POWERFUL AND COMPACT

THE MARKET DEMANDS

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 and customisation of products with quick and defined delivery times, as well as responding to the needs of highly creative designers.

BIESSE RESPONDS

with technological solutions that enhance and support technical expertise as well as process and material knowledge. Rover K Smart is a numerical control machining centre for artisan and small to medium sized businesses looking for simple solutions at affordable prices.
ROVER K SMART

- FOR MACHINING PANELS AND SOLID WOOD PIECES WITH A SINGLE, INNOVATIVE MACHINE
- EASY TOOLING AND OPTIMAL PANEL HOLD
- PANEL AND WORK AREA CLEANING
- MAXIMUM OPERATOR SAFETY
- CUTTING-EDGE TECHNOLOGY IS RENDERED ACCESSIBLE AND INTUITIVE.
FOR MACHINING PANELS AND SOLID WOOD PIECES WITH A SINGLE, INNOVATIVE MACHINE

The Rover K Smart is equipped with 3 or 4 independent interpolating axes, and can be fitted with aggregates capable of handling any type of machining operation, both on panels and on solid wood workpieces.
The components of Rover K Smart configurations are the same as those used across Biesse’s high-end solutions. The electro-spindle, boring head and aggregates are designed and manufactured for Biesse by HSD, the global leader in this sector.

C AXIS TORQUE: QUICKER, MORE PRECISE, MORE RIGID.
The quick-coupling system ensures fast and easy replacement of the vacuum modules and the Uniclamps, used to lock narrow and particularly thick pieces in position.

The Biesse work table guarantees optimum hold on the workpiece as well as quick tooling.

The innovative ATS work table boasts a universal design for superb flexibility and easy configuration.

Uniclamp clamps with pneumatic system.
Thanks to the 16 position revolver, tools and aggregates are always available, without the need for operator intervention when moving from one machining process to the next.

Different references for the machining of multiple components.

The Pick Up station supports automatic tool-holder rack tooling.
High-level technical solutions offering superb results with maximum ease and user safety.

The Smart range for Rover has been created to meet the needs of customers looking for high performance with a limited investment. With high-level, quality components and prismatic linear guides, the work surfaces on these machines can be configured with a variety of working units and are the ideal fit for manufacturers requiring a Y 1500 mm working field and powerful 13 kW electrospindle. These features make Rover Smart machines some of the most compelling and unique solutions in their category, guaranteeing reliability and safety, with CE compliance as standard. Rover K Smart is a competitive solution for machining large panels.
The Gantry structure has been designed to improve the precision and reliability of machining operations. Rigidity and lack of vibration ensures consistent and reliable quality of machined panels.
OPTIMAL PANEL AND WORK AREA CLEANING

Motorised conveyor belt for the removal of chips and waste.

Adjustable suction hood with 6 settings.
MAXIMUM OPERATOR SAFETY

The fully-enclosed working units with perspex window ensures total safety and maximum visibility.

Pressure-sensitive floor mats for active safety: the machine continues to work consistently at maximum speed, even when the operator is present.
Remote control panel for direct and immediate operator control.

LED bar with 5 colours, indicating the machine status in real time.

PC with Windows real-time operating system and bSolid software interface, including anti-collision system.
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 and safely monitored.
THE MOST ADVANCED TECHNOLOGY CLOSE AT HAND

BPAD
Wi-Fi control console for performing the key functions required during the preparation of the working area and the tooling of the working units and tool holder warehouses. The bPad is a valuable tool for supporting teleservicing, courtesy of the camera and bar code reader functions.

BTOUCH
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 bSuite 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.

BPAD AND BTOUCH ARE AN OPTIONAL FEATURE WHICH CAN ALSO BE BOUGHT AFTER PURCHASING THE MACHINE, IN ORDER TO IMPROVE THE FUNCTIONALITY AND APPLICATION OF THE TECHNOLOGY AVAILABLE.
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.
CONFIGURATION

Powerful and compact, for superb performance both on panels and on solid wood.

Complete and compact working unit configuration, capable of handling any machining operation with the smallest possible footprint.

13.2 kW electrospindle.
BH17L boring head.
1 or 2 outlet horizontal milling units.

WORKING FIELDS

<table>
<thead>
<tr>
<th></th>
<th>mm/inch</th>
<th>ROVER K SMART 1532</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td></td>
<td>3260/128.3</td>
</tr>
<tr>
<td>Y</td>
<td></td>
<td>1560/61.4</td>
</tr>
<tr>
<td>Z</td>
<td></td>
<td>165/6.5</td>
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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.

A weighted sound pressure level (LpA) during machining for operator workstation on vane-pump machine Lpa=79dB(A) Lwa=85dB(A) A-weighted sound pressure level (LpA) for operator workstation and sound power level (Lwa) during machining on cam-pump machine Lwa=83dB(A) Lwa=100dB(A) K measurement uncertainty dB(A) 4.

The measurement was carried out in compliance with UNI EN 848-3:2007, UNI EN ISO 3746: 2009 (sound power) and UNI EN ISO 11202: 2009 (sound pressure levels at workstation) during panel machining. 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.
# TECHNICAL DATA

## ROVER K SMART 1532

<table>
<thead>
<tr>
<th>Parameter</th>
<th>ROVER K SMART 1532</th>
<th>CE Mats</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>mm/inch</td>
<td>6745 / 265,6</td>
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<tr>
<td>Y</td>
<td>mm/inch</td>
<td>4517 / 177,8</td>
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<tr>
<td>H</td>
<td>mm/inch</td>
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<tr>
<td>H MAX</td>
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<tr>
<td>X/Y/Z axis speed</td>
<td>m/min</td>
<td>85 / 60 / 20</td>
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<tr>
<td></td>
<td>ft/min</td>
<td>278,8 / 196,8 / 65,6</td>
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<tr>
<td>Vector speed</td>
<td>m/min</td>
<td>104</td>
</tr>
<tr>
<td></td>
<td>ft/min</td>
<td>341,2</td>
</tr>
</tbody>
</table>
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.
B_CABINET IS A UNIQUE SOLUTION FOR MANAGING FURNITURE PRODUCTION FROM THE 3D DESIGN PHASE TO PRODUCTION FLOW MONITORING. IT'S NOW POSSIBLE TO PLAN THE DESIGN OF A SPACE AND QUICKLY PASS FROM CREATING THE SINGLE ELEMENTS TO GENERATING PHOTO-REALISTIC CATALOGUE IMAGES, FROM GENERATING TECHNICAL PRINTS TO PRODUCING REQUIREMENT REPORTS, AND ALL IN ONE SINGLE ENVIRONMENT.

B_CABINET FOUR, SUPPLEMENTARY MODULE, MAKES IT EASY TO MANAGE ALL THE WORK PHASES (CUTTING, MILLING, BORING, EDGEBANDING, ASSEMBLY, PACKAGING), JUST WITH A CLICK.

B_CABINET FOUR INCLUDES AN ENVIRONMENT DEDICATED TO THE REAL TIME MONITORING OF THE PROGRESS OF THE PRODUCTION PHASES. THAT MEANS COMPLETE CONTROL OF THE ORDER STATUS, STEP BY STEP, THANKS TO CHARTS AND 3D IMAGES.
SOPHIA is the IoT platform created by Biesse in collaboration with Accenture which enables its customers to access a wide range of services to streamline and rationalise their work management processes.

It allows alerts and indicators to be sent to the customer in real time, in relation to production, the machines used and the type of process carried out. These are detailed instructions for more efficient use of the machine.
SOPHIA TAKES THE INTERACTION BETWEEN CUSTOMER AND SERVICE TO A HIGHER LEVEL.

IoT - SOPHIA provides a comprehensive overview of the specific machine performance features, with remote diagnostics, machine stoppage analysis and fault prevention. The service includes a continuous connection with the control centre, the option of calling for assistance from within the customer app (such calls are managed as priorities), and an inspection visit for diagnostic and performance testing within the warranty period. Through SOPHIA, the customer receives priority technical assistance.

PARTS SOPHIA is the easy new, user-friendly and personalised tool for ordering Biesse spare parts. The portal offers customers, dealers and branches the chance to navigate within a personalised account, consult the constantly updated documentation of the machines purchased, and create a spare parts purchase basket indicating the real time availability in the warehouse and the relative price list. In addition, the progress of the order can be monitored at all times.

10% CUT IN COSTS

50% REDUCTION IN MACHINE DOWNTIME

10% INCREASE IN PRODUCTIVITY

80% REDUCTION IN PROBLEM DIAGNOSTICS TIME
BIESSE SERVICE

- Machine and system installation and commissioning.
- Training centre dedicated to Biesse Field engineers, subsidiary and dealer personnel; client training directly at client’s site.
- Overhaul, upgrade, repair and maintenance.
- Remote troubleshooting and diagnostics.
- Software upgrade.

500
Biesse Field engineers in Italy and worldwide.

50
Biesse engineers manning a Teleservice Centre.

550
certified Dealer engineers.

120
training courses in a variety of languages every year.
The Biesse Group promotes, nurtures and develops close and constructive relationships with customers in order to better understand their needs and improve its products and after-sales service through two dedicated areas: Biesse Service and Biesse Parts. With its global network and highly specialized team, it offers technical service and machine/component spares anywhere in the world on-site and 24/7 on-line.

**BIESSE PARTS**

- Original Biesse spares and spare kits customized for different machine models.
- Spare part identification support.
- Offices of DHL, UPS and GLS logistics partners located within the Biesse spare part warehouse, with multiple daily pick-ups.
- Order fulfillment time optimized thanks to a global distribution network with de-localized, automated warehouses.

- **92%** of downtime machine orders fulfilled within 24 hours.
- **96%** of orders delivered in full on time.
- **100** spare part staff in Italy and worldwide.
- **500** orders processed every day.
In the crowded world of domestic design, Lago takes its place as an emerging brand, thanks to a collection of stimulating products and a corporate philosophy that embraces the interaction between business and art, coupled with on-going research into sustainable development. “We created a number of projects, or rather, concepts - states Daniele Lago - that have shaped Lago as we see it today: we saw design as a cultural vision that applies not only to individual products, but rather to the entire business chain”. “Flexibility is the key word here at Lago” says Carlo Bertacco, Manufacturing Manager. “We started to introduce the concept of processing only outstanding orders, which enabled us to reduce our footprint and empty the site from the very beginning”. “The machinery that we purchased - states Bertacco - is great, it entailed a limited investment versus the capabilities it offers and is linked to a specific manufacturing approach. What I am talking about is a given manufacturing volume with Lago-standard quality levels and the possibility of customising as late as possible, at the customer’s request: in short, the very basic principles of lean manufacturing”.

Source: IDM Industria del Mobile
Lago, our customer since 1999, is one of most prestigious Italian furniture brands in the world.
One of the secrets to cost-justifying an investment in flexible, labor-saving technology is finding ways to keep it busy. MCM Inc. of Toronto has mastered that trick of the trade. To maximize the return on investment for some of its plethora of CNC machinery, the company has purchased equipment that can be used both to fabricate parts for its custom office and retail environment projects and to manufacture acoustical ceiling panels it produces for another company. Many of the machines pulling double duty on MCM’s shop floor sport the Biesse logo. “For our company, this is a great combination because the CNC machining for the acoustical product is fairly simple, it’s just a lot of holes,” said Gregory Rybak, who founded MCM, short for Millworks Custom Manufacturing, in 2001. “But having this technology greatly helps us with all of the custom work, especially for very intricate shapes and profiles. The acoustical ceiling panels are helping fill up our capacity, which is why we can afford to have all of these machines. If it were just for custom work, we would never be able to buy all of them.” MCM has so many Biesse machines that Rybak said even he loses count. He then proceeded to rattle them off resulting in Rybak said. “We have a lot of processes within our company that most of our competitors do not. We have a full woodshop and a full flat line painting line where we can paint a lot of paneling. Our metal shop is thoroughly sophisticated with CNC lasers, bending machines, and all sorts of welding machines. We also have our own installation crews. When a designer has an idea for a structure that is built in steel, aluminum, solid wood, decorative panels or a combination, we can do it and meet their deadlines.” MCM’s one-stop-shop approach to servicing customers has served the company well. Over the first 15 years of its existence, MCM has expanded several times and now occupies three buildings totaling 240,000 square feet and employs 250 people. Even working almost around the clock six days a week is not enough to eliminate the need for more space. “We are out the door in our current location,” Rybak said. “We are planning on buying another building and having more warehouse space because a lot of our production has to be stored.” MCM’s newest Biesse machine is a Rover S CNC flat table machining center. It is mainly used in tandem with the Skipper to manufacture acoustical ceiling panels, but also gets pressed into service from time to time to fabricate parts for commercial and office projects. “Making acoustical panels is a very simple process,” Rybak said. “The Skipper has 62 boring heads to drill many holes at a time in the veneered MDF panels for sound absorption. While the Skipper is drilling a panel, the same operator is using the Rover S to drill holes from the other side of the board. This makes the operation very fluent and more productive.” The Rover S, which is also used to fabricate parts from plastic and non-ferrous metals, replaced the job performed by one of MCM’s two Rover B CNC nesting routers. Both Rover B machines are now dedicated to custom products. The Rover C9, a five-axis router with a flat table, is another example of a machine doing production and custom work. “The C9 is a combination machine that we use for the acoustical product but get used more for three-dimensional parts. We recently used the C9 to cut a railing that went through three floors of an office. The railing was actually glued-up solid oak about 2-3/8 inch thick. The top of the railing for each landing had a fairly intricate spiral design. “The five-axis machines have the most downtime; we may only use them 20 percent of the time,” Rybak said. “But without the five-axis capacity we wouldn’t be able to do a lot of the parts, like the railings. While you pay a premium for it, for us it’s worth it.”

**BIESSE TECHNOLOGY PULLS DOUBLE-DUTY AT MCM**

IT'S BEEN A GOOD MARRIAGE. BIESSE IS A WORLD-CLASS SUPPLIER AND HAS BEEN A GOOD COMPANY FOR US OVER THE YEARS IN TERMS OF SERVICE AND SUPPORT
LIVE THE EXPERIENCE
Interconnected technologies and advanced services that maximise efficiency and productivity, generating new skills to serve better our customer.

LIVE THE BIESSE GROUP EXPERIENCE AT OUR CAMPUS ACROSS THE WORLD.