTEM WITHIN THE WORK TABLE



Multi-zone technology seamlessly and automatically adapts the vacuum of the machine to the different board sizes that the customer has in his production



This technology makes it possible to switch from one format to another without any manual operations.



# RELIABLE TECHNOLOGY

The Rover Plast K FT can be fitted with the same components used on other top-of-the-range models. The electrospindle and aggregates are designed and manufactured for Biesse by HSD, the global leader in this sector.



Electrospindles for every application:

- 9,0 kW HSD air cooled with automatic tool changer ISO30 and HSK F63, 1.000-24.000 rpm
- 19,2 kW HSD liquid cooled with automatic tool changer HSK F63, 1.000-24.000 rpm

**C AXIS TORQUE:  
QUICKER,  
MORE PRECISE,  
MORE RIGID.**



Reduction of tool change set-up time and the possibility of operator error, thanks to the contact pre-setter, which automatically determines the length of the tool.

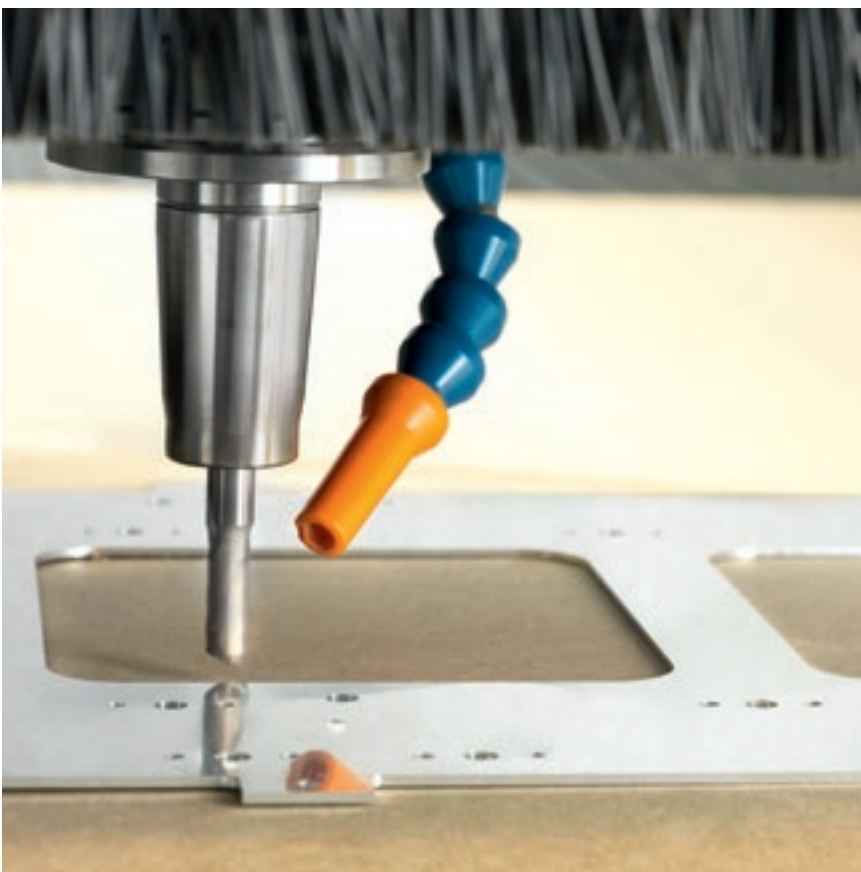




A specific Research & Development team creates pioneering solutions to meet the requirements of the market for technological materials and offer cutting-edge technology that is reliable and guarantees first class results.

**Cold air blower**

drastically reduces tool overheating, maintaining its functions over time and avoiding any damage to the material being processed, while at the same time guaranteeing better dust and chip removal.



**Automatic tool lubrication system with a mixture of oil and air** for machining non-ferrous metallic materials and light alloys.



# SIMPLE TOOLING AND A WIDE SELECTION OF TOOLS

Tool change magazine with up to 14 spaces, rendering all tools and aggregates available at all times with no need for operator intervention when changing tooling between machining operations.

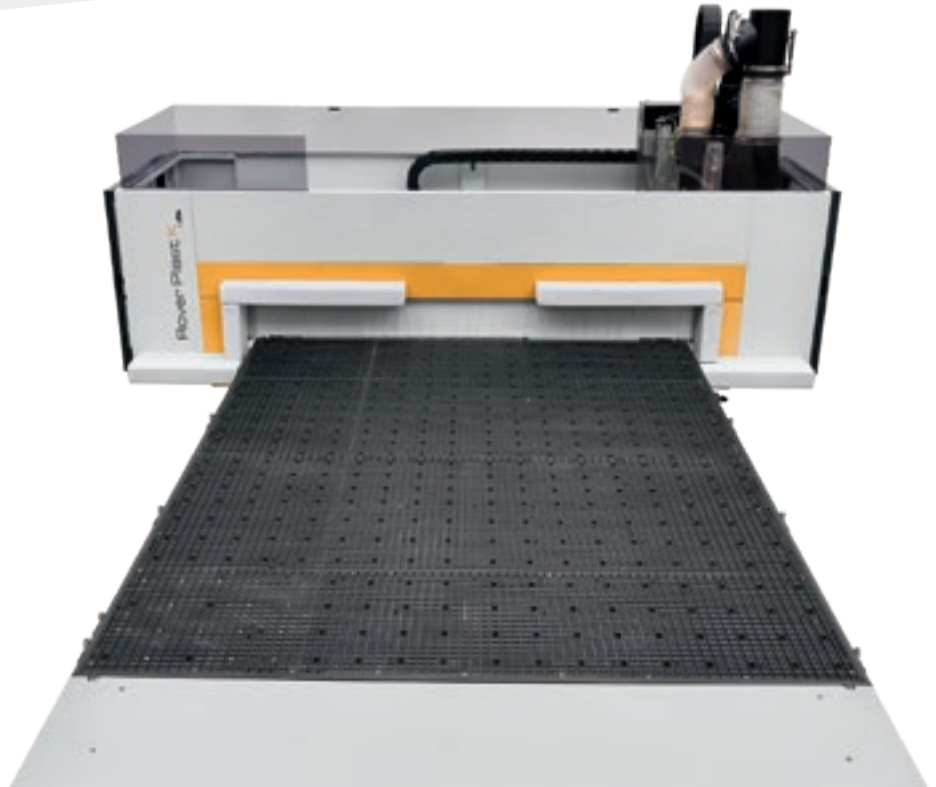


The magazine is integrated into the base, ensuring that tools are always available even when using automatic loading solutions whilst keeping overall dimensions to a minimum.

# PRECISION AND QUALITY GUARANTEED OVER TIME

Rover Plast K FT has a robust and well-balanced structure, designed to handle demanding machining requirements without compromising product quality.

The Gantry structure with dual motors is designed to increase precision and reliability standards for the execution of all nesting operations.



**Automatic lubrication** is an option that ensures the continuous lubrication of the machine's main moving parts without the need for operator intervention.



The air conditioning system for the standard electrical cabinet ensures that all electrical components remain reliable over time.



# INTE GRA TION

## CONTINUOUS EVOLUTION

**Integrated lines and robotised cells constantly redesign the production methods of tomorrow.**

Biesse technologies are increasingly sophisticated but always user-friendly, able to maximise the competitiveness of customers wanting to increase their productivity but with reduced times and costs. Rover Plast K FT combines perfectly with the entire range of Biesse automatic Winstore magazines, guaranteeing optimum flexibility, excellent performance and easy use to meet every possible need.







Winstore X3

Rover S

Rover S

# PROTECTION AND SAFETY FOR ALL MACHINING OPERATIONS

**Biesse machines are designed to enable operators to work in complete safety.**

Long term safety and reliability thanks to the new bumpers combined with photocells with no footprint or mechanical wear.



The large hatch, which can be opened, facilitates access for tooling operations and for cleaning the front of the machine.



Overlapping lateral curtain guards protect the working unit.



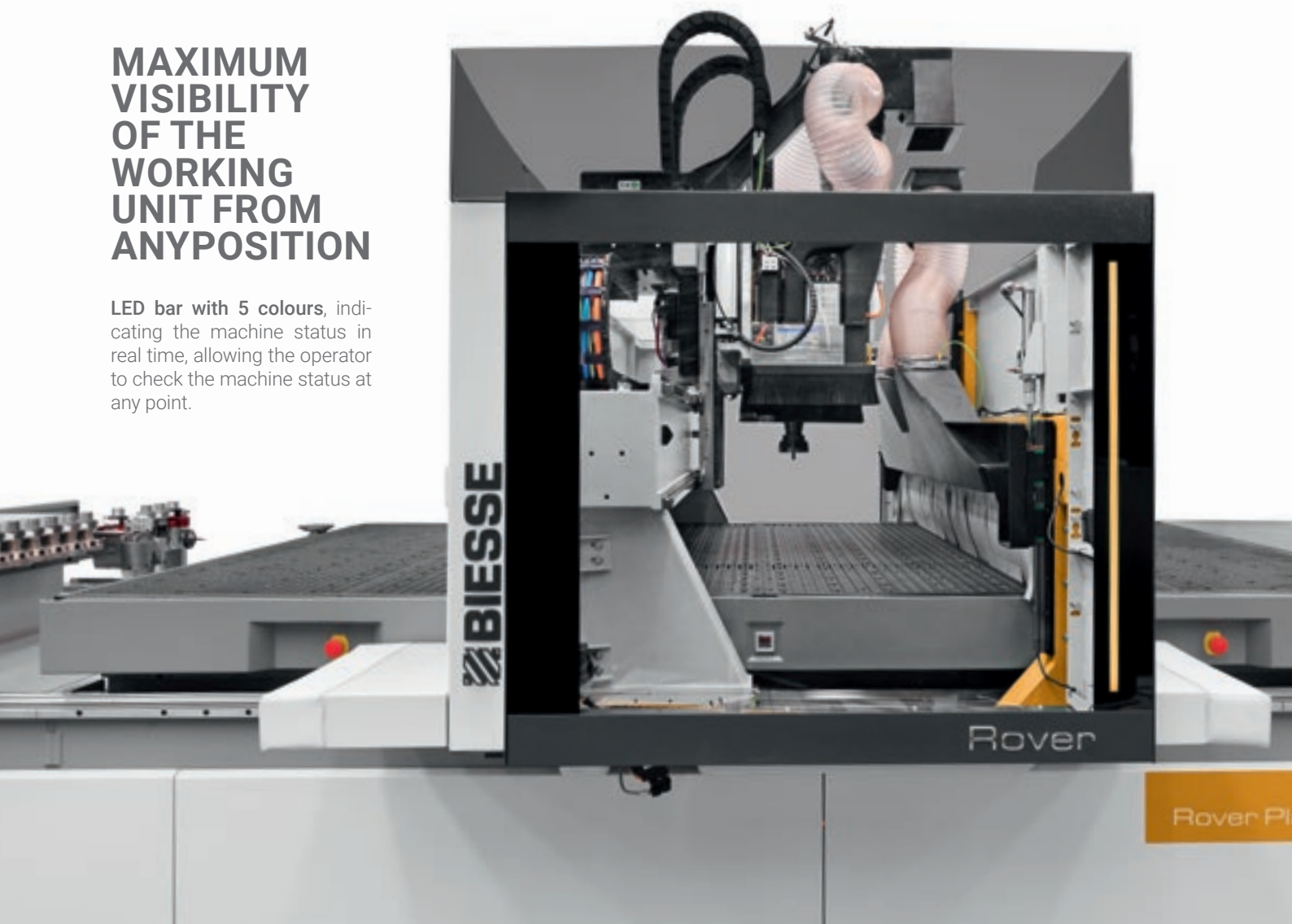
## TECHNOLOGY AT THE SERVICE OF THE USER



New console with Windows real-time operating system and B\_SOLID software interface, including anti-collision system.

## MAXIMUM VISIBILITY OF THE WORKING UNIT FROM ANY POSITION

LED bar with 5 colours, indicating the machine status in real time, allowing the operator to check the machine status at any point.





# THE MOST ADVANCED TECHNOLOGY CLOSE AT HAND

bTouch is an optional feature that can be purchased after purchase of the machine to enhance the functionality and the usage of the technology available.



**bTouch is the new 21.5" touch screen which enables you to carry out all of the functions previously performed using the mouse and the keyboard, enhancing the direct interaction between the user and the device.**

Perfectly integrated with the B\_SUITE 3.0 interface (and with later versions) and optimised for touch, this solution is incredibly simple, and makes the best possible use of the Biesse software functions installed on the machine. The screen has a maximum resolution of 1920 x 1080 (Full HD) at 60 Hz.

Specifically, you can:

- ✔ create any CAD programme (including parametric programmes), with layouts and machining operations
- ✔ move, rotate and increase the size of objects (panel, NC machine, tool etc.) present within the CAD/CAM area
- ✔ quickly and simply complete warehouse tooling, by dragging the tools into their designated places
- ✔ prepare the machine for the correct positioning of the panel (machine set-up), moving tables and carriages into the desired position
- ✔ send a programme machining list, change the parameters and send it to the NC machine for processing
- ✔ manage all of the soft-console controls

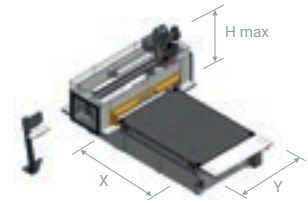
# INDUSTRY 4.0 READY



**Industry 4.0 is the new industry frontier, based on digital technologies and on machines that speak to companies. The products driving this revolution can communicate and interact independently within production processes, which in turn are connected via intelligent networks.**

Biesse is dedicated to transforming the factories owned by our customers into real-time factories that are ready to provide digital manufacturing opportunities. Intelligent machines and software become indispensable tools that facilitate the daily work of those who machine wood and other materials on a daily basis.

# TECHNICAL DATA



## WORKING FIELD

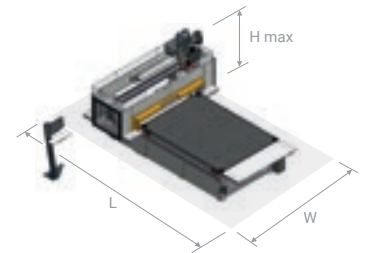
		X	Y	Z	
				WITHOUT/WITH SWEEPING ARM	WITH ROLLERS HOLD-DOWN UNIT
Rover Plast K FT 1224	mm	2465	1260	170	90
Rover Plast K FT 1531	mm	3100	1560	170	90
Rover Plast K FT 2231	mm	3100	2205	170	90
Rover Plast K FT 2243	mm	4300	2205	170	90

## SPEED

	X	Y	Z	
m/min	25	60	25	low speed
m/min	60	60	25	high speed

## VECTOR SPEED

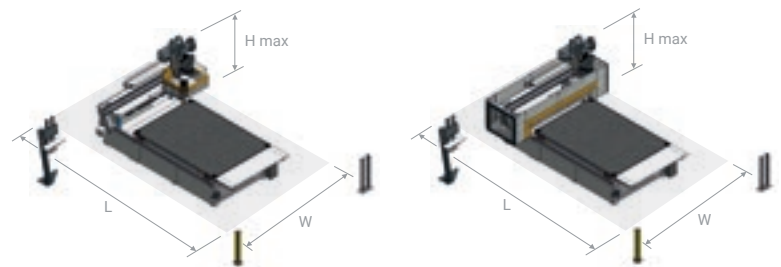
m/min	65	low speed
m/min	85	high speed



## STAND-ALONE MACHINE 3 SIDE ACCESS

### LOW SPEED

		L	W	H	H MAX
		NCE / CE	NCE / CE		
Rover Plast K FT 1224	mm	6183	3955	985	2570
Rover Plast K FT 1531	mm	6538	4256	985	2570
Rover Plast K FT 2231	mm	6538	4911	985	2570
Rover Plast K FT 2243	mm	7743	4911	985	2570



## STAND-ALONE MACHINE 3 SIDE ACCESS

### HIGH SPEED

		L		W		H	H MAX
		NCE	CE	NCE	CE		
Rover Plast K FT 1224	mm	6294	6310	4037	4255	985	2570
Rover Plast K FT 1531	mm	6444	6590	4337	4660	985	2570
Rover Plast K FT 2231	mm	6444	6590	4982	5210	985	2570
Rover Plast K FT 2243	mm	7649	7794	4982	5210	985	2570

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.

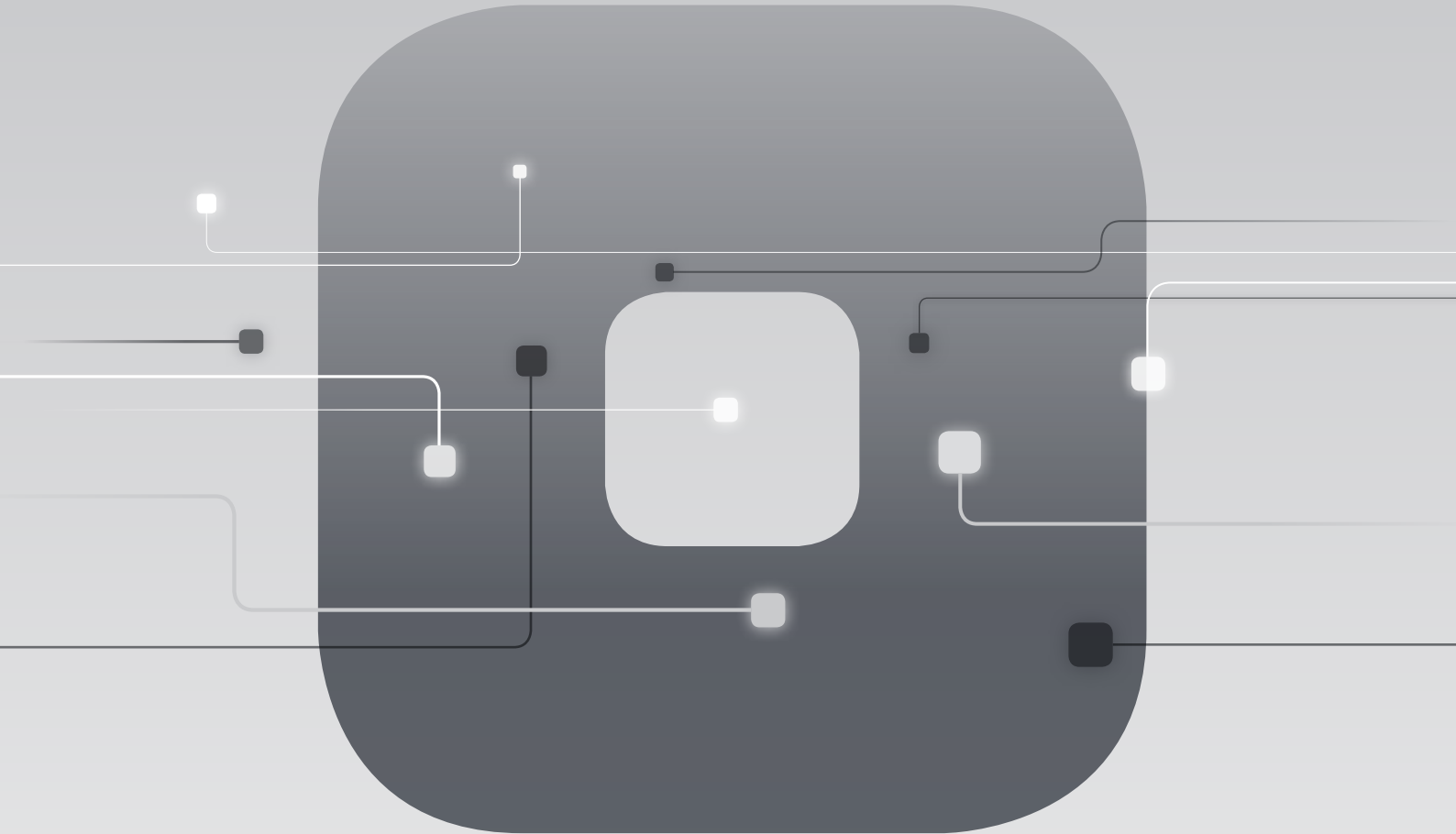
Weighted sound pressure level A in: Operator workstation LpFA 76 dB (A). Loading/unloading position LpFA 72 dB (A). Operating conditions: Boring or Milling at a speed of 20 m/min, 20000 rpm. LWA = 93.5 dB during boring LWA = 95.5 dB during milling Uncertainty factor K = 4 dB.

The measurement was carried out in compliance with EN ISO 3746 - EN ISO 11202. The noise levels shown are emission levels and do not necessarily correspond to safe operation levels. Despite the fact that there is a relationship between emission and exposure levels, this may not be used in a reliable manner to establish whether further measures need to be taken. The factors determining the exposure level for the workforce include length of exposure, work environment characteristics, other sources of dust and noise, etc. i.e. the number of other adjoining machines and processes. At any rate, the above information will enable the operator to better evaluate dangers and risks.



# 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



in collaboration with **accenture**

# HIGH-TECH BECOMES ACCESSIBLE AND INTUITIVE



**B\_SOLID IS A 3D CAD CAM SOFTWARE PROGRAM THAT SUPPORTS THE PERFORMANCE OF ANY MACHINING OPERATION THANKS TO VERTICAL MODULES DESIGNED FOR SPECIFIC MANUFACTURING PROCESSES.**

- Planning in just a few clicks.
- Simulating machining operations to visualise the piece ahead of manufacturing and providing guidance for the planning phase.
- Virtual prototyping of the piece to avoid collisions and ensure optimal processing.
- Machining operation simulation with a calculated execution time.





# REDUCED TIME AND WASTE



**B\_NEST IS THE B\_SUITE PLUGIN SPECIFICALLY FOR NESTING OPERATIONS. IT ALLOWS YOU TO ORGANISE YOUR NESTING PROJECTS IN A SIMPLE WAY, REDUCING THE MATERIAL WASTE AND MACHINING TIMES.**

- Flexibility with reduced production times and costs.
- Optimisation for every type of product.
- Management of articles, sheets and labels.
- Integration with company software.



# 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.



## **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

**90%**

OF MACHINE DOWN CASES  
WITH RESPONSE TIMES  
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

## THE GRAIN HOW WE OPENED UP NEW MARKETS

**The Grain Sandblasted Sign Company is proud to be Europe's market leader in three dimensional wooden sign systems. The exclusive signs they manufacture are produced from the finest quality materials available and are made to stand the test of time.**

Wooden signs convey a strong sense of environmental awareness, but most importantly a quality image that is sen-

sitive to the aesthetic of every business. All wood used comes from sustainable forests.

Co-directors Peter and Sam Ratcliffe, a father and son team, are passionate about their heritage in sign manufacture. Immensely proud with an exacting attention to detail, their craftsmanship is clearly reflected by the customers they attract, dealing with some of the top names in the

leisure, retail and entertainment industries.

"We already had a CNC router but needed something more heavy duty with a larger bed in order to transfer our creative designs into the finished products which our customers deserved" explained Peter. "The very nature of our business means that we need to produce bespoke items very quickly, using bigger and thicker sub-



**WE WERE IMPRESSED BY BIESSE'S INVESTMENT AND COMMITMENT TO THE UK. IT WAS ALSO GREAT TO MEET THE SPARES AND FRONT LINE SUPPORT TEAMS, WHICH REALLY FILLED US WITH CONFIDENCE.**

**Peter Ratcliffe**  
*Director*

strates. The guys at Delcam recommended the Klever, which we went to see in action at Biesse's Daventry Tech Centre and it 'ticked all the boxes' as far as we were concerned."  
"We also had severe space constraints as the machine needed to be installed under a mezzanine floor with just 2.35M of headroom. The Klever was one of the few machines which could accommodate this with the required extraction". The

visit to Daventry also reinforced their decision to buy Biesse. "We were impressed by Biesse's investment and commitment to the UK. It was also great to meet the spares and front line support teams, which really filled us with confidence"  
In terms of performance "the machine's reliability is excellent and on the one occasion when we experienced downtime (which was only a trip), we had an engineer on site the next morning. Being based in

Cornwall, we can't fault the service."  
The major benefit is that The Grain can now achieve 3D milling. "It's opened up new markets for us. We can now 3D mill MDF and HDU which has definitely contributed to winning additional business. The Klever has been well worth the investment. The machine has paid for itself just in terms of reliability and speed".





Founded in Italy,  
international native.

We simplify your  
manufacturing  
to make the process  
of any material



ur  
g process  
potential  
I shine.

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.**

Join the  
Biesse world.

[biesse.com](https://www.biesse.com)



