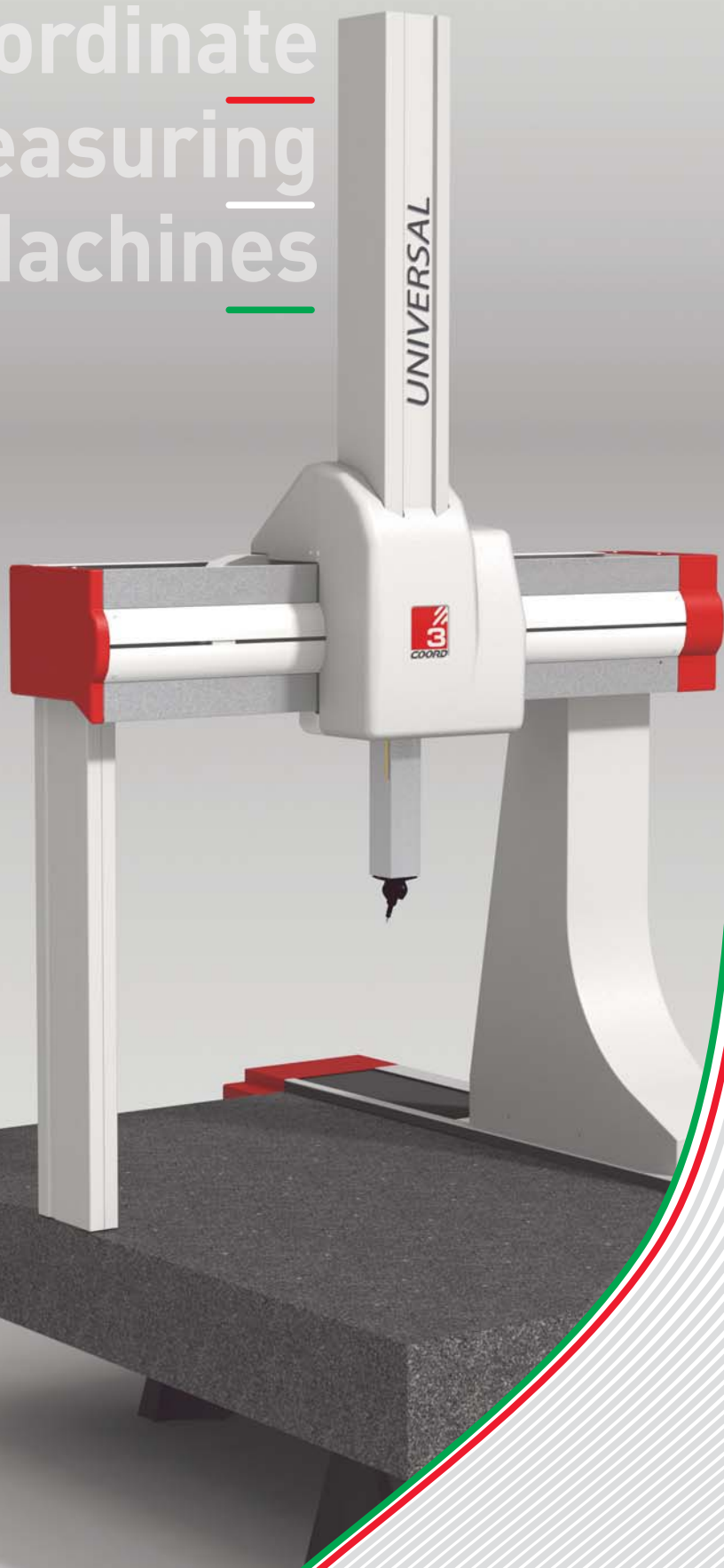


Coordinate Measuring Machines





Sample of COORD3 major Clients:

- ABB
- ALCOA
- ALENIA
- ALLGAIER WERKE
- AUDI
- BERTONE
- BMW
- BOSCH
- CAGIVA
- CATERPILLAR
- CENTRO RICERCHE FIAT
- CHERY AUTOMOBILE CO. LTD.
- COMAU
- DALMINE
- EATON
- ENEA BRASIMONE
- FASA-RENAULT
- FATA ALUMINIUM
- FAW HAINAN
- FIAT
- FORD
- G. AGUSTA
- GOODYEAR
- HI-TECH MOLD
- ITALDESIGN
- IVECO
- JOBS
- KARMAN STAMPOSTECH
- KIKUCHI
- LANDRA
- LEAR CORPORATION
- MAGNA
- MAGNETI MARELLI
- MATRA MARCONI SPACE
- NUOVO PIGNONE
- PEUGEOT CITROEN AUTOMOBILE (DONGFENG)
- PIAGGIO
- PININFARINA
- RENAULT
- SAFILO
- STOLA
- TELCO
- TEXTRON AUTOMOTIVE
- TRW AIR BAG SYSTEMS
- VOLKSWAGEN



Since 1973 COORD3 has designed, manufactured and supplied Coordinate Measuring Machines (CMM) and innovative dimensional metrology solutions.



Manufacturing companies around the world rely on COORD3 Metrology Solutions to measure, certify and improve the quality of their products.



An installed base of over 3000 Coordinate Measuring Machines is testimony to the COORD3 international reputation established for technological excellence, product support and reliability for its full range of Italian manufactured CMM products.

COORD3 INDUSTRIES an Italian company certified ISO 9001:2008.



COORD3 INDUSTRIES is an OEM supplier to NIKON METROLOGY, EROWA AG and CARL ZEISS IMT



Horizontal Arm

Horizontal arm CMMs are the ideal solution to measure thin-walled components including car bodies, sheet metal panels, vehicle glass, dashboards and for the inspection of mechanical parts such as engine blocks and gearbox castings, and aeronautical and automotive components. All horizontal arm CMM systems are available both in single and dual arm versions. COORD3' horizontal arm CMM range includes:

Model	Measuring Strokes (mm)		
	X Axis	Y Axis	Z Axis
Swan SI	3000, 4000, 5000, 6000 (*)	1200, 1500, 1600	1200, 1500, 2000, 2500
Swan L	2000, 3000, 4000, 5000, 6000	1200, 1500	1500, 1800, 2000
Jupiter	5000, 6000, 8000 (*)	1400, 1600	2000, 2500, 3000

(*) Other measuring Strokes available on request



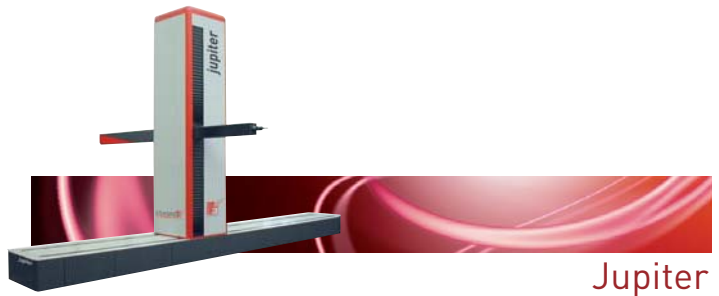
Swan SI

Available as a "Runway" structure with the main guide-way beam attached to the floor. The light and robust carriage, built entirely of light alloy, as well as the dual mechanical guide-way on the X beam, provide reliability, precision and rapid measurements.



Swan L

Available as a "Console" structure, where the main guide is attached to the side of a rigid cast iron surface plate. "Console" structures are extremely modular providing both CMM flexibility and programmability providing speed and intuitive use over traditional measurement gauges.



Jupiter

Available as a "Runway" structure with the main guide-way beam attached to the floor which can be installed at flush-floor level and has man walkable covers to protect the X guide-ways. The entire CMM structure is thermally insulated and suitable for use directly on the manufacturing floor; its open structure provides maximum accessibility of the measuring space and simplifies part loading and unloading operations.



CMM Bridge

Bridge CMMs are perfect for small, medium and large measuring applications and offers optimum performances, guaranteeing an excellent cost/performance ratio with the undisputed advantage of the incorporated work surface. COORD3 offers a complete range of bridge CMMs, from the compact ARES NT to the extra large KRONOS NT series.

All COORD3 Bridge CMMs are built using the most advanced CMM construction technology and can be equipped with a full range of probes (point-to-point, scanning probes and laser scanners) as well as manual, motorized indexable/continuous probe heads.



Model	Measuring Strokes (mm)		
	X Axis	Y Axis	Z Axis
UNIVERSAL	1500, 2000, 2500, 3000	1000, 1200, 1500	900,1000
Ares NT	500, 700, 1000	500, 650	500
Hera NT	700, 1000, 1200, 1500, 1800, 2000	700, 850, 1000	500, 650, 700, 850
Kronos NT	2000, 2500, 3300, 4000	1300, 1500, 2000	1000, 1300,1500





COORD3 Universal CMM

COORD3 UNIVERSAL is the new family of Bridge measuring machines. UNIVERSAL results from decades of experience in advanced CMM design and establishes the new CMM industry benchmark for design simplicity, advanced material selection and construction technologies. The COORD3 UNIVERSAL CMM is available in several model sizes with best-in-class dynamics and metrology performances and can be configured with a motorized indexable and continuous probe heads with point-to-point, continuous scanning and laser probes.

Mobile Bridge Frame in Advanced Alloy

The use of advanced aluminum alloy for the whole mobile structure ensures both excellent dynamic performances through moment of inertia optimization. New and exclusive Y beam design manufactured from micro-machined extruded alloy and a large section alloy Z ram (90 x 90 mm) for maximum rigidity flexibility and allowing use of motorized continuous and indexable probe Heads with point-to-point, continuous scanning and laser probes.

One Piece Granite Surface Plate

The unique design of monolithic granite plate with integral guide-way guarantees maximum rigidity, optimizes metrological performance with minimum footprint, and allows optimum accessibility to the CMM measuring area. Isostatic support provides robust support with maximum installation flexibility.

Air Bearing System

The Air Bearing guide-way system ensures maximum smoothness eliminating any friction between the sliding surfaces. All axes are equipped with isostatic support/guide system, combining perfect alignment optimizing the CMM geometry and assembly process.



Direct Axis Drive Systems

All measuring axes adopt a direct drive system ensuring maximum performance and positioning accuracy. The toothed drive belt systems insulate the CMM structure from transmission of vibrations and generated heat.

Measuring Scales

Latest generation high resolution linear scales with integral anchoring system allows for linear expansion without distortion and combined with the multi-sensor temperature system minimizes errors induced by variations in ambient temperature.

Multisensor thermal compensation with Wireless connection

A next generation COORD3-T WIRELESS multi-sensor thermal compensation system with high precision temperature sensors for both part and CMM structure.

A COORD3 UNIVERSAL CMM can be equipped with a wide range of options including:

- Safety Protection Laser Scanning System with "SAFE MEASURE" function that constantly checks for the presence of operators in the pre-defined CMM security perimeter region and automatically decreases CMM speed without interrupting the measurement cycle
- Active vibration isolation system (AVM)
- Y axis beam protection system comprising bellows and covers system for use in harsh environment applications



Ares NT

The ARES CMM series is the COORD3 entry level bridge type CMM. The ARES CMM are automatic, flexible and compact measuring machines that can be fitted with manual and automatic probe heads. ARES CMM is equipped with point-to-point probes and represents a universal measuring device for general purpose inspection applications. The ARES NT series is characterized by the use of innovative materials and construction methodologies; the Z spindle is produced from Silicon Carbide and the mobile bridge of aerospace alloy maximizing structural rigidity and reducing moving masses minimizing potential inertia errors.

- Integrated one-piece granite surface Plate.
- Z ram made of micro-machined alloy extrusion (NT-L) or Silicon Carbide (NT).
- Zero hysteresis friction drives for smooth and repeatable motion.
- Measurement system using high resolution transducers (0,1 µm).



Hera NT

The HERA CMM series, designed with advanced CAD design techniques, are flexible and precise measuring machines and able to carry out measurements both in point-to-point mode as well as continuous scanning measurements with both contact and laser sensors. The HERA CMM is available in a wide range of model sizes, with multi-sensor temperature compensation for use in manufacturing environments. HERA CMM is also available in NT configuration, incorporating a Z ram spindle produced from Silicon Carbide which further improves the already excellent HERA metrological performances.

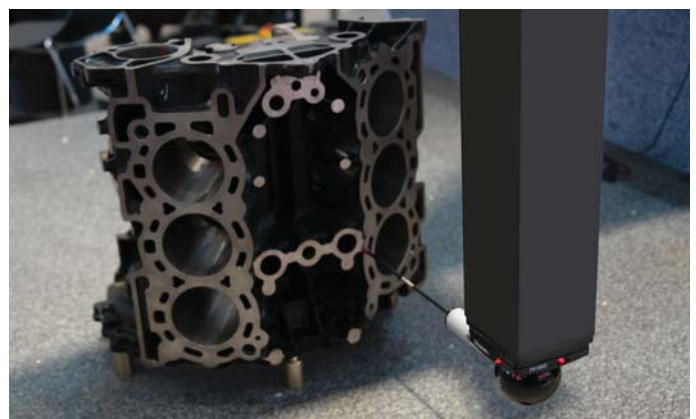
- Moving alloy bridge frame on granite table machine base with isostatic supporting system.
- Z ram made of micro-machined alloy extrusion or Silicon Carbide (NT).
- Combination toothed belt and zero hysteresis friction drives for smooth and accurate movements.
- Measurement system using high resolution transducers (0,1 µm).
- Multi-sensor temperature compensation system complete with part temperature probe.



Kronos NT

KRONOS is the COORD3 series of large bridge CMMs and represent an alternative to traditional Gantry CMM machines for high precision measurement of mechanical parts without the need of specially constructed foundations. Its robust construction, and protection system of covers and bellows, allow the KRONOS CMM to operate in the various production environments including Metrology Rooms and manufacturing areas. KRONOS CMM is also available in NT configuration, incorporating a Z ram spindle produced from Silicon Carbide which further improves the already excellent HERA metrological performances.

- Moving alloy bridge frame on granite table machine base with isostatic supporting system.
- Z ram made of micro-machined alloy extrusion or Silicon Carbide (NT).
- Combination rack & pinion and zero hysteresis friction drives for smooth and accurate movements.
- Measurement system using high resolution transducers (0,1 µm).
- Multi-sensor temperature compensation system complete with part temperature probe.

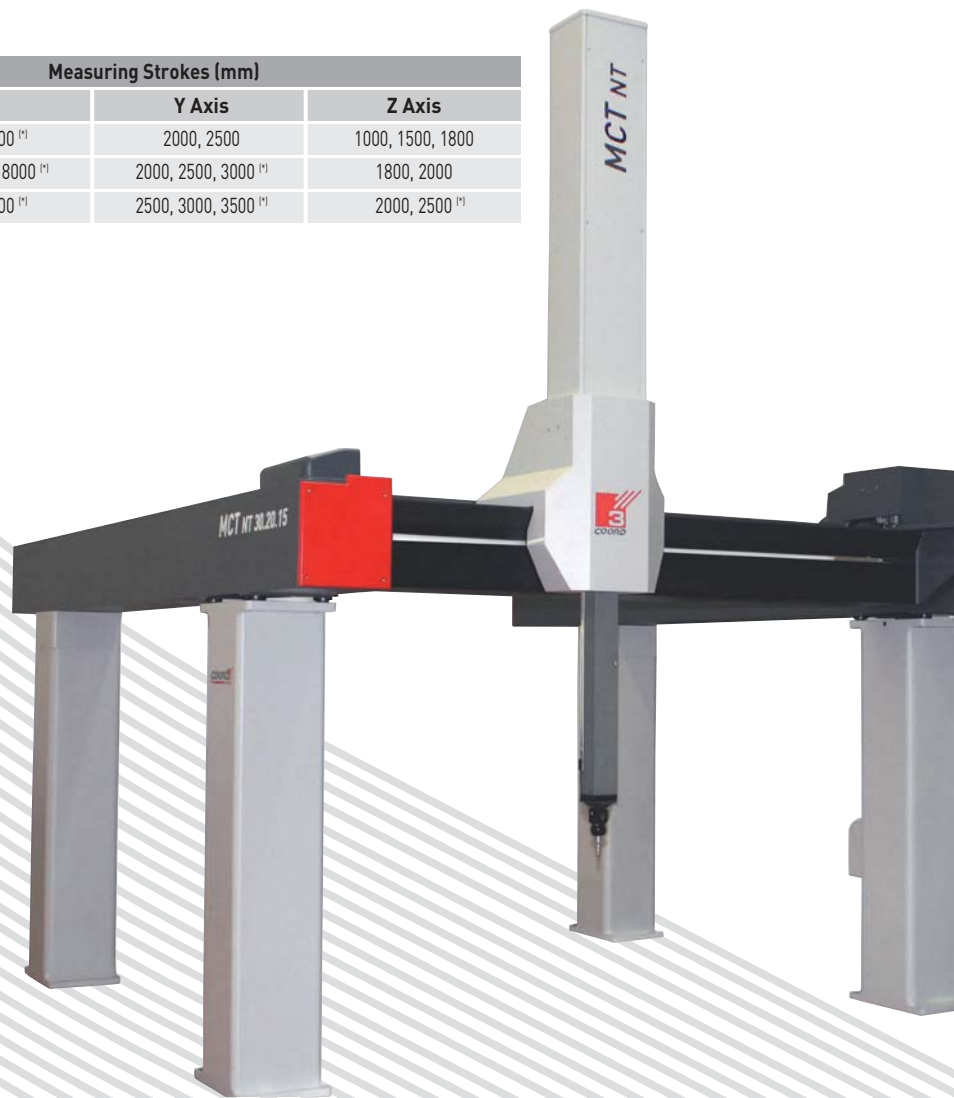


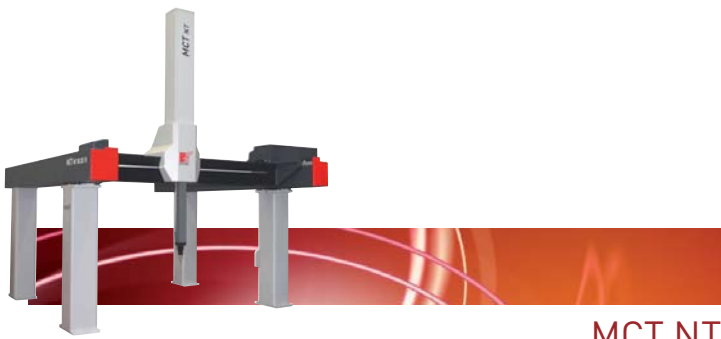
CMM Gantry

Gantry configuration of CMM guarantees excellent metrological performance when measuring large-scale objects. The main structure (pillars and longitudinal guide-ways) remains static and fixed to the foundation base with only the main carriage moving. Gantry architectures minimize errors of inertia and distortions in shape. Gantry CMMs provide operators to full access to the work area both during loading and unloading of parts, as well as during the programming and inspection process. Gantry CMMs are ideal precision tools for aerospace, wind energy, construction, defence and automotive manufacturing sectors. COORD3 offers a complete range of Gantry CMMs, based on three product lines, each designed to guarantee the best price/performance ratio.

Model	Measuring Strokes (mm)		
	X Axis	Y Axis	Z Axis
MCT NT	3000, 4000, 5000, 6000 (*)	2000, 2500	1000, 1500, 1800
MCT Star Light	3000, 4000, 5000, 6000, 8000 (*)	2000, 2500, 3000 (*)	1800, 2000
MCT Plus	5000, 6000, 7000, 8000 (*)	2500, 3000, 3500 (*)	2000, 2500 (*)

(*) Other measuring Strokes available on request





MCT NT

The MCT NT is characterized by supreme mechanical design and stability, ensuring long term accuracy reducing annual calibration costs. MCT NT is a blend of the most advanced technology, design (FEM analysis), material selection and experience gained from pioneering the dimensional inspection of large parts and combine to provide outstanding customer price/performance ratio.

MCT NT is also available in NT-Light configuration. The MCT NT-L is the entry level solution for Gantry CMM, adopting a alloy Z spindle and a single X axis scale system.

- Y main carriage in advanced alloy: ensures high rigidity combined with low weight to reduce inertia effects.
- Z ram in Silicon Carbide: ensuring higher rigidity - a key point to achieve high accuracy.
- Multi-sensor temperature compensation is implemented as a standard feature on MCT NT to optimizes machine behavior.
- MCT NT models are supplied with dual measuring scales.
- Machine beams are free to expand (no constraints) on their main axis (machine X axis).
- Optical scales free to expand lengthwise. Resolution: 0,1 microns.
- MCT NT can be supplied with a bellow kit providing further protection on the main structure (X/Y axes).



MCT StarLight

MCT StarLight is the range of medium-to-large Gantry CMMs, notable for its excellent structural stability and its flexibility, in that it can be configured according to the requirements of specific applications.

- Generous distance between bearings for optimum mechanical rigidity.
- Main Y carriage with high rigidity and exclusive tubular steel structure.
- Z ram in extruded aluminum alloy guarantees stability and minimizes inertia.
- X beams with large transversal section in stabilized steel, equipped with pillar support system which allows linear expansion without risking stress or distortion.
- X/Y guideway axes in ground high resistance epoxy resin.
- Measuring system with high resolution linear transducers (0.1 μm) with "Dual Reader" system on longitudinal X axis.
- "Dual Drive" system on main X carriage (optional up to 2500 mm Y axis stroke).
- Multiprobe temperature compensation system, including manual part probe (optional).



MCT plus

MCT Plus is a large-scale Gantry CMM created for industrial measuring applications. Its unique structure incorporates the "Dual Drive" and "Dual Scales" system on the X beams limiting structural distortion during motion and guaranteeing metrological performance to the highest standards in its class.

- Wide distance between bearings for optimum mechanical stability.
- X and Y axes with rack & pinion drive system for efficient principle axes motion.
- X beams with large transversal section produced in stabilized steel equipped with pillar support system allowing linear expansion without risking stress or distortion.
- Measuring system with high resolution linear transducers (0.1 μm), and "Dual Scale" system on longitudinal X axis.
- Dual Drive system on main X carriage.
- Multi-probe temperature compensation system, including manual part probe (optional).



Services

COORD3 offers a wide range of after-sales services guaranteeing the optimum operation of our measuring systems to customers.

- **ACCREDIA CALIBRATION CENTER:** calibration services and ACCREDIA certification in accordance with ISO 10360-2
- **CMM RETROFIT:** electronic, mechanical and software upgrades
- **CMM MAINTENANCE:** maintenance contracts and annual calibration
- **MEASUREMENT:** measurement, digitizing and reverse-engineering services
- **RELOCATION:** pack-up and relocation of CMMs

LAB ACCREDIA 138

COORD3's ACCREDIA LAB is qualified to carry out performance tests on all brands and models of CMM, in accordance with the ISO 10360-2 standard.

The correct metrological calibration of a CMM guarantees:

- The possibility of tracing measurements to national standards
- Evaluation of measurement variables
- The possibility of repeating and reproducing results
- The compliance of data to ACCREDIA and ISO standards

RETROFIT

The upgrade of an existing CMM system can reduce maintenance costs and prolong its life while extending the original investment. Given the constant improvement in electronics, updating or replacement of the original CMM Control System can significantly improve the performance and reliability of a CMM. Moreover, upgrading CMM software makes the most recent developments in measurement programs available (graphic reports, CAD data import/export, offline programming, the latest in probe-heads and measurement sensors), providing a noticeable improvement in productivity and greater CMM flexibility and capabilities.

MAINTENANCE

Today's quality standards demand that Coordinate Measuring Machines be subject to periodic performance verification reviews and recertification. Scheduled maintenance provides a systematic inspection of the critical CMM components guaranteeing correct functioning and reliability. COORD3 service offers a complete range of maintenance and calibration contracts tailored to specific customer needs and guaranteeing reliability and ongoing optimal CMM performance.

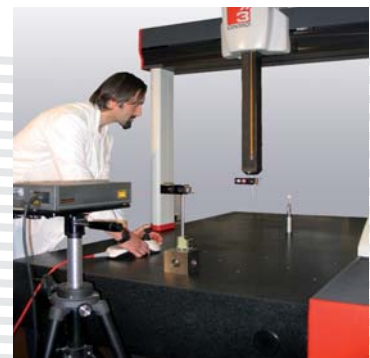
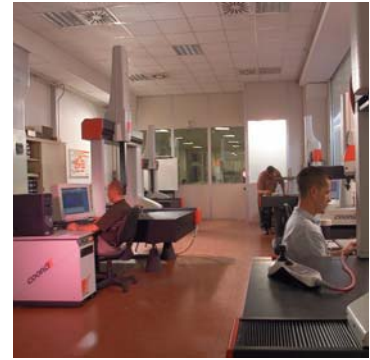
RELOCATION

A CMM is a technologically complex system which requires specialist care and attention when being moved or relocated. Inadequate packing and incorrect clamping of the system can cause serious and costly damage to bearings, guides and drive systems. COORD3 Service Group undertake the correct dismantling and packing of your CMM including the clamping of movable structure and protection of guide-ways and suggests the appropriate procedures for moving of the machine.

MEASUREMENT SERVICES

COORD3 and its Official Representatives offer the following services:

- First article inspection
- Third Party Measurement and issue of an inspection report
- Digitization of unknown sculpted surfaces
- Comparison of mathematical models and physical parts and issue of an inspection report
- Reconstruction of mathematical models using point clouds and reverse-engineering
- Third Party Measurement and issue of an inspection report
- Training courses in CMM metrology and programming
- CMM Part Programming





Full list of Agents & Distributors available at
www.coord3.com

COMPANY WITH
QUALITY SYSTEM
CERTIFIED BY DNV
= ISO 9001 =



COORD3 Industries S.r.l.
**Headquarters/Administration
and Sales:**

Strada Statale 25, n. 3
10050 Bruzolo (TO) - Italy
Tel.: +39 011 9635511
Fax: +39 011 9635566
www.coord3.com
www.coord3-cmm.com
info@coord3.it

MILANO

Via B. Diotti, 21
20153 Milano - Italia
Tel.: +39 02 47999197
Fax: +39 02 47997754

PISTOIA

Via degli Oleandri, 8
51100 Chianciano (PT) - Italia
Tel.: +39 0573 935058
Fax: +39 0573 539970

Subsidiaries:

P. R. CHINA

COORD3 Beijing Co., Ltd
1st floor, Fortune Plaza
Long Sheng Industrie Zone
No. 7 North Rongchang street
EDZ, Beijing 100176 - P.R.China

INDIA

COORD3 Metrology India Pvt. Ltd.
49/39, Site - IV,
Industrial Area Sahibabad
Ghaziabad 201010 - India

USA

COORD3 Metrology, Inc.
48861 West Road
Wixom, MI 48393
USA