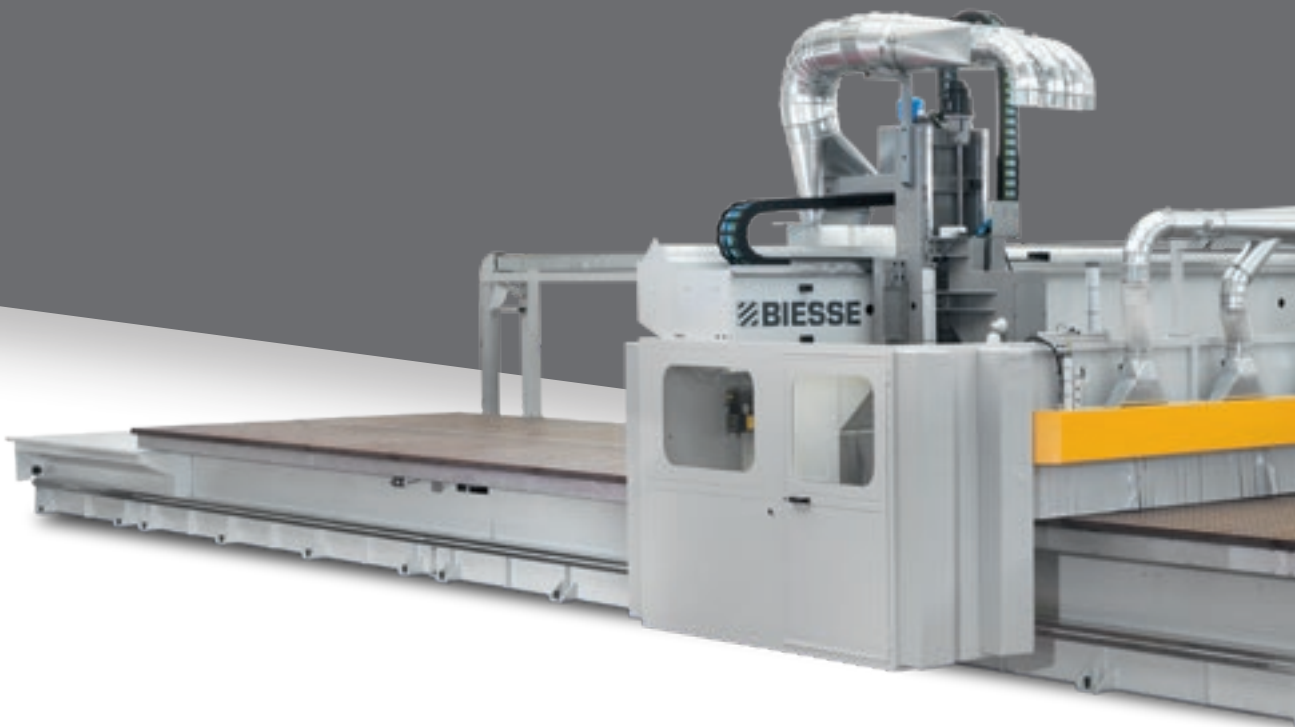


MAT ERIA_{XC}

HIGH-PERFORMANCE
MULTI-PURPOSE 5-AXIS
MACHINING CENTRE

UNIQUE TECHNOLOGY FOR MACHINING ISOTHERMAL PANELS



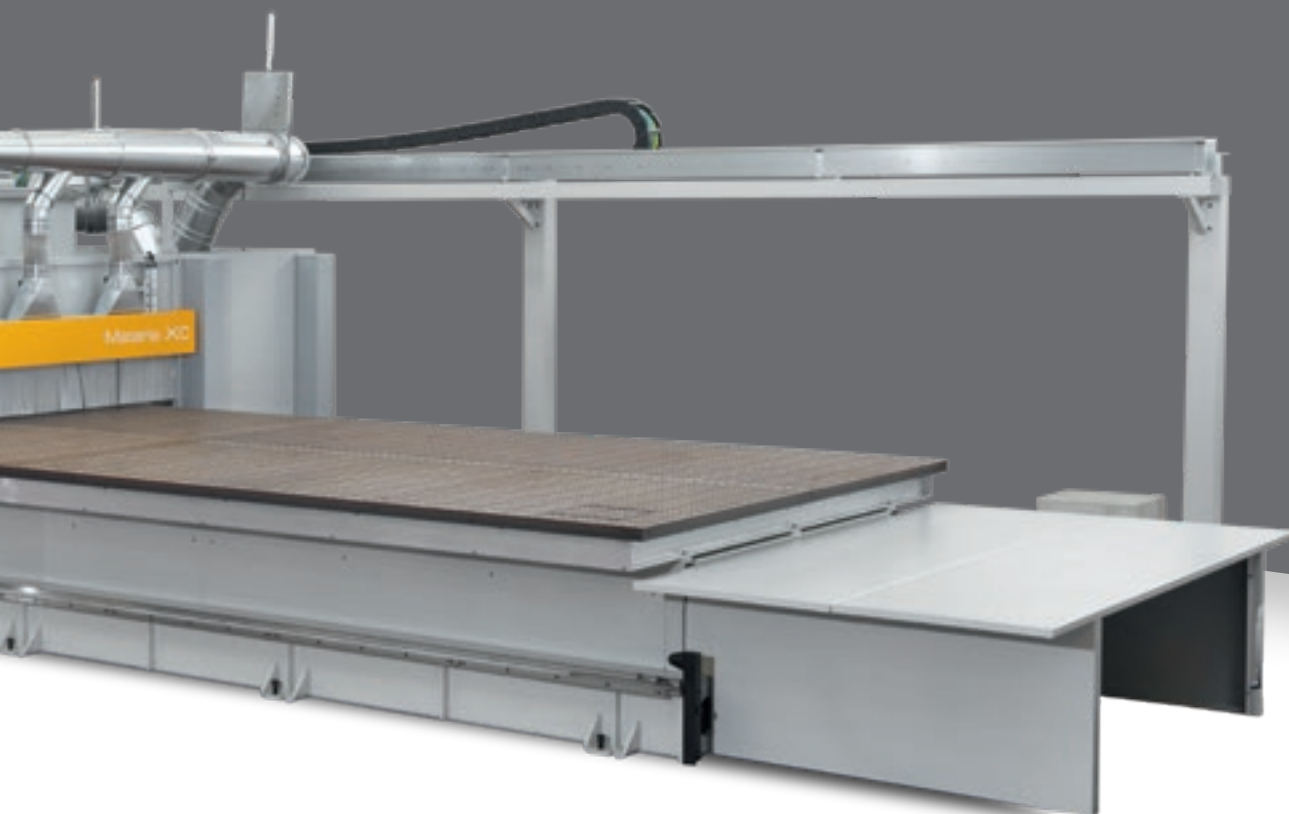
THE MARKET EXPECTS

a change in manufacturing processes that enables 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 defined delivery times.

BIESSE RESPONDS

with **technological solutions** that enhance and support the technical expertise and the knowledge of processes and materials.

Materia XC is a 5-axis machining centre with a mobile gantry, specifically designed for machining isothermal fittings on vans, articulated lorries and semi-trailers.



MATERIA XC

- ROBUST STRUCTURE
FOR TOP MACHINING PRECISION
- FAST AND POWERFUL, WHATEVER THE TASK
- TOP-QUALITY FINISHED PRODUCT
- TOTAL SAFETY FOR THE OPERATOR

ROBUST STRUCTURE FOR TOP MACHINING PRECISION

The rigid structure of MATERIA XC guarantees that there are no vibrations whilst carrying out machining operations, which means perfect end products.

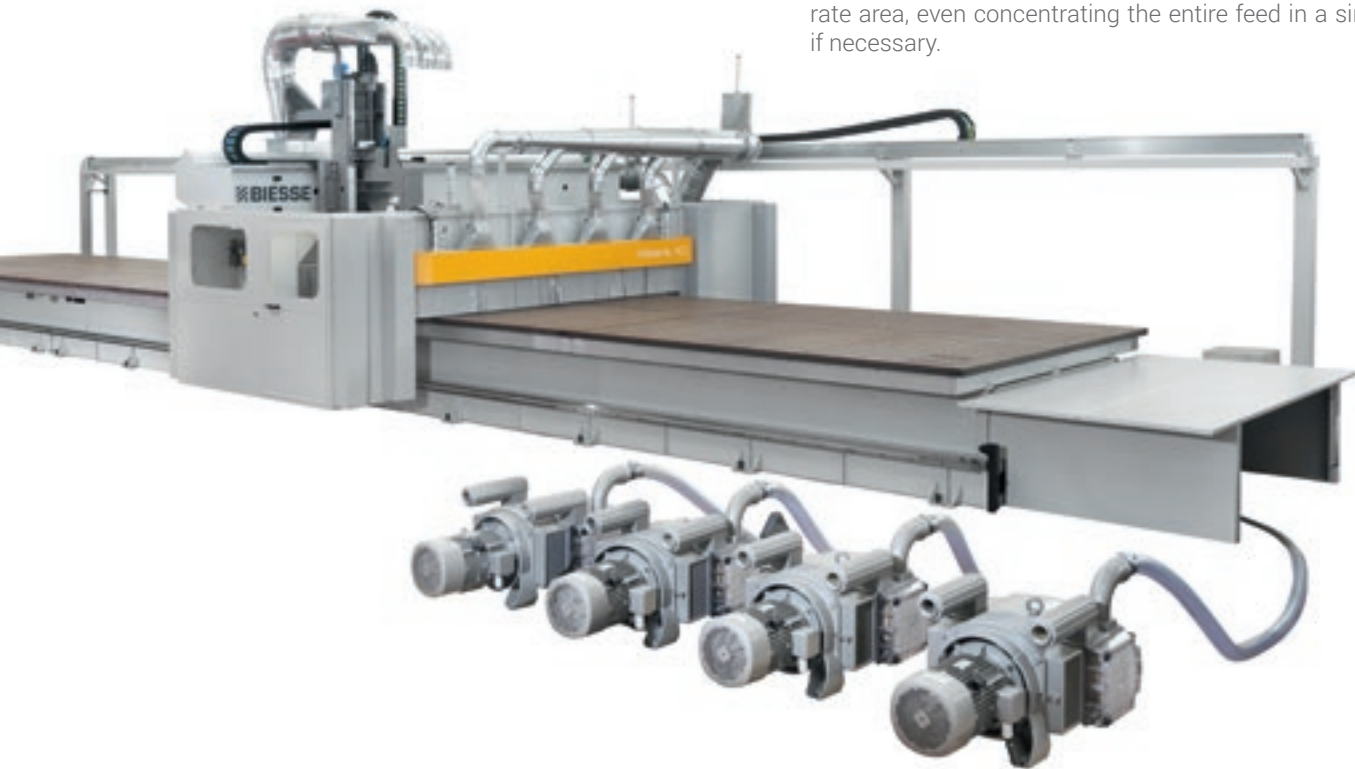


When designing its processing centres, MATERIA uses 3D CAD for the solid modelling. This, plus a program for calculating and sizing the finished elements, highlights the strain that the structure will be subjected to during machining operations. The machine architecture, with its mobile bridge, ensures that the work can be carried out in rigid conditions and at the optimum speed. The base in electro-welded steel guarantees optimum rigidity and allows the machine length to reach two dimensions: 10 m and 16 m.

**MATERIA XC CAN BE CONFIGURED
WITH TWIN LOADING STATIONS,
ALLOWING PENDULAR MACHINING TO
INCREASE THE LEVEL OF PRODUCTIVITY.**

MATERIA XC CAN PROVIDE SPECIFIC SOLUTIONS FOR ALIGNING AND CLAMPING THE PANELS PERFECTLY

Panel locking by means of a wire-braided table in phenolic resin, with the relative vacuum system. The work table is sub-divided into 6 or 10 vacuum areas (depending on the size) fed by 4 pumps (each 250 m³/h) to ensure optimum locking. The vacuum can be activated independently on each separate area, even concentrating the entire feed in a single area if necessary.



Panel alignment system with line lasers on the mobile gantry.



Position reading system with a video camera for centring large panels thanks to a rototranslation cycle in the machining program.

PRECISION

CREATIVE TECHNOLOGY

High precision and efficiency distinguish Materia XC, the NC machining centre that can process isothermal materials.

The robust structure of Materia XC guarantees optimum results and constant reliability.

A precise, top quality electrospindle, numerous optional and standard systems available according to the material worked, and the TPA operating system are what guarantee perfect machining operations.



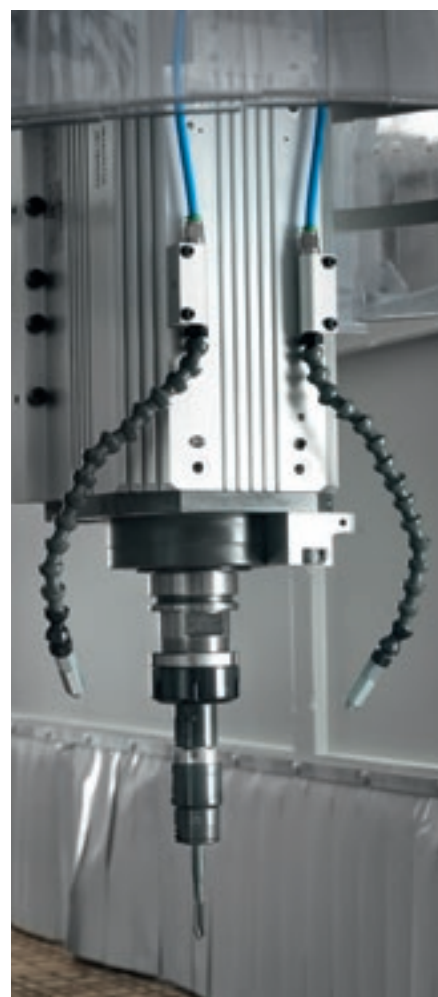


FAST AND POWERFUL, WHATEVER THE TASK

The MATERIA XC configuration enables even the most complex machining operations to be performed in an efficient manner, combining the power of the electrospindle with the reduced cycle times obtained by the presence of the tool magazines directly on the machine.

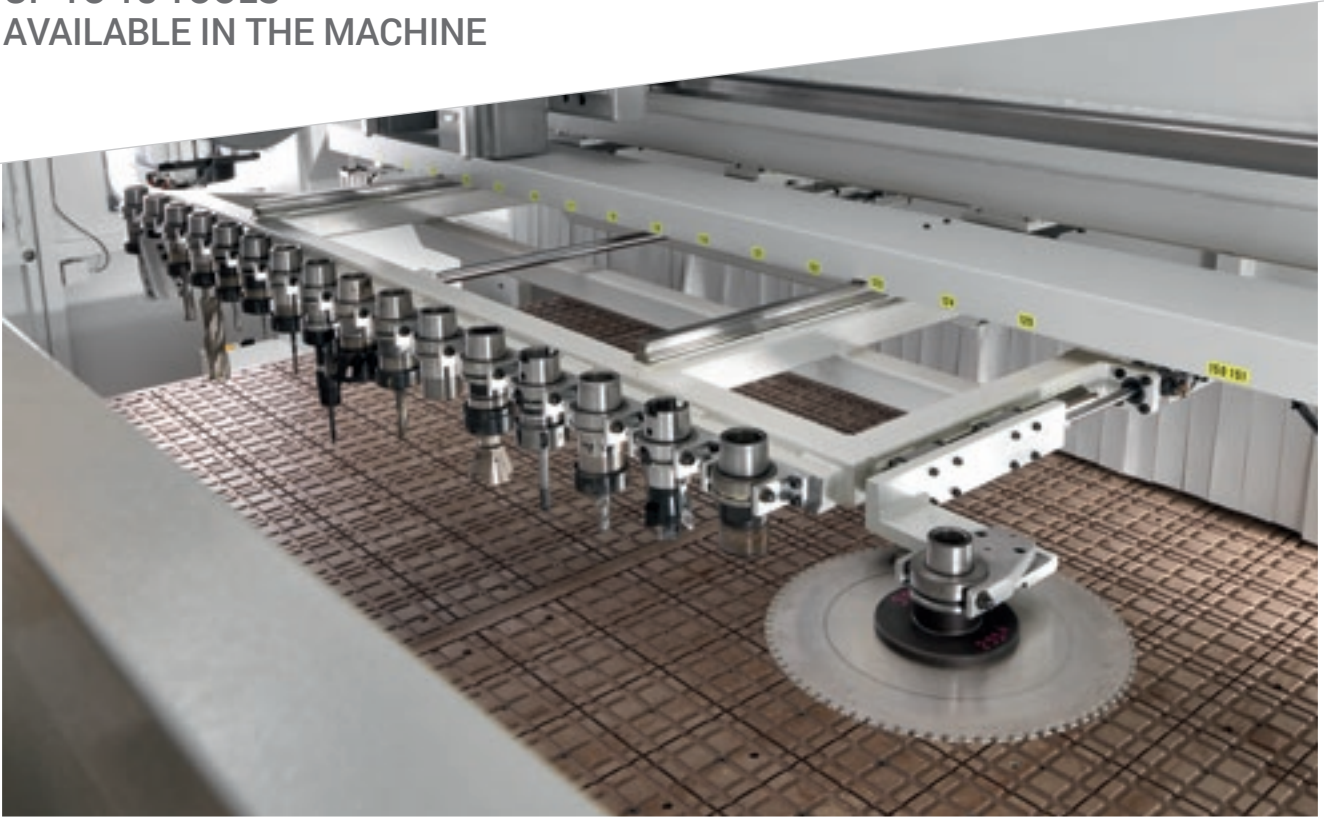


Top performance thanks to the 17 kW synchronous electrospindle with encoder.



Spray Mist system
Sprayed liquid for machining operations with coolant.

UP TO 18 TOOLS
AVAILABLE IN THE MACHINE



17-place linear tool magazine for quick tool changes.



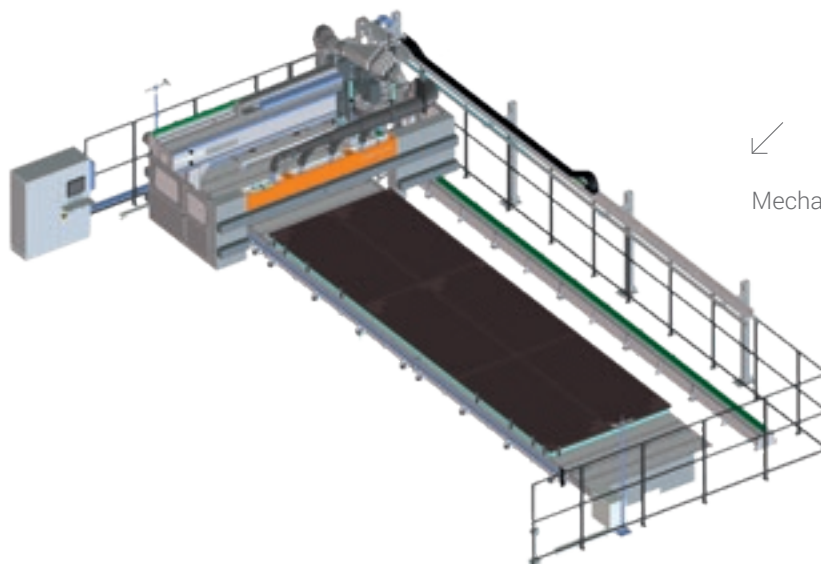
Magazine for blade with 500 mm diameter.



MAXIMUM QUALITY OF THE END PRODUCT, AND TOTAL SAFETY FOR THE OPERATOR

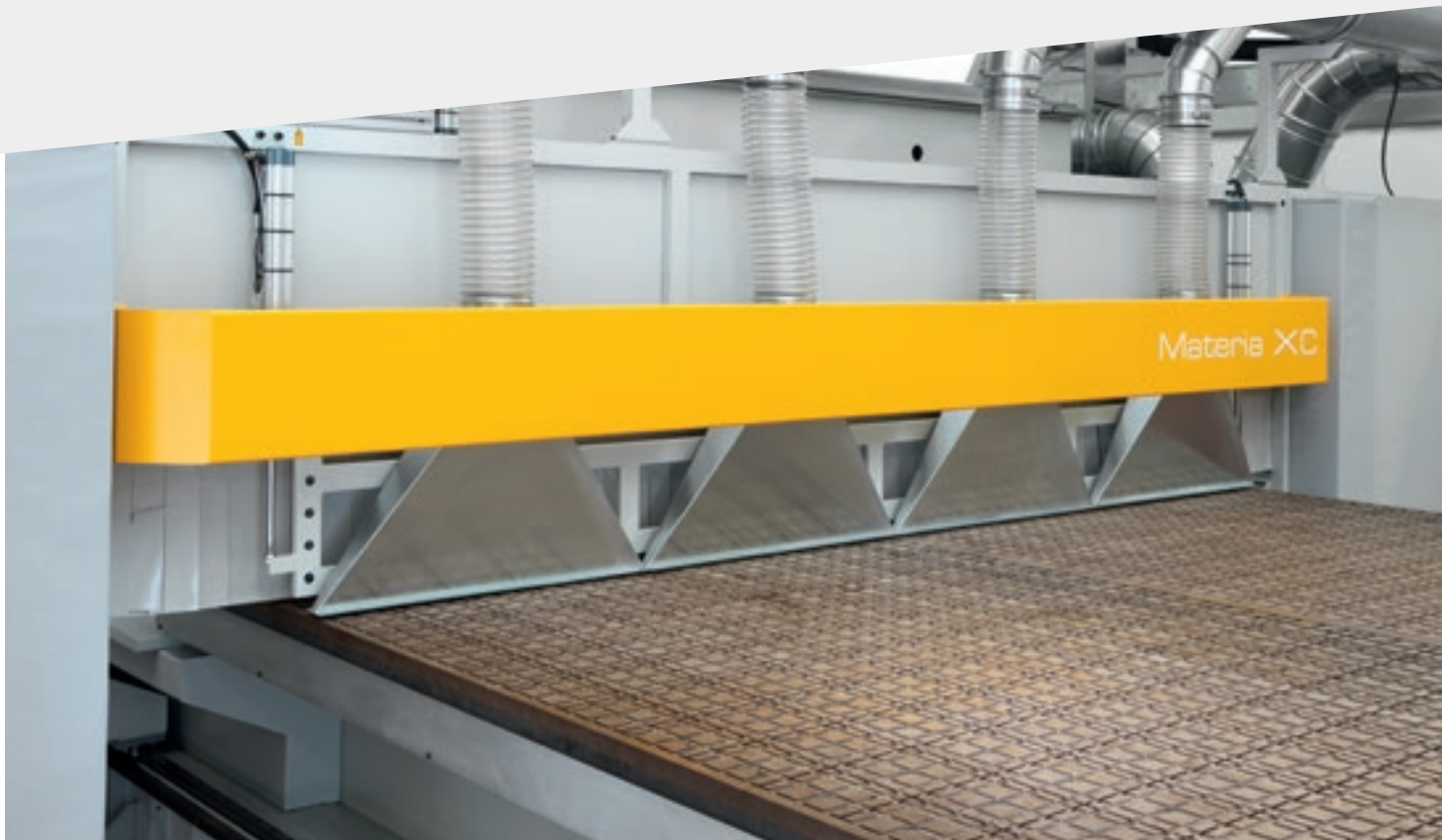


PROTECTIVE BUMPER ALL
OVER THE MACHINE FRAME.



Mechanical perimeter guards.

Solutions for cleaning of the worktop and panel, to the vacuuming of fine dust particles, to safeguard the work environment.



Possibility to fit the machine out with suction mouths flush with the panel, ensuring even greater cleanliness for the work area and the factory.



Complete suction hood for 5-axis work units. The system is managed by pneumatic cylinders that enable multiple positioning to suit the type of tool being used.

PRACTICAL, USER-FRIENDLY TECHNOLOGY

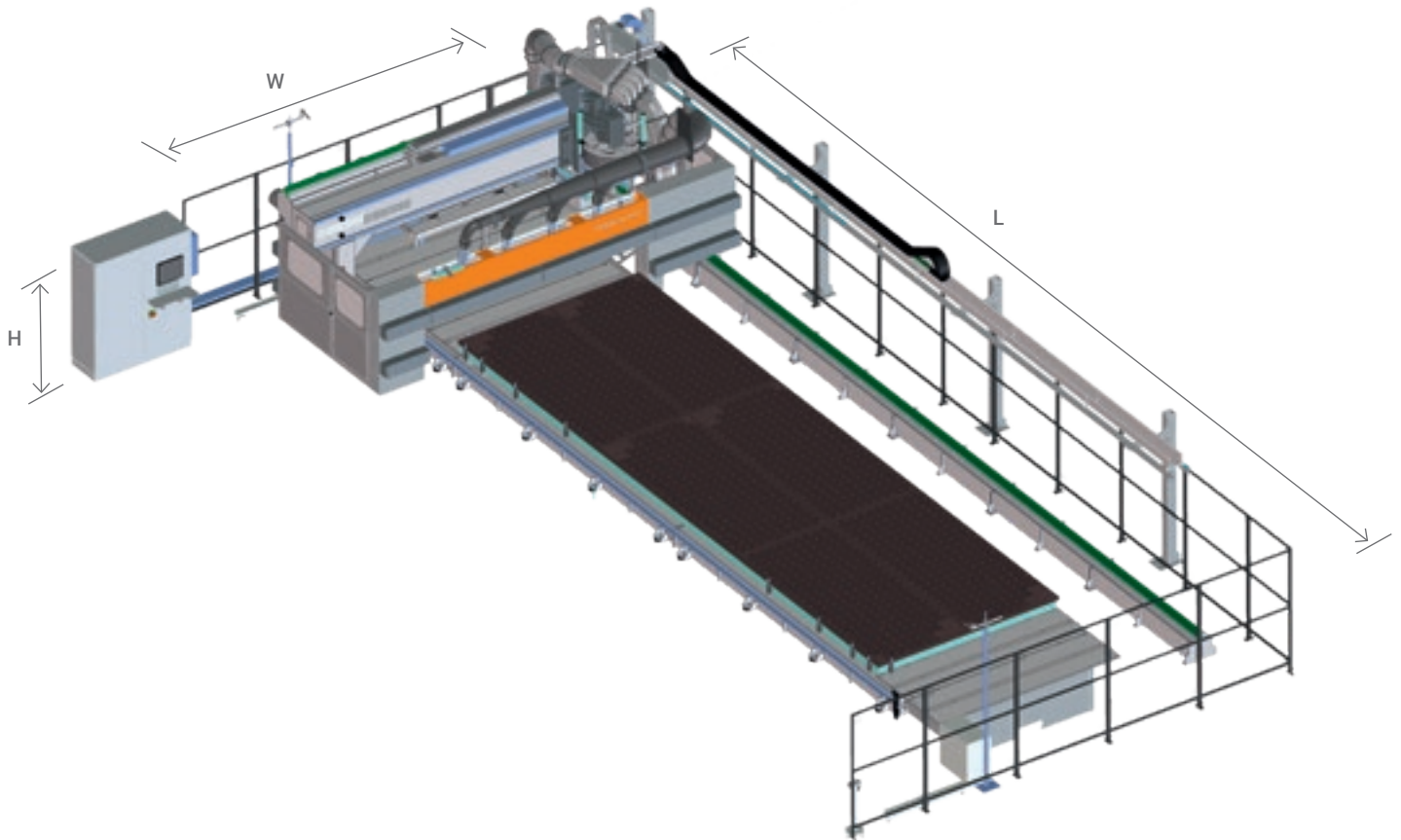


The MATERIA range is equipped with a very powerful NC - TPA. Thanks to its characteristics, the CNC TPA control family allows for an excellent machining finish and optimised machining centre management.



With the TPA NC, the programming can be implemented directly on the machine thanks to a user-friendly graphic environment and a wide range of complex machining operations, or from the office.

TECHNICAL DATA



WORKABLE PANEL

X	mm	10000/16000	inch	394/630
Y	mm	3000	inch	118
Z	mm	200	inch	7,9

OVERALL DIMENSIONS

L	mm	18400/25000	inch	724,8/984,2
W	mm	9600	inch	377,9
H	mm	4000	inch	157

AXIS SEED

X / Y / Z	m/min	25/60/25	ft/min	82/187/82
-----------	-------	----------	--------	-----------

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.

The measurements taken on the machine during the job gave back the following values: Operator's work position. Position A LAeq (dB) 86.0, LAF (dB) 88.0, LCpk 92.0. Position B LAeq (dB) 86.0, LAF (dB) 88.0, LCpk 86.0. Position C LAeq (dB) 86.0, LAF (dB) 88.0, LCpk 85.0. Position D LAeq (dB) 86.0, LAF (dB) 88.0, LCpk 92.0. Position E LAeq (dB) 84.0, LAF (dB) 86.0, LCpk 86.0. Position F LAeq (dB) 82.0, LAF (dB) 84.0, LCpk 84.0. LAeq = A-weighted equivalent continuous sound level; LAF = Emitted sound power level; LCpk = C-weighted maximum instantaneous sound pressure value.

As envisaged by the Machinery Directive 2006/42/EC, the weighted (A) sound pressure levels were measured at 1m from the surface of the machine and at 1.6m from the floor because the working positions cannot be defined. The noise values given are emission levels, and are not necessarily safe work levels. There is a correlation between emission levels and exposure levels, but this cannot be reliably used to determine whether or not further precautions are needed. The factors that affect the real exposure level are the characteristics of the workplace and other noise sources, for instance the number of machines and other machining operations being carried out nearby. In addition, the emission exposure levels may vary from one country to another. This information will, however, enable the machine user to better assess the dangers and risks. It is compulsory for personnel working on the machine to use appropriate ear protection. The machine gives off high acoustic emissions; there may be a risk of partial loss of hearing if suitable protection is not worn.

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
BIESSE**

UPM-ITALY.COM



UPM MODENA: FROM THE CONCEPT TO THE END PRODUCT

Matthew Galdi is the commercial director of UPM, the Modena-based company that has been operating for over seventy years in the visual communications and illuminated sign sector, as well as more recently in the general contractor industry. "We're able," states Galdi "to offer turnkey solutions from concept to finished product, tailored to the needs of our customers. We can manage all

the design, technical, bureaucratic and logistics aspects thanks to our highly-qualified technical and graphics staff, who work with advanced tools, cutting-edge technologies and innovative materials." Biesse has played a decisive role in transforming UPM's commitment to innovation into a reality: "We had always used machines that could be defined as slightly 'niche'. Then, we

decided to equip ourselves with a more technologically-advanced and powerful machine: and we found the perfect solution with Biesse Group".



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)



