

Caravans/RVs

Machines for the caravan and motorhome industry



CMS is part of SCM Group, a technological world leader in processing a wide range of materials: wood, plastic, glass, stone, metal and composites. The Group companies, operating throughout the world, are reliable partners of leading manufacturing industries in various market sectors, including the furniture, construction, automotive, aerospace, ship-building and plastic processing industries. SCM Group coordinates, supports and develops a system of industrial excellence in 3 large highly specialized production centres employing more than 4,000 workers and operating in all 5 continents. SCM Group: the most advanced skills and know-how in the fields of industrial machinery and components.

CMS SpA manufactures machinery and systems for the machining of composite materials, carbon fibre, aluminium, light alloys, plastic, glass, stone and metals. It was established in 1969 by Mr Pietro Aceti with the aim of offering customized and state-of-the-art solutions, based on the in-depth understanding of the customer's production needs. Significant technological innovations, originating from substantial investments in research and development and take-overs of premium companies, have enabled constant growth in the various sectors of reference.

Caravans/RVs

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scmgroup | industrial machinery
and components

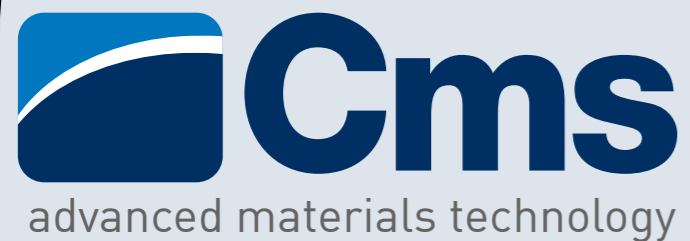
Cms | your
technology
partner



a company of **scmgroup**



**RELIABILITY ON
WHEELS**



High-speed 5-axis machining centers with best-in-class accuracy for processing composites, aluminium and metal

CMS Advanced Materials Technology is a leader in CNC machining centers for machining advanced materials, including **composites, carbon fiber, aluminum, light alloys and metal**. Significant investments in research and development have kept the brand on the cutting edge with machines that deliver best-in-class performance in terms of precision, processing speed and reliability and that meet the needs of customers operating in some of the toughest industries. Since the early 2000s, CMS Advanced Materials Technology gained the reputation of being the go-to technology partner in customers operating in industries of excellence, like the **aerospace, aeronautics, automotive, yacht racing, Formula 1, and advanced railway industries**.



The one-stop supplier of the best plastics processing machines since 1973

CMS Plastic Technology makes state-of-the-art numerically controlled machining centers, beam saws and thermoforming machines for processing **plastic materials**. The brand is the result of a winning synergy between the technical-industrial experience in thermoforming of the time-honoured Villa company, founded in 1973, and the milling know-how of CMS. Following constant investments in research and innovation, CMS Plastic Technology is known as the sole partner for the entire process from thermoforming and trimming to the manufacturing of models and moulds, to maximise productivity. CMS Plastic Technology is the key player in many industries, including **automotive, aerospace, construction machinery, caravans, buses, railway, signing, and bathtub production**.



The widest range of water-jet cutting systems and deburring-finishing for metal processing

CMS Metal Technology is the brand dedicated to the production of machines for metalworking and technical articles, offering a wide range of **complete water-jet cutting systems, pressure intensifiers and wet and dry deburring-finishing machines**. Since the 1990s, following the acquisition of Tecnocut and strong continual internal development, CMS Metal Technology has earned considerable international prestige with over 1,500 installations worldwide. CMS Metal Technology is the reliable partner of leading companies in many areas, including **automotive, aerospace, machining, furniture and industrial architecture industries**.

CMS FOR THE CARAVAN INDUSTRY

By capitalising on **tradition** and **experience**, CMS is the ideal partner for innovative solutions that guarantee:

- **the best-in-class performance**
- **superior reliability**
- **top-notch technological features.**

CMS has the most suitable solution for all specific needs with the right machinery to meet the increasingly demanding requirements of an ever-changing industry.

A caravan is the chosen home away from home for many holidaymakers. It represents the freedom of being able to reach charming places without giving up the comfort of home and enjoy the company of your nearest and dearest.

Motorhomes and camper vans regardless of their construction typologies are more than simple vehicles we can live in from time to time. In many cases, they are a genuine expression of a lifestyle and a significant way for increasing the quality of life of users.

CMS has been supplying dedicated solutions for the production of side walls, floors and roofs for motorhomes, caravans and camper vans for over 30 years.

With Avant Caravan CMS offers the guarantee of fast and trouble-free travel!



WHY CHOOSE A CMS MACHINING CENTER?

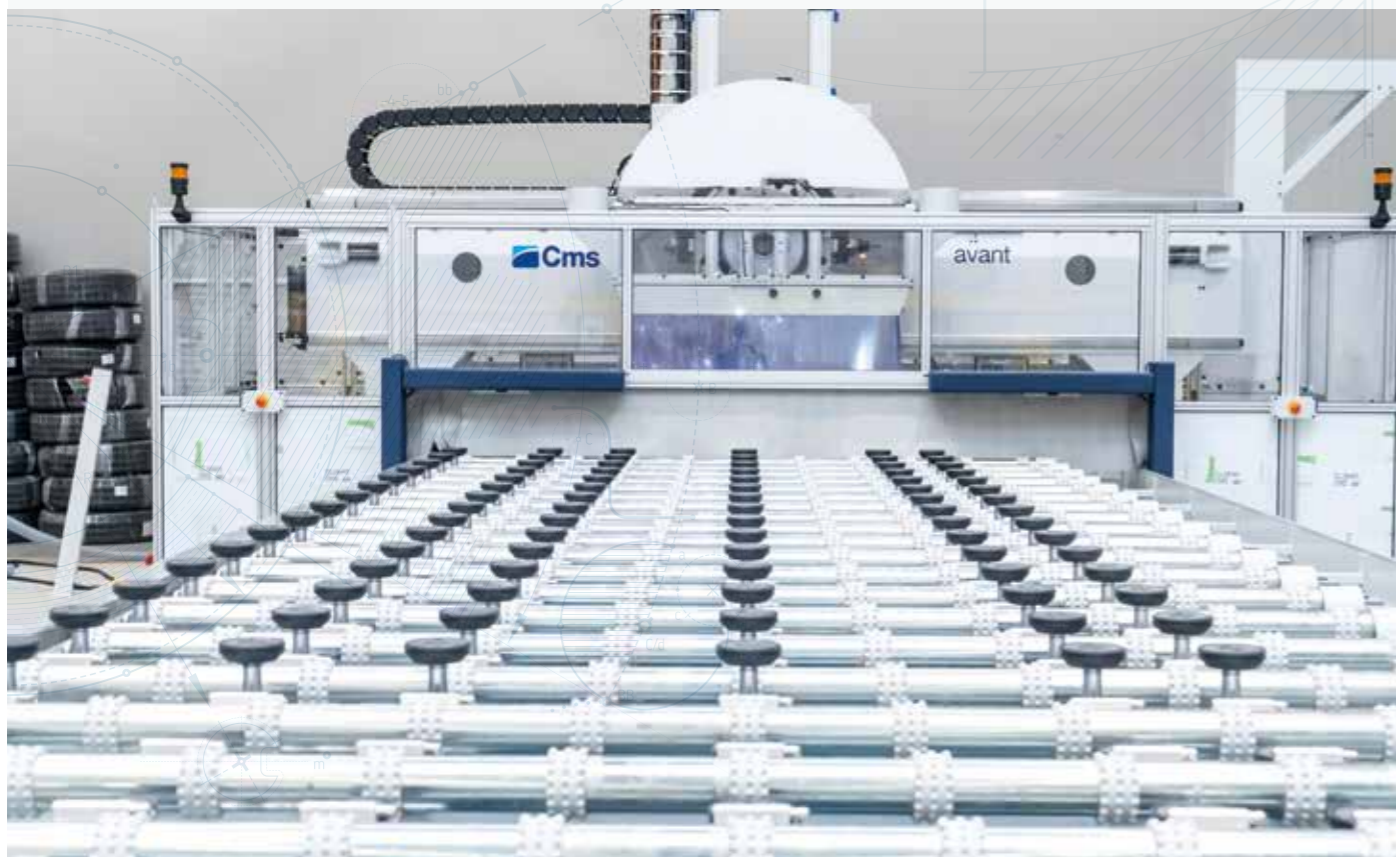
- **EXPERIENCE:** Over 30 years of experience and continuous technological development in the production of machinery for the caravan industry.
- **RELIABILITY AND EFFICIENCY:** With more than 100 machines installed and operating worldwide, the CMS Avant Caravan machining center is the benchmark for the caravan/camper van industry and beyond. CMS also offers successful applications for customers seeking automation, productivity and top-level reliability.
- **MAXIMUM CONFIGURABILITY:** CMS has developed several operating units over the years that can also be used in combination, reducing the execution time of many machining operations by 53%.

AVANT CARAVAN

MACHINING CENTER FOR WORKING ON SIDE WALLS, FLOORS AND ROOFS OF MOTORHOMES, CARAVANS AND CAMPER VANS.

Avant Caravan has always been at the service of companies in the industry to guarantee maximum productivity and reliability. Since the 1980s, it has been the best solution for making side walls, floors and roofs of motorhomes, caravans and camper vans, as well as refrigerated truck panels.

- Wide range of operating units: 3-, 4- and 5-axis heads and a new floating operating unit for making recesses avoiding the use of expensive and systems that require maintenance.
- Drilling units and tailor-made solutions to meet the needs of all types of production or processes
- Also available in GT version for processing panels up to 3500 mm wide



KEY BUYER BENEFITS

- + Total number of **independent suction cups increased by 225%**
- + **Best-in-class reliability** for machine and suction pad matrix worktable
- + No unnecessary movements for positioning the suction pads with the **flexible CMS matrix worktable**
- + Possibility of machining up to 17% larger panels
- + **Zero suction cup set-up time** when switching from one panel to another

COMPONENTS AND ACCESSORIES



Rotating axis and tool length calibration device



CNC outlet cleaning bar

Avant Caravan GT with two independent 5-axle units



CNC-controlled floating system



Drilling units



Suction cup with automatic cleaning system



Rear pneumatic drills with adjustable center distance from CNC



STORES



Rotating stores



Chain store

EIDOS

VACUUM THERMOFORMING SYSTEM FOR EXTERNAL AND INTERIOR PARTS OF CARAVANS AND MOTORHOMES

Eidos, the new CMS vacuum sheet thermoforming machine, is the result of over 40 years of experience and development in thermoforming. **It is the ideal solution for making thermoformed components of external and internal parts of caravans and motorhomes.**

Eidos is available as a stand-alone station or in various configurations with automatic loading/unloading systems. It guarantees the best performance and implements **innovative software for superior product usability and maximum ease of use.**

Eidos can be used to make vacuum thermoformed parts with superior quality particularly on glossy surfaces, a key condition required for cosmetic details for caravan interiors and exteriors.

The exclusive guided counter-mould with four brushless motors can be used to make mechanical moulding parts, like PC or PMMA windows and for transferring textures directly from the mould.

The new oscillating printer cooling system and high-efficiency heating panels slash the processing cycle time achieving remarkable energy efficiency ratings.



KEY BUYER BENEFITS

- + **Top-notch machining precision:** The frame/counter-mould structure is 151% more stable ensuring maximum machining precision.
- + **High productivity:** The new ventilation system, with programmable mobile vents, means 31% faster cooling of the formed parts. The tilting function allows an even distribution of the cooling effect.
- + **Control and simplicity:** The new CMS Thermo Active software offers simple and user-friendly control of the entire thermoforming process. The new graphic representation of the cycle and the daily production dashboard minimise the possibility of errors and reduce the learning time by 53% compared to previous solutions.
- + **CMS ThermoProphet patented system** for automatic heating power management using thermal vision.

CNC MACHINING CENTERS

CUTTING AND TRIMMING OF THERMOFORMED PARTS FOR THE CARAVAN AND MOTORHOME INDUSTRY

The range of high-speed 3- and 5-axis machining centers with best-in-class accuracy are the ideal solution for producing thermoformed components for caravan and motorhome exteriors and interiors.

The various fixed and mobile gantry solutions adapt perfectly to all specific needs, guaranteeing maximum flexibility and programming and simplicity of use.

3 or 5-axis CNC MACHINING CENTERS with Z stroke up to 500 mm

TIME 100 and TRACER

Machining centers with minimum footprint, maximum access and ease of use for trimming of low-draw parts and machining from sheets.



Production of windows for caravans and motorhomes



5-axis CNC MACHINING AXES with Z stroke up to 500 mm

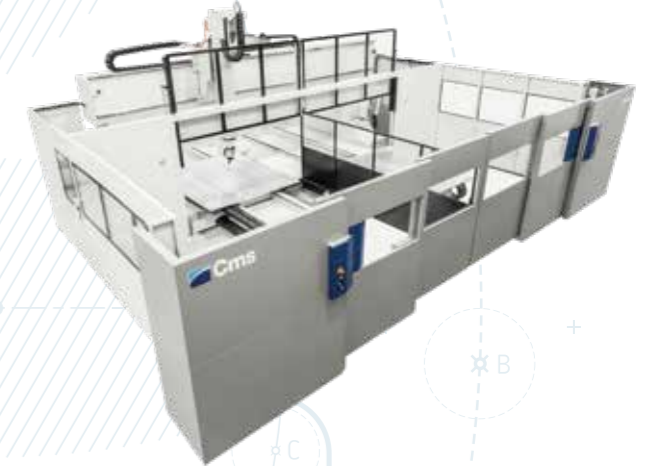
ATHENA

A machining center offering maximum flexibility for high-speed trimming of thermoformed parts. Athena reduces the overall machining times by 13% by optimising the axis movement dynamics, both in acceleration and braking, during all steps of the cutting cycle.



GENESI

Genesi is the fixed gantry and moving table machine ideal for trimming large, high-density thermoformed parts. It works with the tables alternating or coupled.



Trimming of thermoforming caravan components



SMARTLINE

FOR CUTTING INSULATING AND SOUND-ABSORBING MATERIAL PANELS FOR THE CARAVAN INDUSTRY

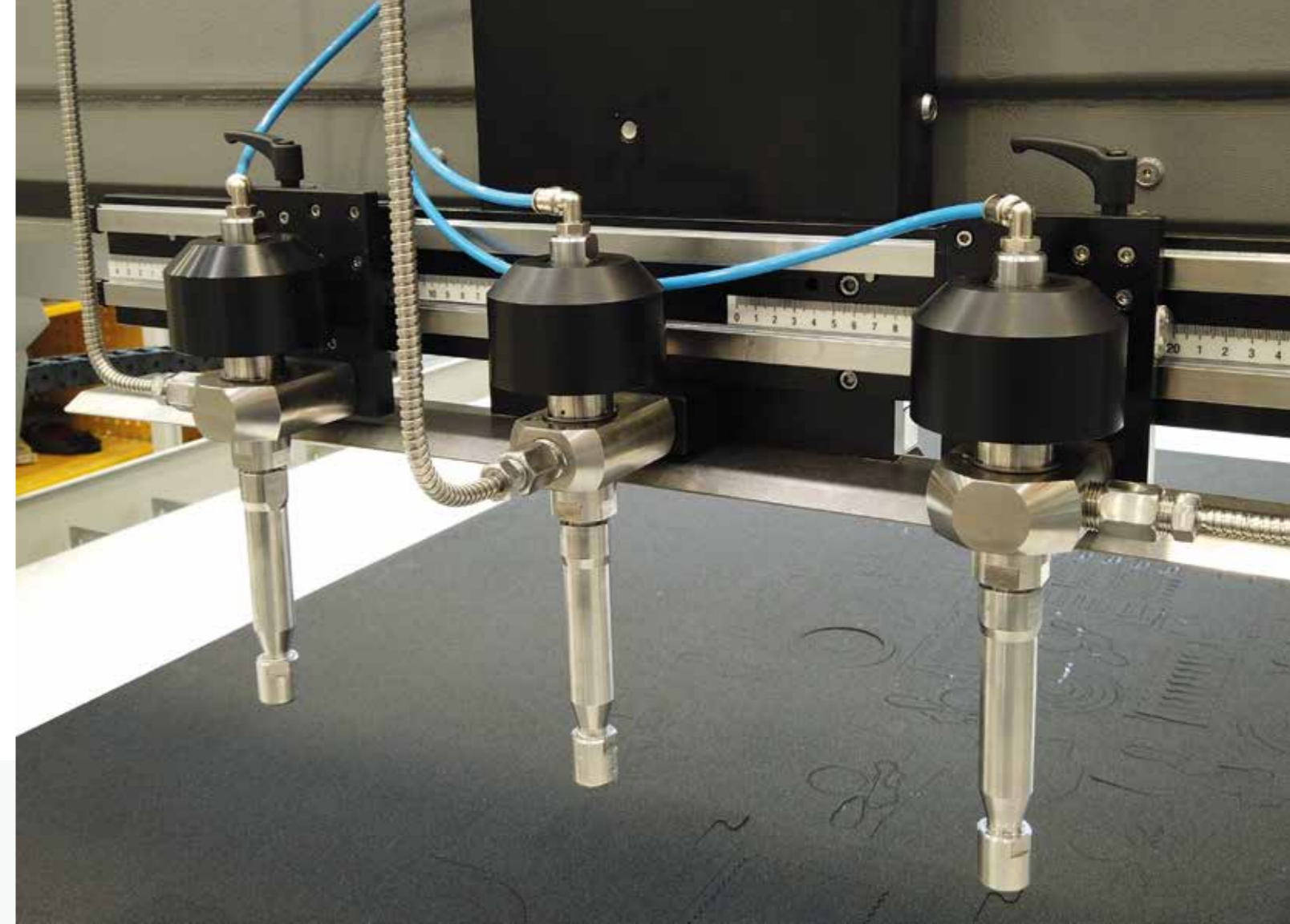
Among the solutions dedicated to the caravan and motorhome industry, CMS offers the 3-axis Tecnocut Smartline water-jet solution, ideal for cutting panels made of insulating and sound-absorbing material.

With its new innovative and compact design, Tecnocut Smartline has a monolithic base with a stainless steel tank, an open frame structure for maximum loading ergonomics, and an electric gantry to ensure high performance (rapid speed of 50 m/min and acceleration of 3 m/s²).

Tecnocut Smartline is also available in a multi-head configuration. It can fit up to three 3-axis heads with manual or automatic center distance on the operating unit to adapt to the most various flat sheet optimisation requirements.

Available in the following variants:

- standard bar: adjustable from a minimum of 85 mm to a maximum of 680 mm
- wide bar: adjustable from a minimum of 85 mm to a maximum of 1000 mm



KEY BUYER BENEFITS

- + **Maximum loading ergonomics**, compact and open frame structure to simplify loading and unloading of machined workpieces.
- + **High-performance**: best-in-class rating with speed of 50 m/min and acceleration of 3 m/s² in rapid mode for maximum productivity in 3 and 5-axis configurations.
- + The **best price/performance ratio** for a cutting solution that can be configured to meet any application requirement and investment plan.

CMS connect is the IoT platform that seamlessly integrates with the latest generation of CMS machines

CMS connect offers customised micro-services using IoT apps designed to support the daily activities of operators in the industry and to improve the availability and use of machines and systems. The data collected from the machines in real-time is exploited to **increase machine productivity, reduce operating and maintenance costs and cut energy costs.**



CMS active revolutionary interaction with your CMS machine

CMS active is our new interface. The operator can easily manage several machines because the CMS active interface software has the same Look & Feel, the same icons and the same interaction approach across them all.



APPLICATIONS

SMART MACHINE: Section designed for the continuous monitoring of machine operation, with information on:

Status: machine status overviews. The representations provided allow machine availability to be checked - to identify possible bottlenecks in the production flow.

Monitoring: instantaneous, live display of the operation of the machine and its components, of currently running programs and potentiometers.

Production: list of machine programs run within a given time-frame with best time and average running time.

Alarms: active and historical warnings.

SMART MAINTENANCE

This section provides a first approach to predictive maintenance by sending notifications when machine components indicate a potentially critical state associated with reaching a certain threshold. In this way, it is possible to take action and schedule maintenance services, without any down-time.

SMART MANAGEMENT

Section designed for KPI presentation for all the machines connected to the platform.

The indicators are useful to assess machine availability, productivity and efficiency in addition to product quality.

MAXIMUM SAFETY

Use of the OPCUA standard communication protocol guarantees data encryption at the Edge interference level. The Cloud and DataLake layers all meet state-of-the-art cyber-security requirements. Customer data is encrypted and authenticated to ensure the total protection of sensitive information.

ADVANTAGES

- Optimization of production performances
- Diagnostics to support the optimization of component warranty
- Productivity increase and downtime reduction
- Improvement of quality control
- Maintenance costs cut down

EASY OF USE

The new interface has been especially developed and optimized to be immediately used via touch screen. Graphics and icons have been redesigned for user-friendly and comfortable navigation.

ADVANCED ORGANIZATION OF PRODUCTION

CMS Active enables configuring different users with different roles and responsibilities according to the operation mode of the machining center (e.g.: operator, maintenance man, administrator, ...). It is also possible to define the work shifts on the machining center and then survey activities, productivity and events that have occurred in each shift.

ABSOLUTE QUALITY OF THE FINISHED WORKPIECE








With CMS Active the quality of the finished workpiece is no longer jeopardized by worn-out tools. The new Tool Life Determination system of CMS Active sends warning messages when the tool life is running out and recommends its replacement at the most appropriate time

TOOL SET-UP? NO PROBLEM!

CMS Active guides the operator during the tool magazine set-up phase, also allowing for the programs to be run.



CUSTOMER SERVICE OUR TECHNICIANS BY YOUR SIDE AROUND THE WORLD

-  Training
-  Installation
-  Remote Customer Care (RCC)
-  On-site assistance
-  Check-ups, preventive maintenance and calibrations
-  Modifications and retrofitting
-  Spare parts

WORLDWIDE PRESENCE AND DEDICATED WAREHOUSES AT THE SERVICE OF EVERY CUSTOMER

- 36.000 different product codes to serve machines of all ages
- 1 central warehouse at the Zogno headquarters and 6 others around the world, fully equipped to optimise shipments and minimise waiting times
- 98% of orders in stock
- spare parts guaranteed by scrupulous control processes and validation at our in-house quality laboratory
- availability of recommended spare parts lists based on customer needs to minimise the risk of downtime



THE MOST ADVANCED EXPERTISE IN MACHINES AND INDUSTRIAL COMPONENTS

A world leader in technologies for processing a wide array of materials, including wood, plastic, glass, stone, metal and composite materials. The companies of the group are known worldwide as reliable partners of established industries operating in many areas, from furniture and constructions to the automotive industry,

from aerospace and boating and to plastics processing. The SCM Group coordinates, fosters and develops a system of industrial excellence across three major, highly specialised production hubs. The Group employs over 4,000 people and is directly present worldwide.

INDUSTRIAL MACHINERY

Stand-alone machines, integrated systems and services dedicated to processing a wide range of materials.



Woodworking technology



Technologies for processing composite materials, carbon fiber, aluminum, light alloys, plastic, glass, stone and metal



INDUSTRIAL COMPONENTS

Technological components for machines and systems made by Group, by third parties and other mechanical engineering suppliers.



Spindles and technological components



Electric panels



Fabrications and machining



Cast iron castings

THE SCM GROUP IN NUMBERS

700
Million/Euro
of consolidated
turnover

4.000
people employed in
Italy and the world

3 main
production hubs

5 continents
with direct worldwide
presence

7%
of turnover
invested in R&D

THE CMS RANGE

FOR THE CARAVAN AND MOTORHOME INDUSTRY

5-AXIS MACHINING CENTERS



ARES APC



GENESI

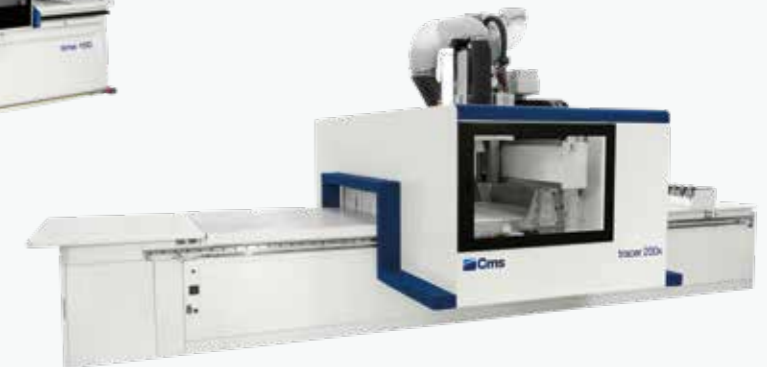


ATHENA

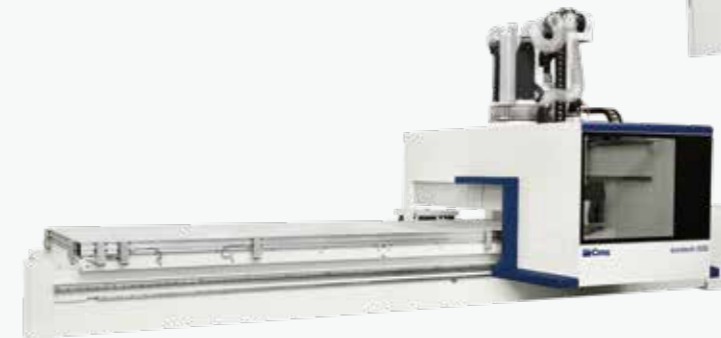
3 OR 5-AXIS CNC MACHINING CENTERS WITH Z STROKE UP TO 500 MM



TIME 100



TRACER 200 X



EVOTECH

CNC MACHINING CENTERS WITH FIXED OR MOBILE GANTRY



MBB



AVANT CARAVAN



FXB

THERMOFORMING MACHINES



EIDOS

WATERJET CUTTING MACHINES AND PRESSURE INTENSIFIERS



TECNOCUT SMARTLINE



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