

# gunstocks

CNC solutions for  
gunstocks and carved parts





CMS is part of the SCM Group, a world leader in technologies for processing a wide range of materials: wood, plastic, glass, stone, metal and composite materials. The Group's companies are, all over the world, the solid and reliable partner of the main manufacturing industries in various product sectors: from furniture to construction, from automotive to aerospace, from boating to plastics processing. SCM Group supports and coordinates the development of a system of industrial excellence organised in 3 large specialised production centers, employing more than 4,000 people and with a direct presence on 5 continents. SCM Group represents the most advanced skills in the design and construction of machines and components for industrial processing in the world.

CMS SpA manufactures machines and systems for processing composite materials, carbon fibre, aluminium, light alloys, plastic, glass, stone and metal. Born in 1969 from an idea of Pietro Aceti with the aim of offering customised and advanced solutions, based on a deep knowledge of the customer's process. Significant technological innovations, generated by major investments in research and development and acquisitions of premium companies, have enabled constant growth in the various sectors of reference.



**CMS Advanced Materials Technology** is the leader in the field of numerically controlled machining centers for the processing of advanced materials: composites, carbon fibre, aluminum, light alloys and metal. Significant investments in research and development have enabled the brand to always stay at the forefront, with machines that ensure best-in-class performance in terms of precision, speed of execution and reliability, and that meet the needs of customers operating in the most demanding sectors.

Since the early 2000s, **CMS Advanced Materials Technology** has established itself as a technological partner in areas of excellence such as aerospace, aviation, automotive, race boating, Formula 1 and the most advanced railway industry.

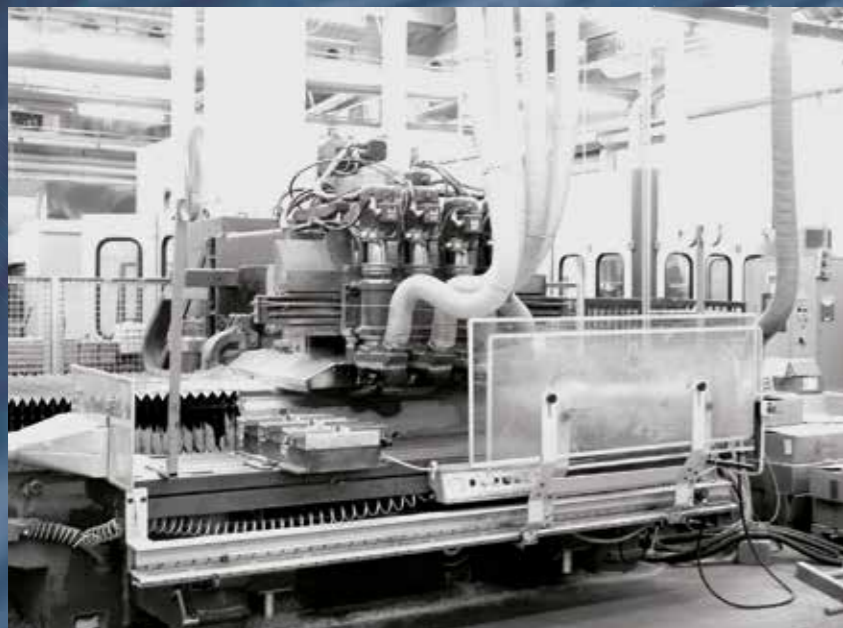
# gunstocks

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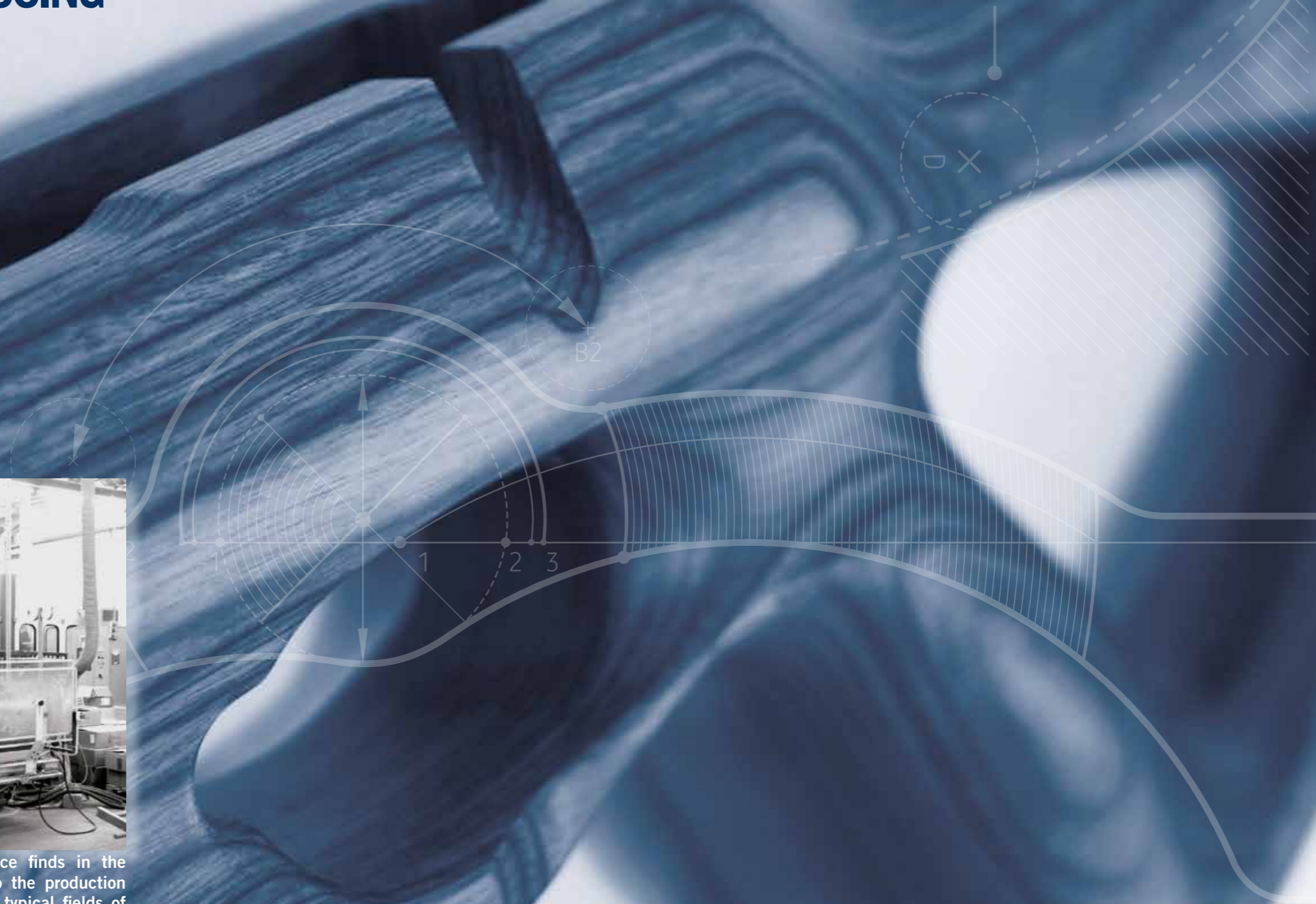




# CNC SOLUTIONS FOR GUNSTOCKS PROCESSING



CMS' extensive and well-established experience finds in the machines and machining centers dedicated to the production of gunstocks one of the most appropriate and typical fields of application. CMS-designed and implemented technologies prove to be the ideal solution for an industry that requires a combination of versatility, accuracy, high production levels and total process automation, including workpiece loading/unloading equipment. CMS' technologies meet any kind of requirement: first the preliminary gunstock machining is carried out, then the mechanical seats are obtained and finally a series of re-processing and lathing operations are repeated, involving the external surfaces. The workpieces processed by CMS' applied technologies, whether gunstocks or carved parts, appear perfect in every detail and ready for the following process operations, such as smoothing and laser engraving.





# KARAT 2TX3

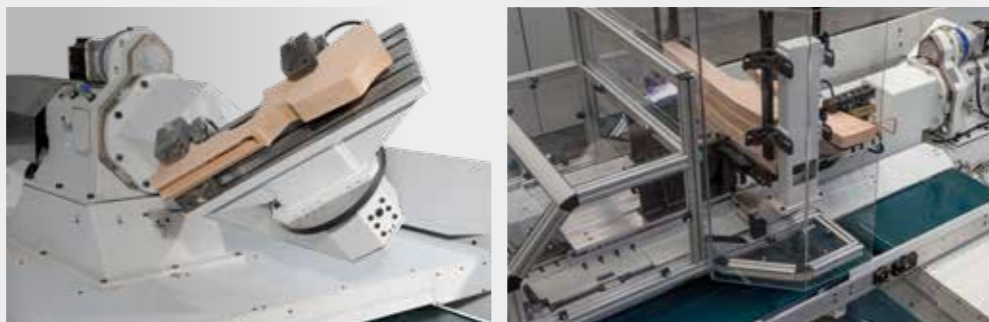
TOP OF THE RANGE FOR PROCESSING OF MECHANICAL SEATS



## KEY BUYER BENEFITS

- + **Unmanned processing** with automatic loading/unloading
- + **High number of tools**
- + **Manipulator group** with high precision and repeatability
- + **2 operating units** that work alternately guaranteeing fast tool changes

Solution dedicated to fore-ends, carbines, semi-automatic and over-and-under guns for the processing of mechanical seats where very high precision is required.



# KARAT 1TX3

FULL PROCESS COVERAGE



## KEY BUYER BENEFITS

- + **High quality level**
- + **Manipulator group with high precision and repeatability**
- + **Possibility** to have a second operating unit

In a single machine the solution for the processing of mechanical seats where very high precision and subsequent turning are required. Ideal for working fore-ends, over-and-under guns, semi-automatic guns and carbines.





# KARAT V

## MAXIMUM FLEXIBILITY IN A SMALL SPACE



### KEY BUYER BENEFITS

- + **Wide possibilities of machine customisation**
- + **Wide range** of workpiece clamping and handling systems
- + **Small footprint**



Flexible solution that, depending on the configuration of the locking systems, can be used for the processing of carbine grips, pistol stocks, fore-ends, stocks and carbines.

# KARAT 4TX3

## HIGH UNMANNED PRODUCTIVITY



### KEY BUYER BENEFITS

- + **Maximum flexibility:** the double automatic loading/unloading station allows, for example, to process carbines on one side and short stocks (for over-and-under and semi-automatic guns) on the other side
- + **Speed of set-up:** the addition of zero points ensures fast and reliable machine set-up
- + **Dedicated cycles:** for very high production demands, dedicated cycles are available that increase productivity by 31%



# ARES / ANTARES

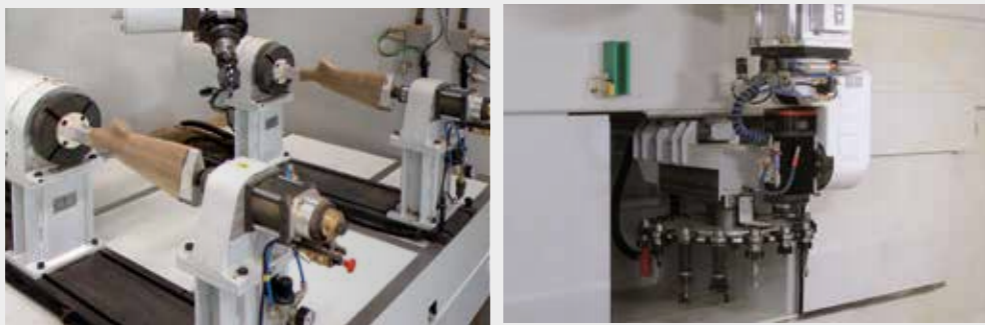
5-AXIS VERSATILITY, PRODUCTIVITY AND PRECISION



## KEY BUYER BENEFITS

- + Many possibilities of machine customisation for maximum flexibility
- + Wide range of workpiece clamping and handling systems
- + Large tool magazines
- + Possibility of pendular cycle in complete safety

Flexible solution that, depending on the configuration of the clamping systems, can be used for the processing of carbine grips, gunstocks, fore-ends, stocks and carbines.



# MULTILATHE

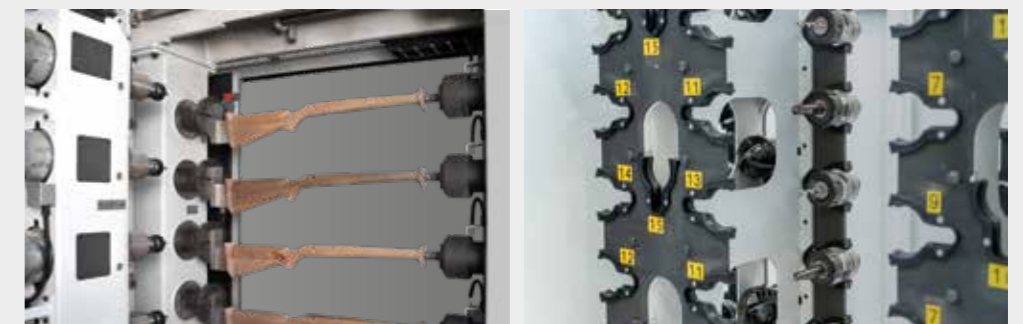
TURNING AND MILLING IN ONE SINGLE POSITIONING



## KEY BUYER BENEFITS

- + High productivity
- + 5-axis processing of 4 workpieces simultaneously
- + 40-station tool magazines (80-station optional)

Solution dedicated to the processing of fore-ends, semi-automatic guns, over-and-under guns and carbines for turning operations and processing of mechanical seats.





# MONOFAST 3D

## HIGH LEVEL OF AUTOMATION IN A SMALL SPACE



### KEY BUYER BENEFITS

- + Unmanned processing
- + Tool change in masked time
- + High level of automation with automatic loading and unloading
- + Processing of the 6 workpiece sides
- + Maximum ergonomics and safety for the operator



Solution dedicated to the processing of carbine grips and pistol stocks.

# KARAT TRIPOSTO

## 5-AXIS AUTOMATION AND HIGH PRODUCTIVITY



### KEY BUYER BENEFITS

- + Simultaneous machining of 3 workpieces
- + Automatic loading and unloading
- + Processing of the 6 workpiece sides



Solution dedicated to the processing of fore-ends, carbine grips and pistol stocks.

# CMS Connect is the IoT platform perfectly integrated with the latest-generation CMS machines

CMS Connect is able to offer customized micro services through the use of IoT apps that support the daily activities of industry operators, improving the availability and use of machines or systems. Real-time data collected by the machines become useful information **to increase machine productivity, reduce operational and maintenance costs and cut energy costs.**



# CMS Active a revolutionary interaction with your CMS machine

Cms Active is our new interface. The operator can easily manage different machines, as the CMS Active interface software maintain the same look&feel, icons and interaction approach.



## APPLICATIONS

**SMART MACHINE:** continuous monitoring of machine operation, with information on:

**Status:** machine status overview. It allows to check the machine availability, in order to identify potential bottlenecks in the production flow;

**Monitoring:** instantaneous, live display of the operation of the machine and its components, 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.

## MAXIMUM SECURITY

Use of the standard OPC UA communication protocol, which guarantees the encryption of data at Edge interface level. Cloud and DataLake levels meet all the state-of-the-art cyber-security requirements. Customer data are encrypted and authenticated, to ensure total protection of sensitive information.

## SMART MAINTENANCE

This section provides **a first approach to predictive maintenance**, by sending notifications when the machine components report a potentially critical state associated with reaching a certain threshold. This way, it will be possible **to intervene and schedule maintenance interventions without stopping the production.**

## SMART MANAGEMENT

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

The indicators provided assess the availability, productivity and efficiency of the machine and the product quality.

## ADVANTAGES

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

## EASE OF USE

The new interface has been especially designed and optimized to be immediately used via touch screen. Graphics and icons have been redesigned for an easy and comfortable navigation.

## ADVANCED ORGANIZATION OF PRODUCTION

CMS Active allows to configure different users with different roles and responsibilities according to the use of the machine (e.g.: operator, maintenance man, administrator...).

It is also possible to define the work shifts on the machine 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 support
-  Check up, preventive maintenance and calibrations
-  Changes and retrofitting
-  Spare parts

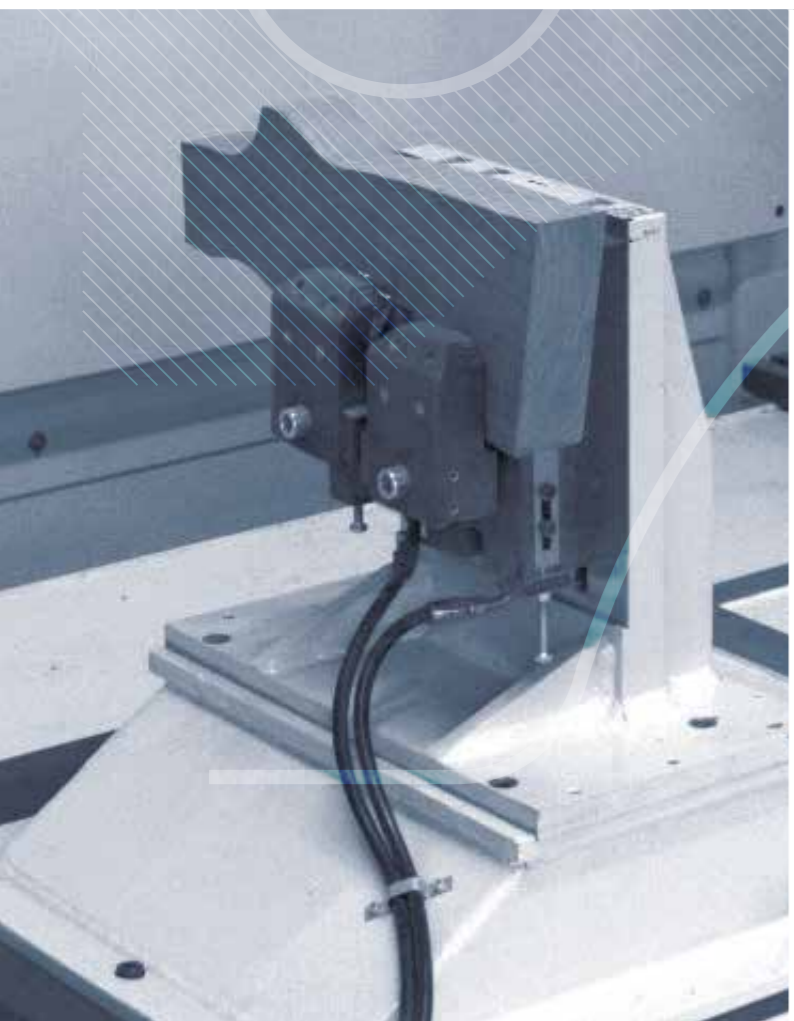
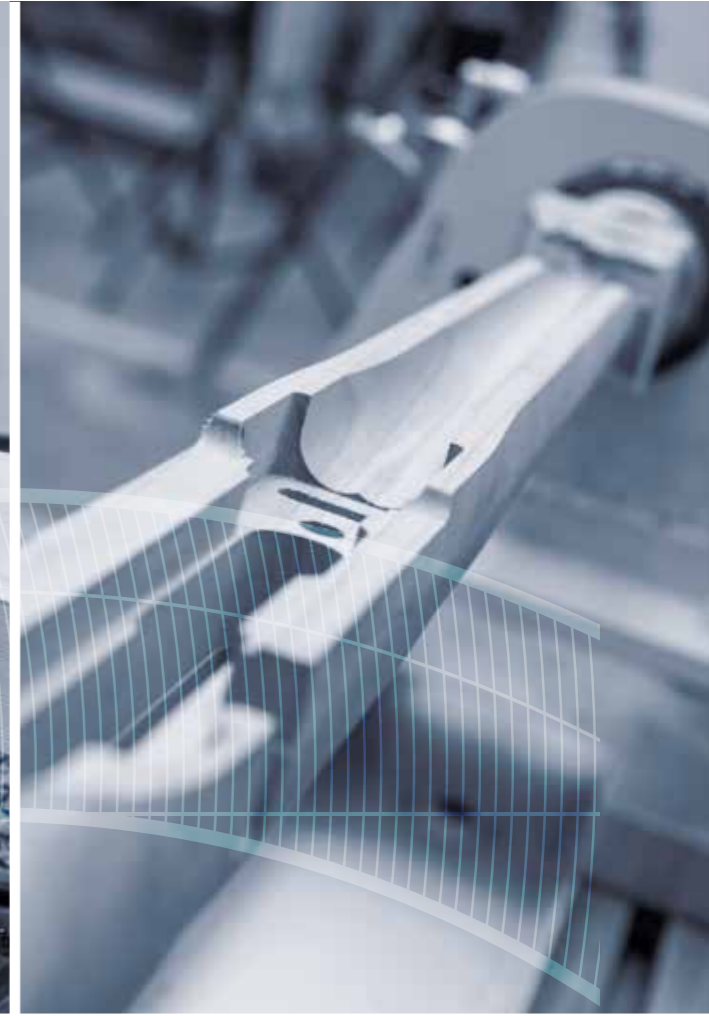
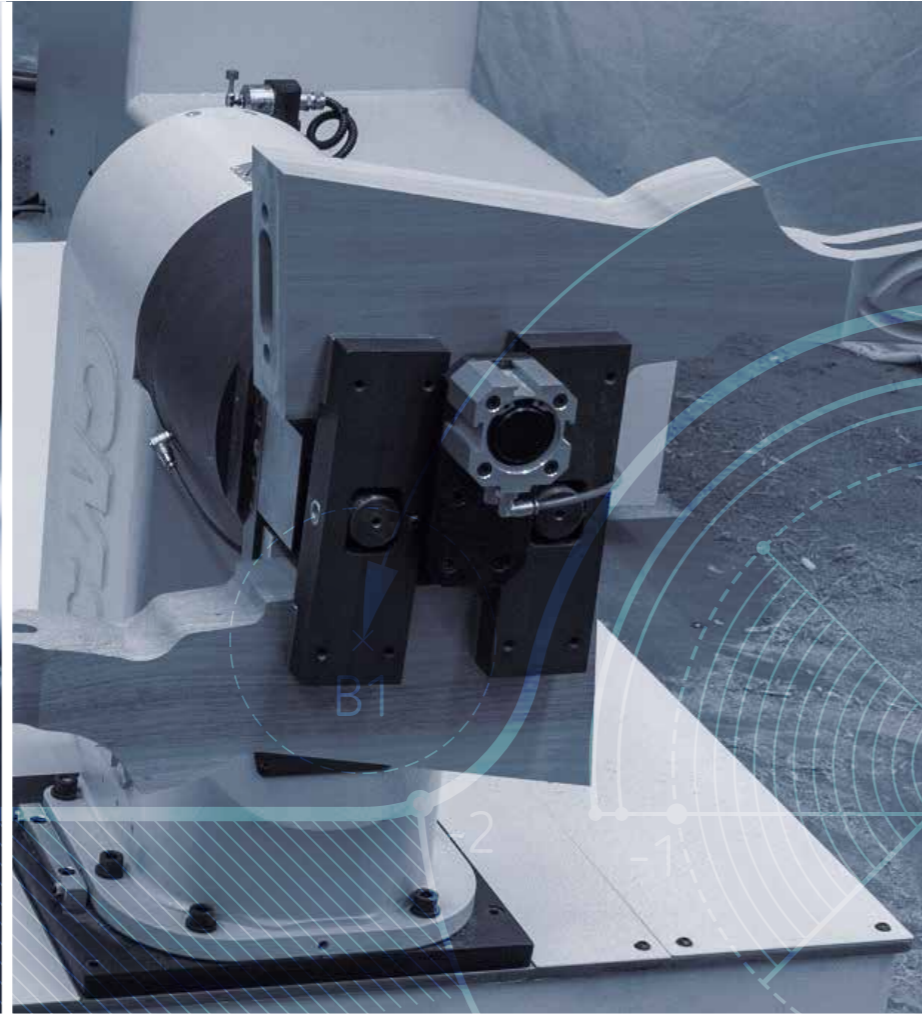
## WORLDWIDE PRESENCE

### AND DEDICATED WAREHOUSES AT THE SERVICE OF EVERY CUSTOMER

- 36,000 different codes to serve machines of all ages
- 1 central warehouse in Zogno and other 6 fully equipped warehouses in the world, in order to ensure shipping optimisation and cut waiting times
- 98% of orders available in stock
- spare parts guaranteed by a scrupulous control process and validated by our in-house quality laboratory
- availability to prepare lists of recommended spare parts based on the customer's needs, in order to minimise downtime risk



# TECHNOLOGY AT THE SERVICE OF INNOVATION







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