

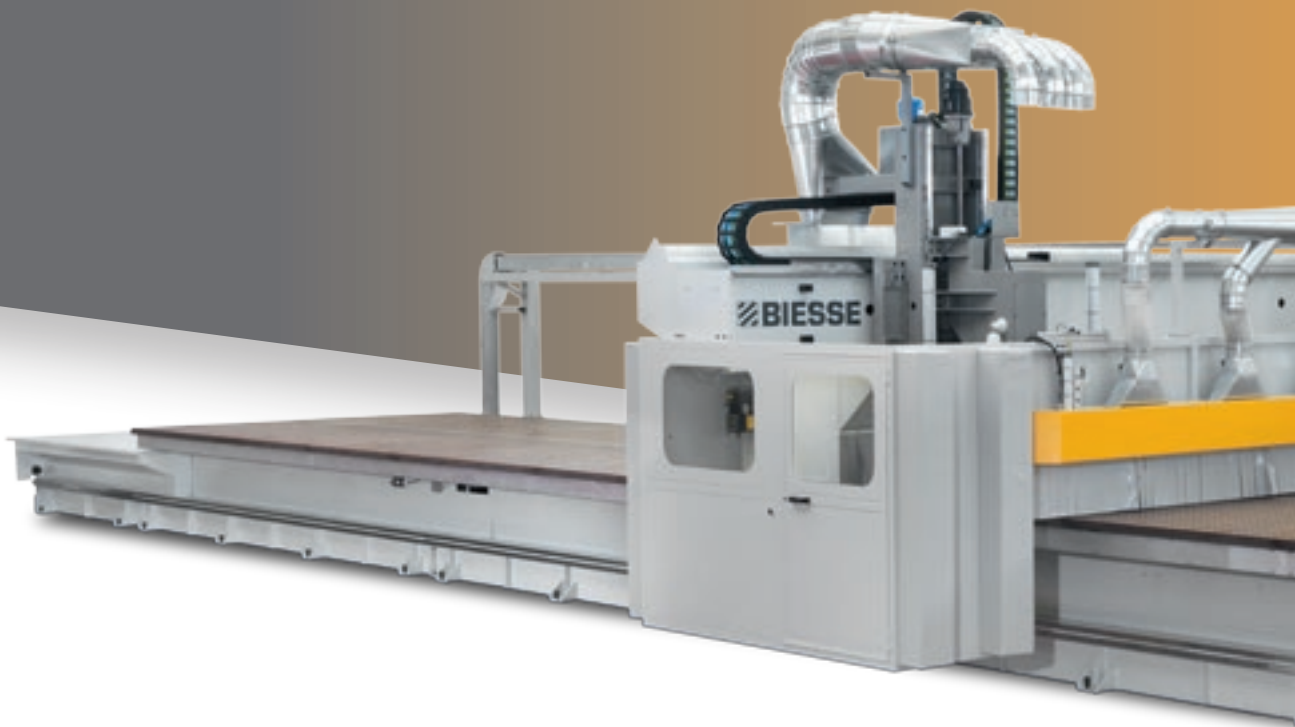
MAT ERIA^{xc}

HIGH-PERFORMANCE
MULTI-PURPOSE 5-AXIS
MACHINING CENTRE

 **BIESSE**

 YEARS
 **BIESSEGROUP**

UNIQUE TECHNOLOGY FOR MACHINING ISOTHERMAL PANELS



THE MARKET REQUESTS

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.

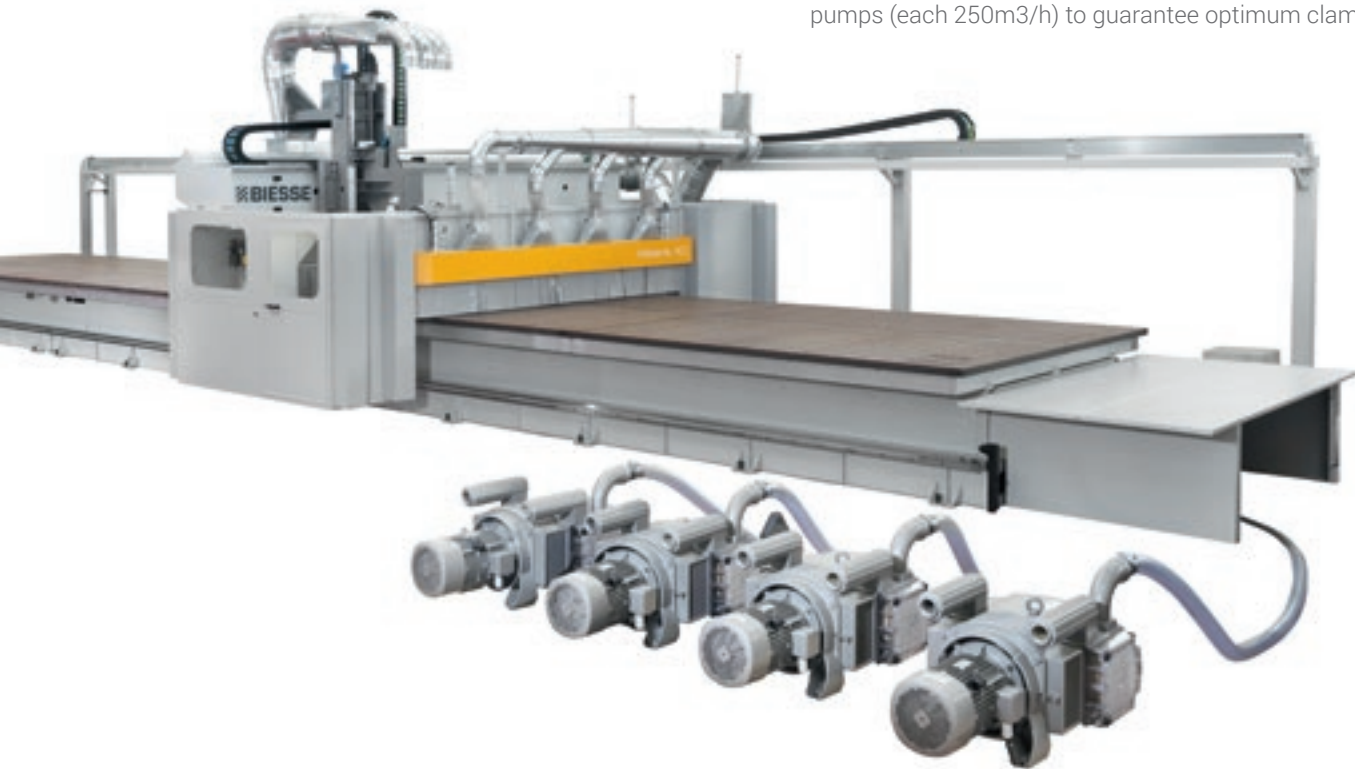


When designing its processing centres, MATERIA uses 3D CAD for the solid modelling. This, plus a program for calculating and sizing the finished elements, highlights the strain that the structure will be subjected to during machining operations. The machine architecture, with its mobile bridge, ensures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

**MATERIA XC CAN ALSO BE BUILT
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

The panel is clamped by means of a wire-braided table made of phenolic resin, and the relative vacuum system. The work table is sub-divided into 6 or 8 vacuum areas powered by 4 pumps (each 250m³/h) to guarantee optimum clamping.



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 pioneering Osai OPEN M 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 17kW synchronous electrospindle with encoder.

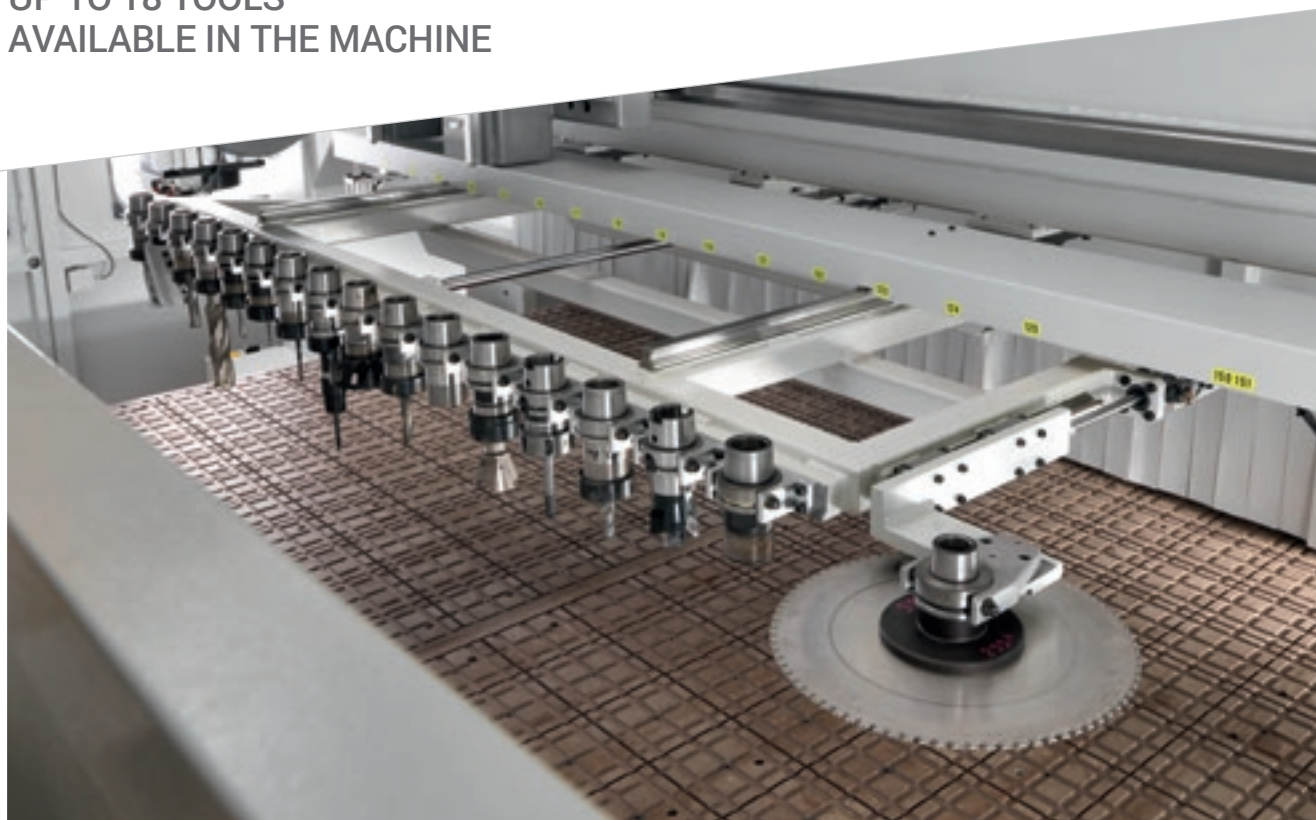


Spray Mist system

Sprayed liquid for machining operations with coolant.



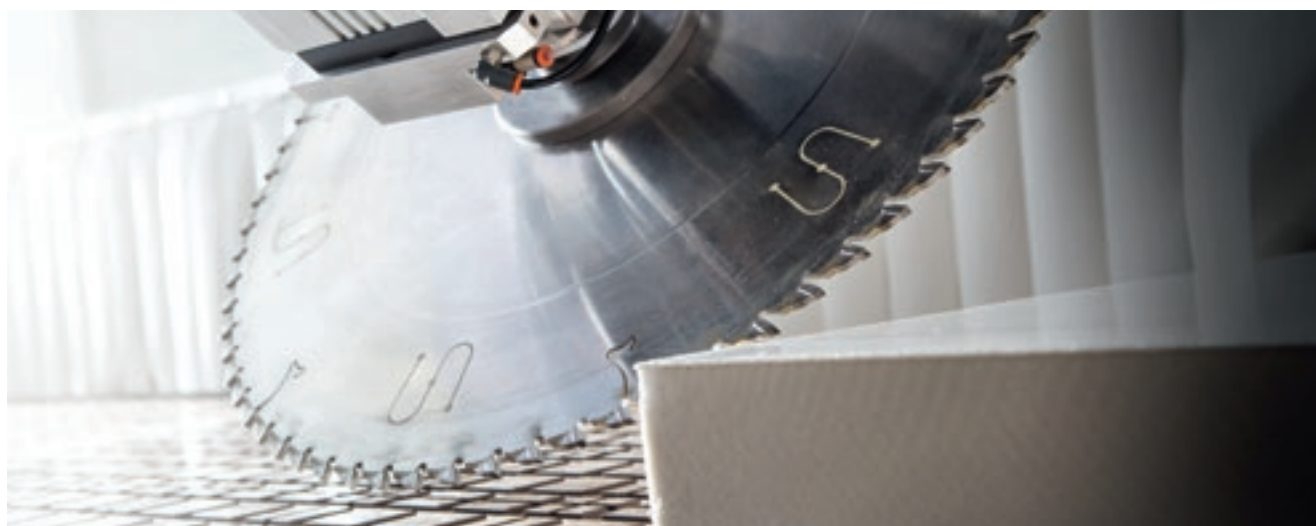
UP TO 18 TOOLS AVAILABLE IN THE MACHINE



17-place linear tool magazine for quick tool changes.



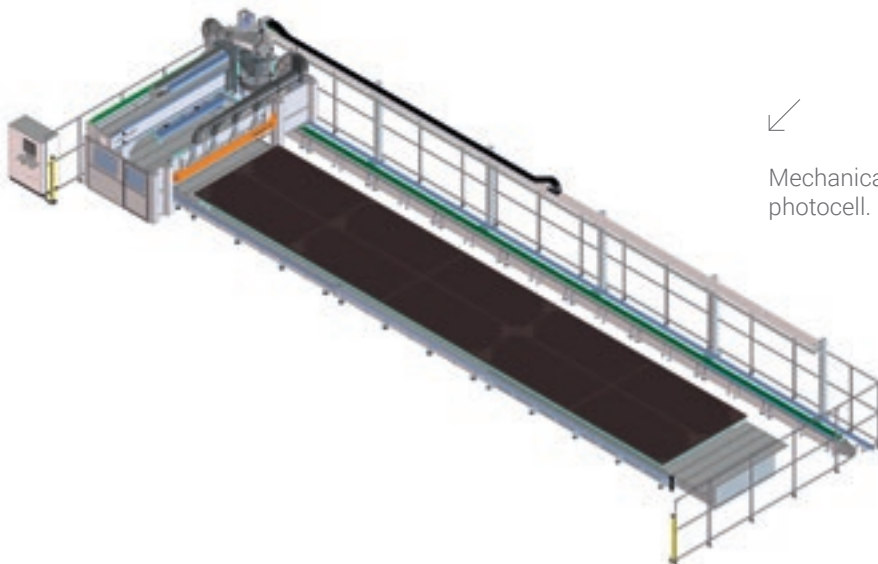
Magazine for blade with 550mm diameter.



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

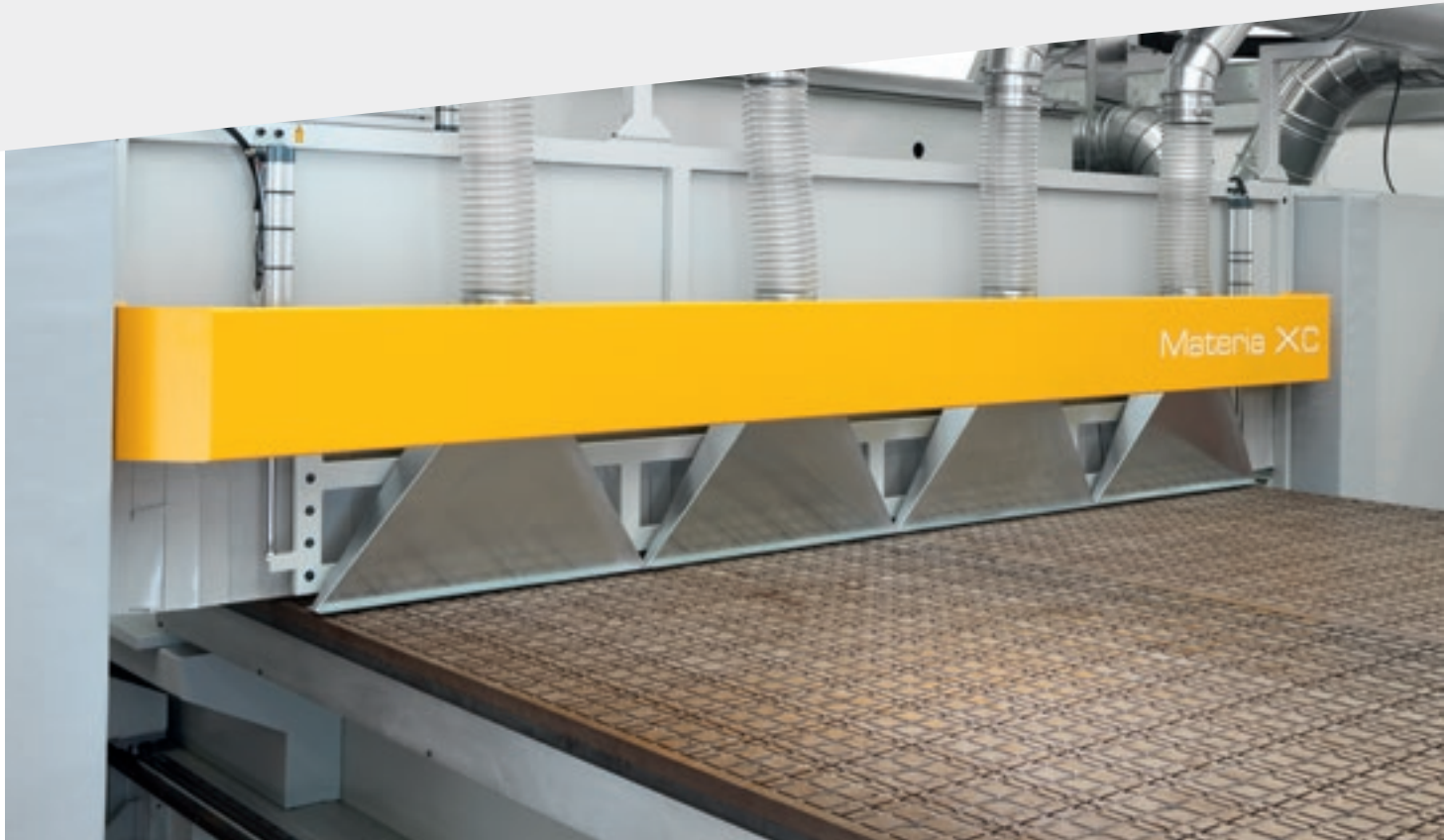


PROTECTIVE BUMPER ALL
OVER THE MACHINE FRAME.



Mechanical perimeter guards, or with a
photocell.

Solutions for cleaning the panel and vacuuming the 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



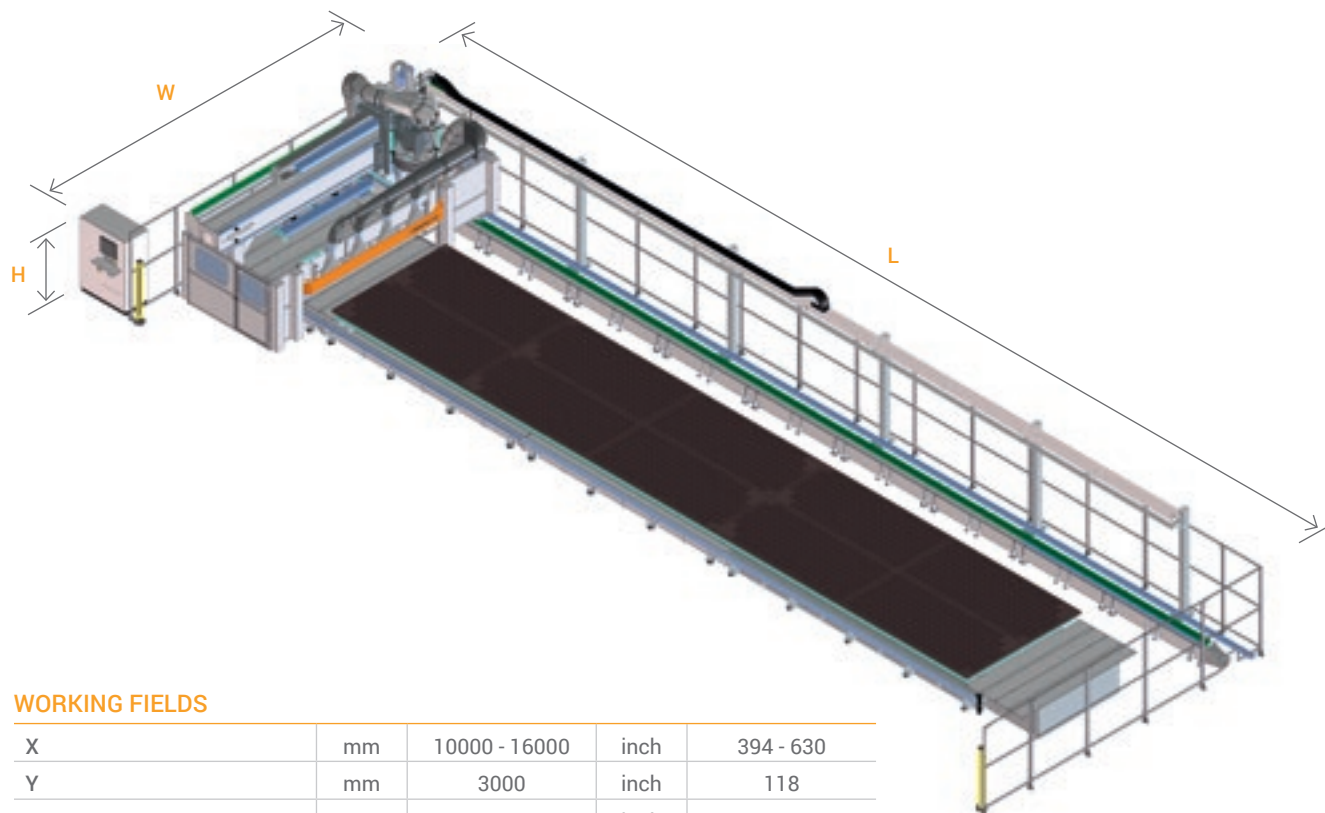
The MATERIA range is equipped with a very powerful NC - the pioneering Osai Open M.

Thanks to its characteristics, the CNC OPEN control family allows for an excellent machining finish and optimised machining centre management. Systems can be completely customised through graphic HMI software and embedded PLC.



The machine NC works with the ISO standard programming language, so it can communicate with any third party CAM system.

TECHNICAL DATA



WORKING FIELDS

X	mm	10000 - 16000	inch	394 - 630
Y	mm	3000	inch	118
Z	mm	250	inch	10

OVERALL DIMENSIONS

L	mm	14500 - 22500	inch	571 - 886
W	mm	8400	inch	331
H	mm	4000	inch	157

AXIS SEED

X / Y / Z	m/min	25 / 60 / 25	ft/min	82/ 187/ 82
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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 surface sound pressure level (L_{pfA}) during machining for operator workstation on vane-pump machine L_{pa}=83dB(A) L_{wa}=106dB(A) A-weighted sound-pressure level (L_{pA}) for operator workstation and sound power level (L_{wA}) during machining on cam-pump machine L_{wa}=83dB(A) L_{wa}=106dB(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.

SERVICE & PARTS

Direct, seamless co-ordination of service requests between Service and Parts. Support for key customers from specific Biesse personnel, in-house and/or at the customer's site.

BIESSE SERVICE

- ▣ Installation and start-up of machines and systems.
- ▣ Training centre for Biesse Field technicians, branch and dealer personnel, and training directly at customer's site.
- ▣ Overhaul, upgrade, repair and maintenance.
- ▣ Remote diagnostics and troubleshooting.
- ▣ Software upgrade.

500

Biesse Field engineers in Italy and worldwide.

50

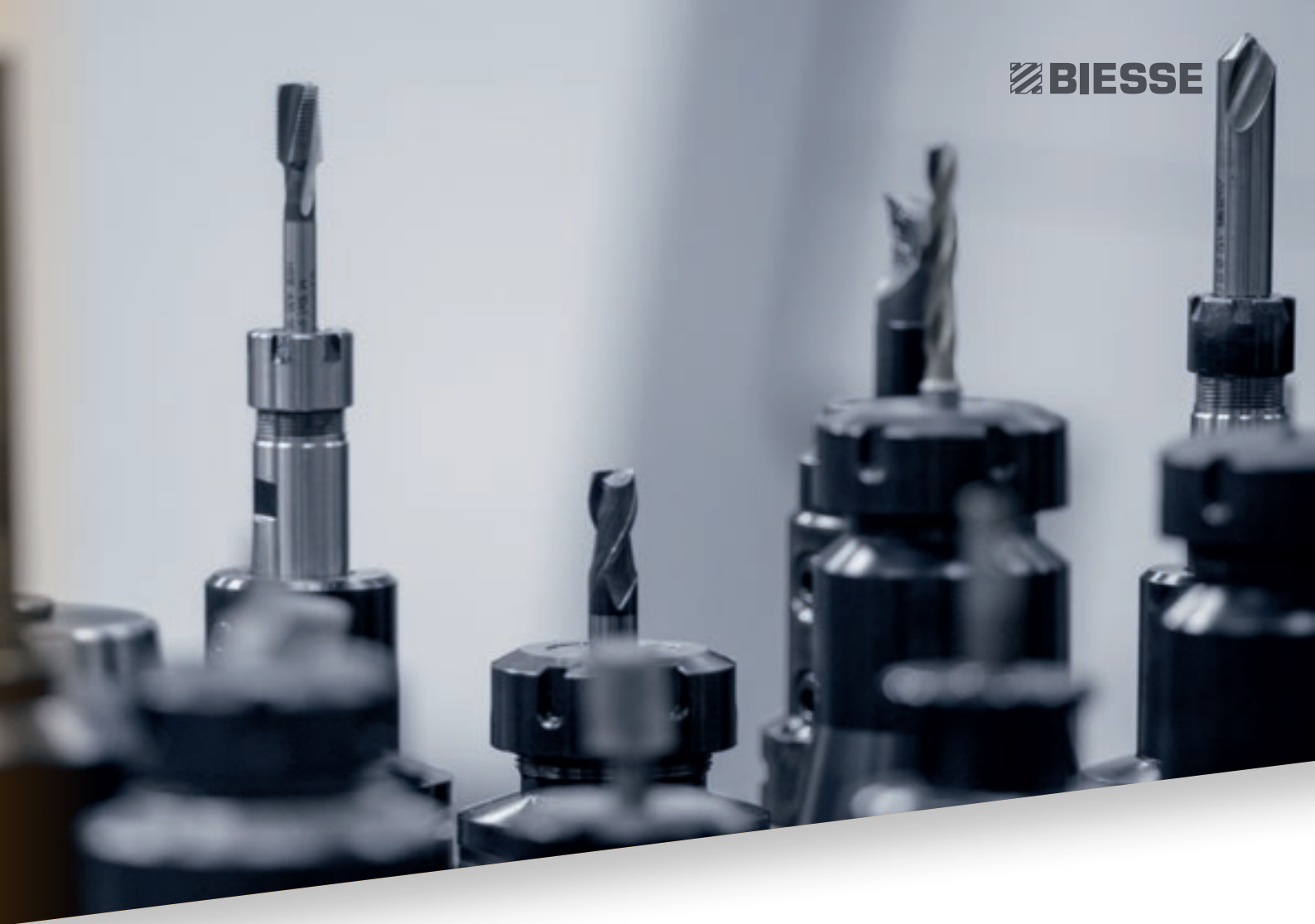
Biesse engineers manning a Teleservice Centre.

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 products and after-sales service through two dedicated areas: Biesse Service and Biesse Parts.

With its global network and highly specialised team, the company offers technical service and machine/component spares anywhere in the world on-site and 24/7 on-line.

BIESSE PARTS

- Original Biesse spare parts and spare kits tailored to each machine model.
- 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 times optimised thanks to a global distribution network with delocalised, 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.

MADE WITH BIESSE

UPM MODENA: FROM THE CONCEPT TO THE END PRODUCT

Matthew Gualdi 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 Gualdi "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".



BIESSE ADVANCED MATERIALS RANGE

CNC - PLAST



Rover Plast J FT



Rover Plast A FT



Rover Plast B FT



Rover Plast M5

CNC - MATERIA



Materia CL



Materia LD



Materia FC



Materia MR



Materia XC

PANEL SAWS



Selco Plast SK4



Selco Plast WN6



Selco Plast WN7

WATER JET CUTTING SYSTEMS



Primus Plast 184



Primus Plast
202-322-324-326

SANDING



Viet Plast S211-S1-S2



Viet Plast Opera 5 - Opera 7 - Opera R



Viet Plast Narrow



Viet Plast Valeria

VERTICAL MACHINING CENTRE



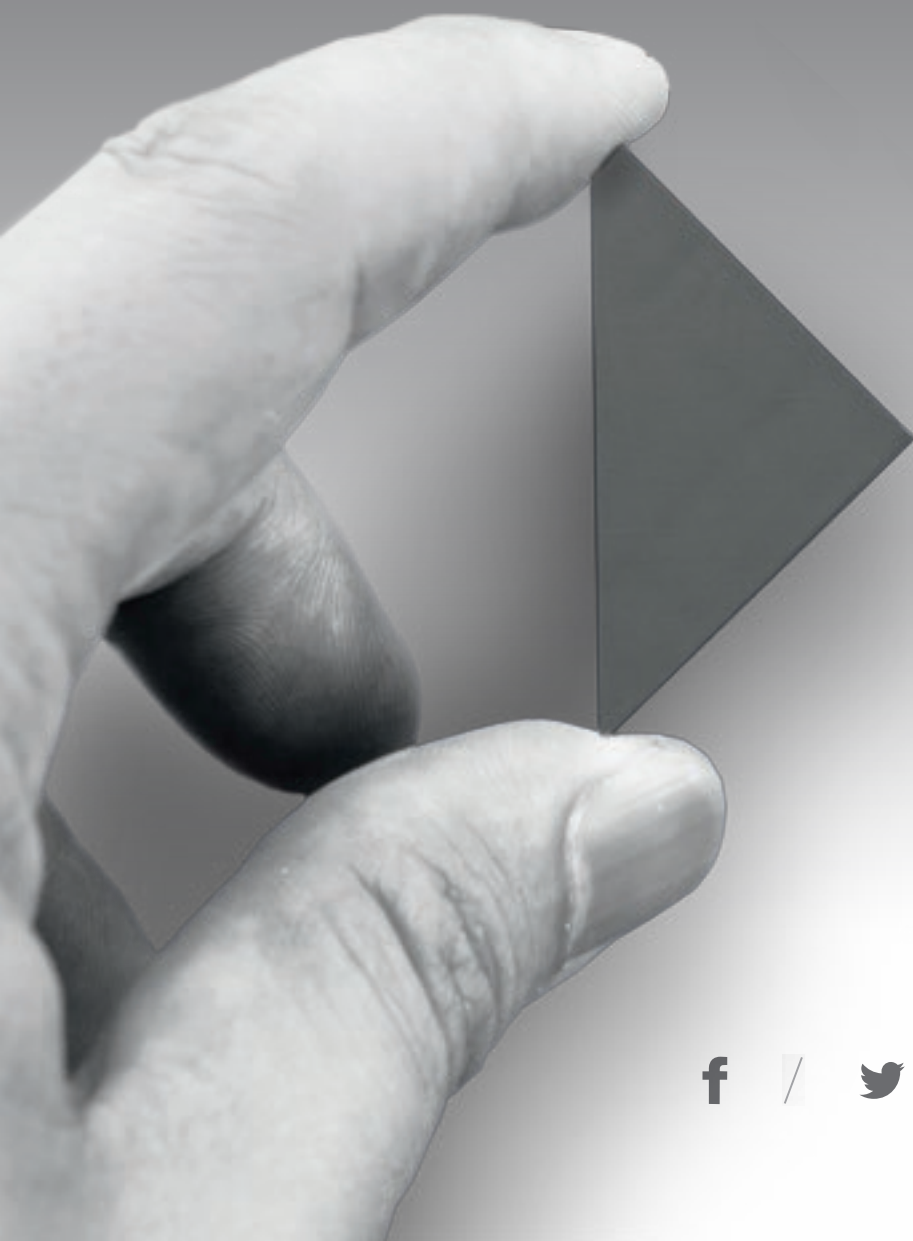
Brema Plast Eko 2.1

HANDLING



Winstore

LIVE THE EXPERIENCE



BIESSEGROUP.COM

E



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
CAMPUSES ACROSS
THE WORLD.**

 **BIESSEGROUP**

