COMPANY

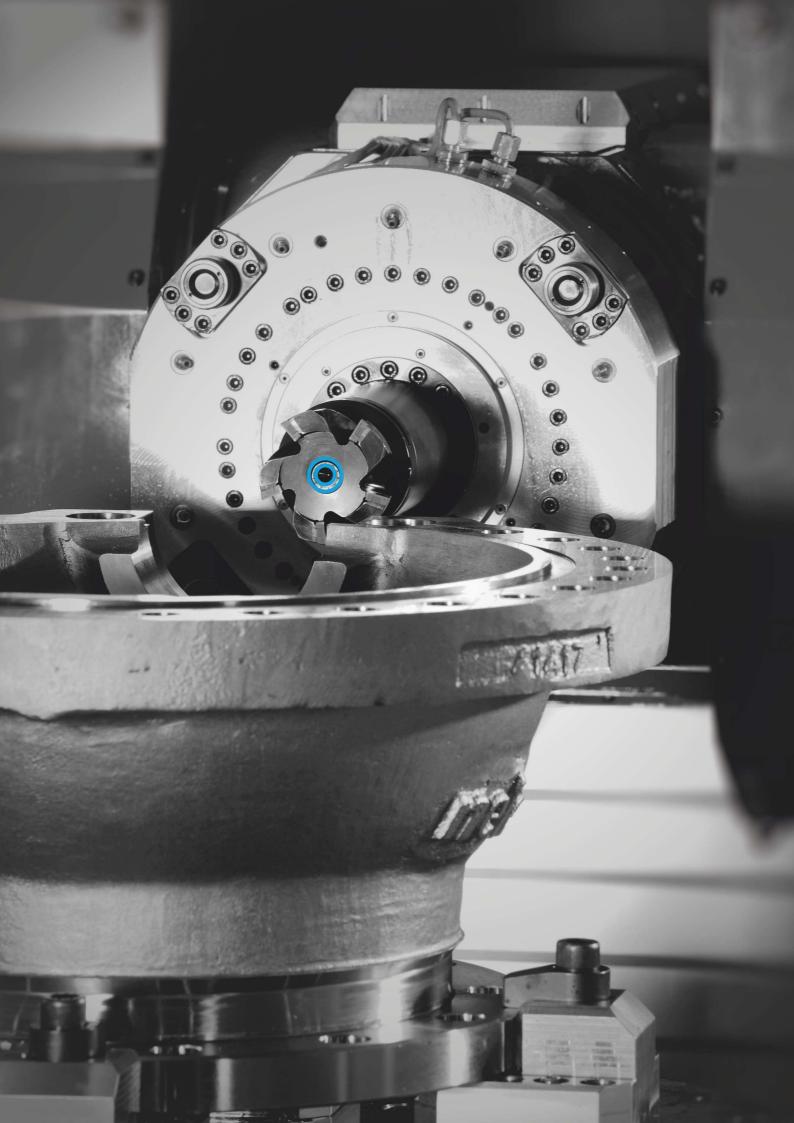
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COMPANY PROFILE

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THE FUTURE
AND TURN IT INTO
TRADITION

evolving together



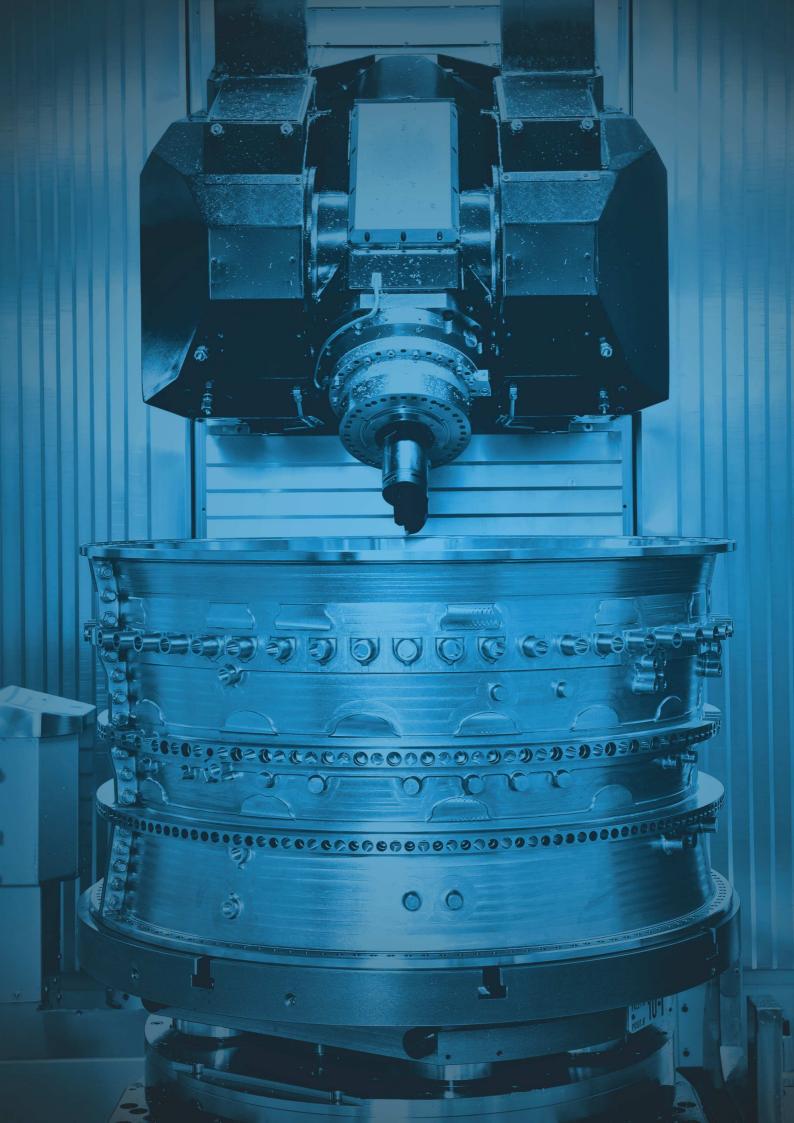


INNOVATION IN TRADITION

MCM represents the perfect union between future and history

MCM Machining Centers Manufacturing is a leading company in designing and manufacturing high precision machining centers with dynamic performances, and flexible automation systems. MCM was established in 1978 in one of the most industrialised Italian districts for machine tools manufacturing. The company has grown over the years thanks to the acknowledgement gained on worldwide markets, with

a large portfolio of international companies primarily active in the Aerospace, Automotive, Energy, Oil & Gas, Industrial components. A long-term cooperation with schools and universities allowed the company to rely on excellent knowhow and expertise. The corporate size, policies and structure are focused on offering solutions that can fulfill customers' requirements, making MCM a reliable partner.

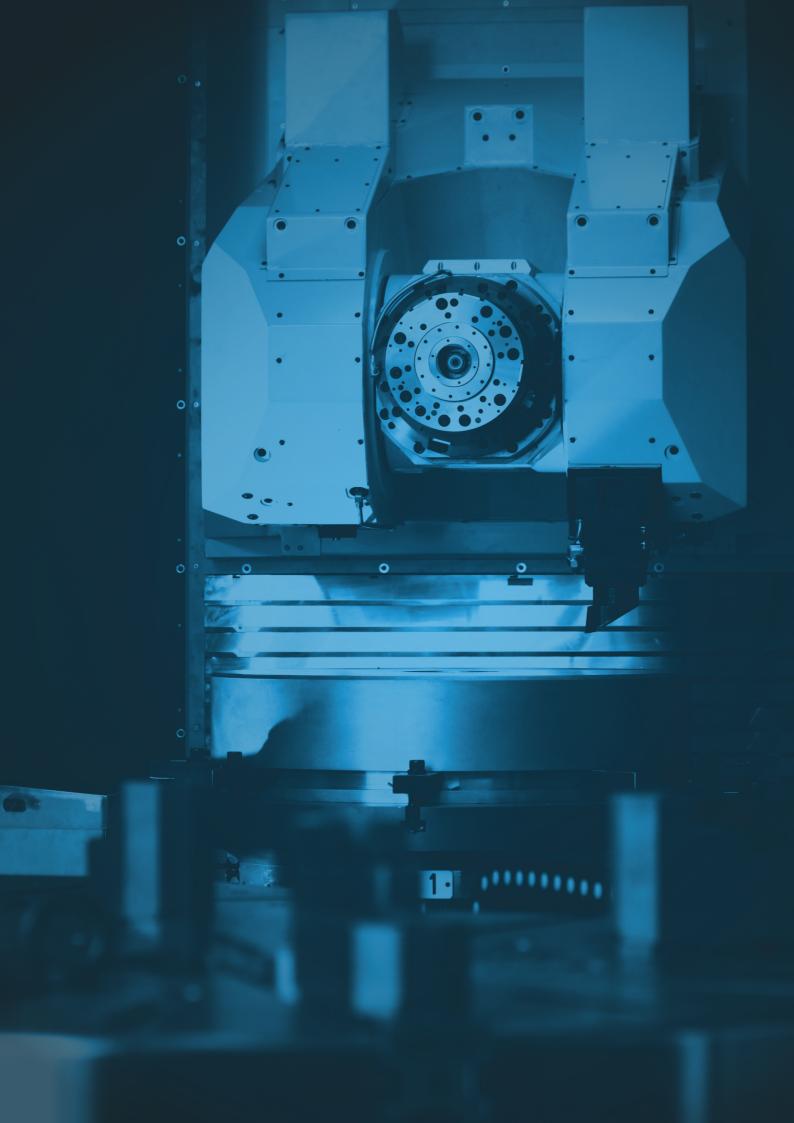


OVERALL KNOW-HOW

Specialised teams supporting the customer: expertise is our strength

The commitment to be attentive to customers' demands, the talent for building a partnership and the strong attitude to create and reinforce the know-how, allowed MCM to develop technological, designing and manufacturing skills, which are reflected in a wide range of products.

One of MCM strengths consists in its strong drive for continuous research and innovation. The most defining characteristic that has led MCM to success is the widespread know-how and the ability to provide specific and suitable solutions to customers' requirements.



TECHNOLOGY & RESEARCH

MCM invests in innovation projects and unique solutions

MCM is investing substantially in present and future research and development. The constant involvement in taking part in technological innovation projects and the close cooperation with universities and research centers are the core elements for a steadily growing know-how.

The research fields are identified by listening and interpreting customers' needs. The inclination to acquire specialised know-how allows MCM to have its own design solutions and manufacturing technology for all of the major components of its product line.



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A GLOBAL SOLUTION WITH ONE PARTNER

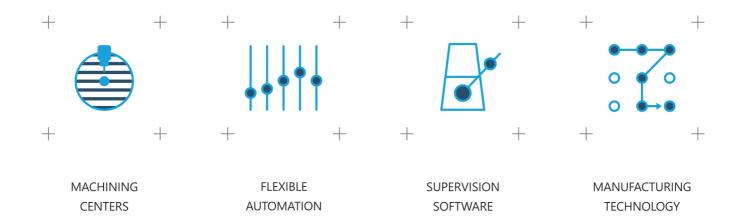


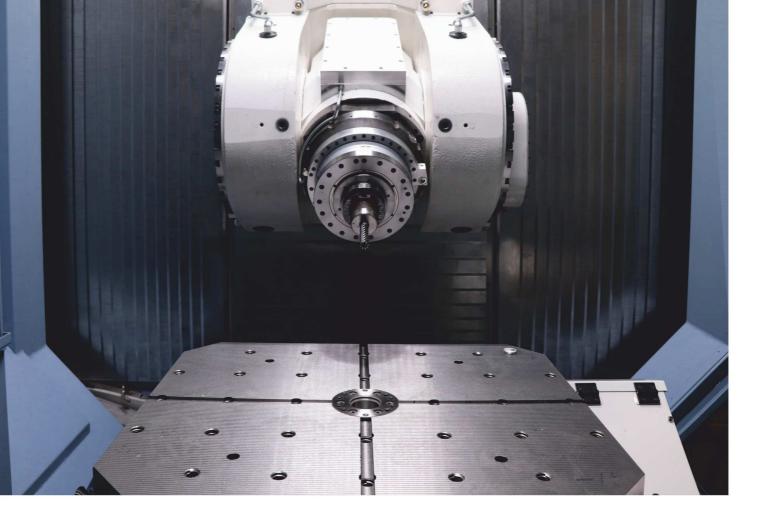
INTEGRATED PRODUCTION PROGRAM

MCM is specialised in designing and manufacturing integrated production systems, with the cornerstone of its solutions based on top-of-the-line machining centers.

Its complete and structured product line enables the customer to develop complex projects with just one experienced and reliable partner.

This philosophy provides many competitive advantages to customers: real and effective co-engineering processes, fast start of production, highly efficient and flexible FMS, extension of the production system life-cycle.





MACHINING CENTERS

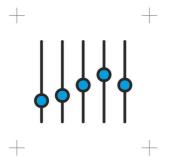
A high-performance complete product line



The MCM range of 4-axis and 5-axis horizontal machining centers is designed to ensure the best possible performance without compromise: precision, reliability, high rigidity, outstanding dynamic performance. All the basic components that guarantee these performances are manufactured according to MCM design and technologies. The machines operative modes are always managed by the supervision software, exclusively developed by MCM, which grants an

excellent production efficiency when integrated with the machine NC. Clock, Tank and Jet Five are the three lines of horizontal machining centers covering machining volumes from 800 mm up to 12 meters and configurable with 4 or 5 axes with milling, turning and grinding capacity. All of them are available in single-, twin- and multi-pallet version or connected one to each other in FMS.





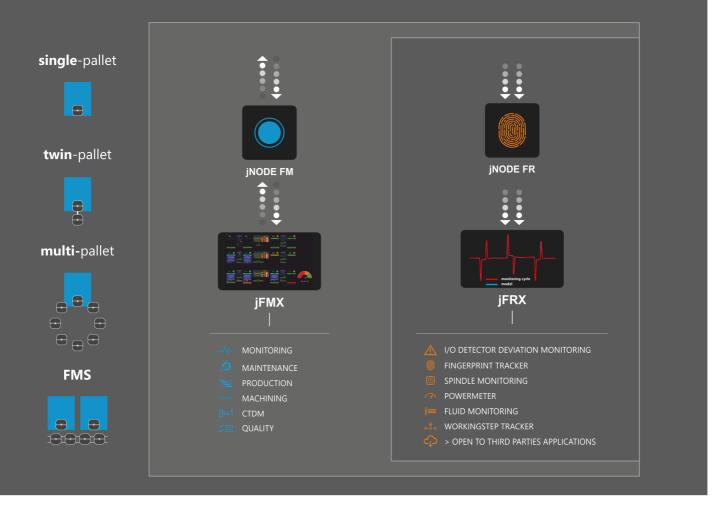
FLEXIBLE AUTOMATION

Systems and solutions for the automation of machining cells and flexible manufacturing systems

MCM manufactures with a specific design, a complete range of automation elements for FMC and FMS to handle workpieces, pallets and tools. Specialised teams of engineers and experts are highly talented to design solutions adaptable to any possible requirement.

The main customer benefit is to have a single partner for the realization of entire projects.

- Layout engineered to optimize the use of the surface and the production flow.
- Better performance, flexibility and autonomy.
- Integration of third-party machines (washing stations, EDM, storage units and CMMs).
- Software solutions engineered for the specific application covering all the FMS production units.



more than **30 years** experience in flexible manufacturing supervision software



SUPERVISION SOFTWARE

MCE, Software Division of MCM, develops supervision software for manufacturing planning and managing

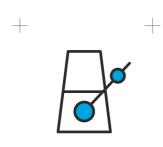
Since its foundation, MCM recognizes the role of information technologies as a fundamental element of its offer. Born in 1986, MCE, the IT division of MCM, develops a series of software services to support production, which are organized in the 'jFMX' suites.

jFMX, the exclusive MCM supervision software, is structured on different levels in order to manage the growing complexities of systems and information, up to the possible centralized coordination and management of an entire workshop. Production planning, resources advanced monitoring, integrated management of process and quality control information are all services offering a strategic feature to the customers' manufacturing systems.

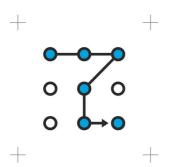
Combined with the other MCM products, the software services allow to increase productivity, plan necessary resources and improve timing of delivery schedule. Moreover, these benefits include a higher system availability, exploiting their potential flexibility without losing efficiency, tracing the execution and calculating production costs, thus contributing to a modern

jFRX platform based on an IT device, integrated on all new MCM machines, allows to monitor and compare the performance and operativity of every machine with predictive services and maintenance indications, when connected to the cloud computing services offered by MCM.

management of the shop floor.







MANUFACTURING TECHNOLOGY

MCM supports the customers in design and development of manufacturing processes

MCM knowledge and experience in manufacturing technology is constantly made available to customers from the training of their engineers, to the design, development and validation of the entire manufacturing process.

The assistance offered consists of: process design, process design for capability, FMECA analysis, fixture design, definition of tools, part program creation, CAD / CAM

technologies, process set-up, statistical and reliability evaluations, support to definition of control plans.

The MCM team of technologists offers both theoretical and applicative activities and constantly develops its know-how thanks to a significant number of cases dealt with and solved, especially in the automotive, aerospace and energy sectors.



+ + APPLICATIONS

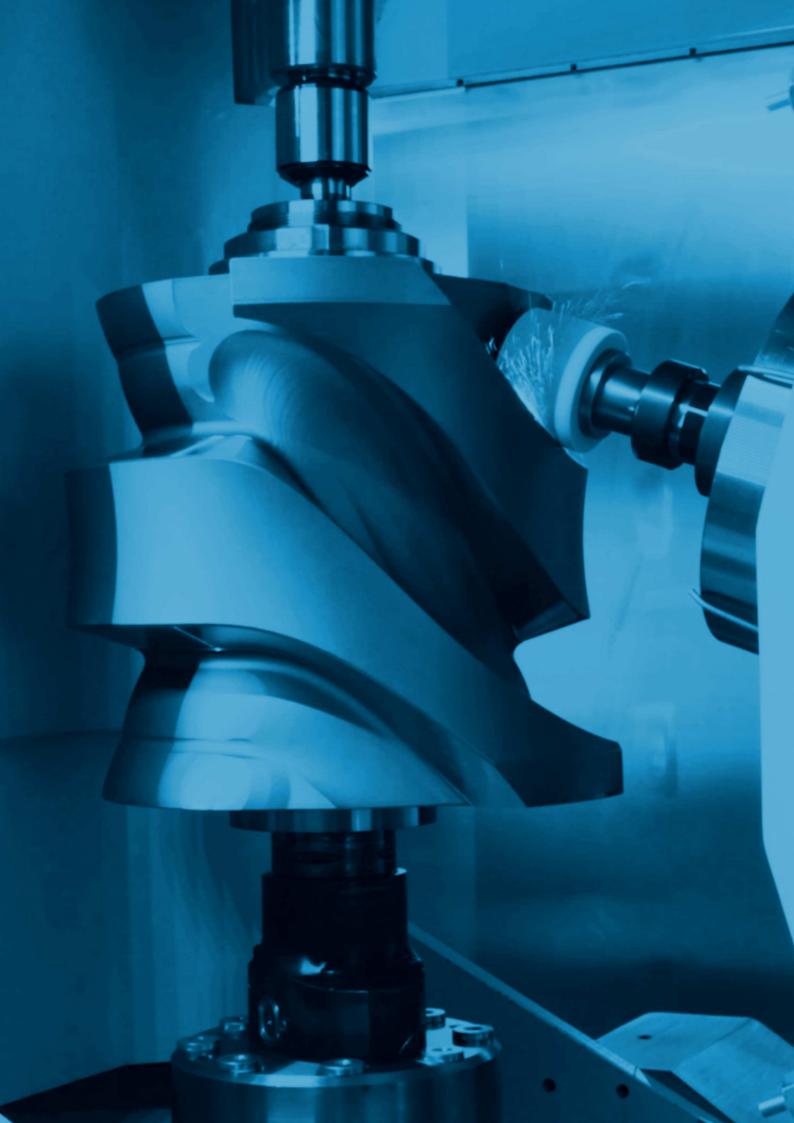
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MCM FIELDS
OF APPLICATION



AEROSPACE



AUTOMOTIVE





HEAVY EQUIPMENT AGRICULTURAL MACHINERY



ENERGY, OIL & GAS





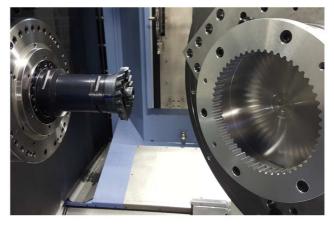
MACHINERY, TOOLING, DEFENCE







INDUSTRIAL COMPONENTS



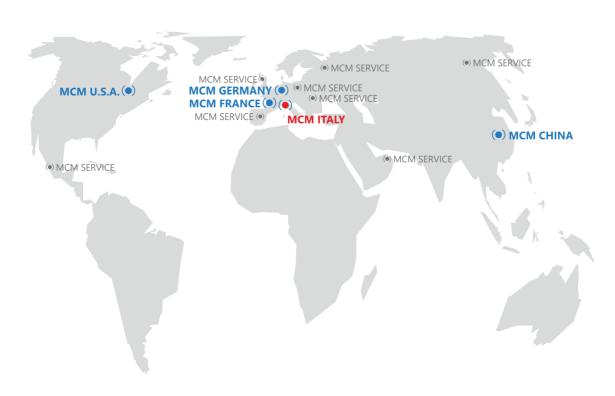
SERVICE, SPARE PARTS & UPGRADE

Headquartered in Italy, MCM operates all over the world

with service subsidiaries located in France, Germany, USA,

China and a constantly growing network of local partners.

A global managing network guarantees the sharing of technical documents, information and experiences, allowing the real effectiveness of the assistance service.



MCM guarantees an efficient service with a global presence and teams of skilled engineers

MCM worldwide subsidiaries and partners are available to support and serve all the reference markets, offering a direct after-sales assistance. All the services are conceived around the idea that the true value of the manufacturing systems is based on their full availability and efficiency during the entire lifecycle. Teams of qualified engineers can perform a quick and

effective problem solving by using a wide range of operating tools: remote diagnostic, preventive and extraordinary maintenance service, system efficiency inspections and spareparts full availability. MCM offers complete and individually designed training courses that significantly enhance a higher productivity of installed machines.

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- _ MACHINING CENTERS
- _ FLEXIBLE AUTOMATION
- _ SYSTEM INTEGRATION
- SUPERVISION SOFTWARE
- _ MANUFACTURING TECHNOLOGY
- _ SERVICE

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