precision mechanics

Excellence through passion

The Headquarters

NEWMEC: The made in Italy of precision mechanics





Obtained certifications







>60 Specialized employees Cad-cam active licences

2000

production area

m2 of

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Our TEAM A group of specialized people

The made in Italy

Of high precision mechanics

WHO WE ARE

Newmec was founded in 2010 in Brescello, Reggio Emilia. We are a mechanical company with a fleet of latest-generation machines.

The effective organization, the know-how and the highly specialized staff have allowed our company to become a point of reference in the industrial sector for precision milling and turning processes.

The company pursues the values of Made in Italy, producing unique and very high-quality components.

The core business



PACKAGING PHARMACEUTICAL MEDICAL







AERONAUTICS

DEFENCE

AEROSPACE

The obtained certifications



ISO 9001:2015

ISO 9100:2015

ISO 14001:2015

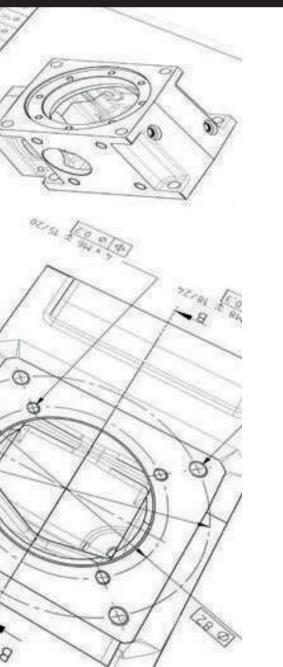
CYBER SECURITY

Data and network security is essential to ensure the protection of information and services in an increasingly complex and digital world. This means keeping protection measures up-to-date, constantly monitoring threats and reacting promptly in the event of cyber-attacks. Newmec has fully integrated the new cybersecurity provisions into its strategy, a necessary added value to protect certain sectors, such as Defence.

Manufacturing Strategies

- Each designer manages his own machine with a notebook connected to the design room, using TopSolid 7.16 and hyperMILL to control the production systems.
- Our advanced metrology room offers customers complete testing and quality control documentation.
- The dimensional survey service measures geometric dimensions and tolerances of mechanical parts and components. Laser scanning acquires any shape, even non-geometric, allowing reverse engineering and dimensional testing via 3D compare.
- Our production and management departments are equipped with ZEISS measuring instruments, calibrated and certified every six months.
- Production is monitored in real time via customized software, which connects bar code readers, machinery and systems for accurate management of traceability and the progress of the order.
- Organized into 3 production shifts, we work 24/7.

Mechanical Groups' assembly



NEWMEC specializes in assembling complex, high-performance mechanical groups for various sectors. We use high-precision CNC machines and advanced equipment to ensure quality and reliability.

PROCESS STAGES:

1. Design: Detailed technical drawings and simulations are created using CAD/CAM software.

2. Machining: Components are manufactured with tight tolerances using selected materials.

3. Preliminary Assembly: Components are assembled with temporary fixtures to ensure alignment.

4. Testing and Verification: Functional tests, load tests, and durability checks are performed.

5. Final Assembly: Final assembly is completed using advanced techniques, followed by a final quality check.

With our expertise and commitment to quality, we are a reliable partner for tailored mechanical assembly solutions.

Vertical warehouse



All purchased materials are sorted and catalogued according to their type, in order to comply with all internal procedures as per certification.

This organization allows to manage at full efficiency, the flow of incoming and outcoming goods.

Located in the warehouse there are also spaces used for the management of Kanban orders, for the control of returned material from treatments and/or external processing and a shipping and packaging area.



Turning departmer

Production area

Our company offers a department dedicated to different turning operations according to our client's necessities. We are able to operate machining from

the special prototype up to small-medium series of production.

Secondary turning

For the execution of CNC Turning operations, our Machines are composed of 6 axis with motorized turrets up to 40 positions, C axis, which allow turning parts up to a diameter of 450.



	Maximum strokes possible		
CNC TURNING MACHINES	X axis	Y axis	Z axis
MAZAK Super Quick Turn 200 MY	180 mm	100 mm	575 mm
MAZAK Super Quick Turn 200 MY	180 mm	100 mm	575 mm
MAZAK INTEGREX 200-III	580 mm	160 mm	1545 mm
GOODWAY GS 280 Y	240 mm	120 mm	600 mm
DAINICHI F20	220 mm	250 mm	500 mm
DMG MORI NLX 2500 y / 700	350 mm	100 mm	795 mm
DMG MORI NLX 2500 y / 700	350 mm	100 mm	795 mm
DMG MORI NLX 2500 y / 700	350 mm	100 mm	795 mm
AVM OSCAR	270 mm	320 mm	720 mm
MORI SEIKI SL 15 M	430 mm	500 mm	300 mm
DMG MORI NTX 2500 / 1500 2GE	550 mm	1500 mm	300 mm

Milling department Production area

In the last few years, a large investments plan has led to the inclusion of strategic equipment and machinery, both from the point of view of the potential and the processing but also from the point of view of the precision required.

Milling is a rapidly expanding department, specialized in 5 axis machining as well as horizontal and vertical machining centers.

We are able to handle machining from the special prototype up to small-medium series of production.

WORK CENTERS	Maximum X axis	n strokes p Y axis	ossible Z axis
DMG MORI ECOMIL 70 5 axis with Slimeline	800 mm	600 mm	800 mm
DMG MORI DMU 50 EVO LINEAR 5 axis	400 mm	450 mm	250 mm
HAAS UMC 750 SS 5 axis	750 mm	500 mm	500 mm
HAAS UMC 750 SS 5 axis	750 mm	500 mm	500 mm
HAAS UMC 750 SS 5 axis	750 mm	500 mm	500 mm
MIKRON MILL P 800 5 axis	700 mm	600 mm	500 mm
HAAS UMC 500 SS 5 axis	610 mm	406 mm	406 mm
MATSUURA MX-850 5 axis	900 mm	780 mm	650 mm
DMG MORI DMC 75 5 axis palletized (3 pallets)	500 mm	600 mm	750 mm
DMG MORI DMU 75 5 axis	500 mm	600 mm	750 mm
CDL VERTICALE EUMA 1020 4 axis	1000 mm	600 mm	600 mm
CDL VERTICALE EUMA 650 ROTOPALLET	650 mm	450 mm	530 mm
CDL AWEA BM-1460 3 axis	1420 mm	610 mm	600 mm
MORI SEIKI SV 500 3 axis	800 mm	500 mm	600 mm
HAAS VF1 3 axis	508 mm	406 mm	508 mm
MORI SEIKI SV 500 3 axis	800 mm	500 mm	600 mm
HAAS UMC-500SS 5 axis	610 mm	406 mm	406 mm
Spinner U-630 ADVANCED	630 mm	530 mm	465 mm

Some of our machinery



DMG MORI DMC-75 palletised monoblock (3 pallet)



DMG MORI DMU-75 monoblock



DMG MORI ECOMIL 70 5 axis with Slimeline



HAAS UMC 750 SS 5 axis





MIKRON P 800 5 axis



MATSUURA MX-850 5 axis

HAAS UMC-500SS 5 axis

METROLOGIC ROOM





PGS100



HIPP BORESKOPE VB



CONTURA RDS 10/12/6



CONTURA RDS 12/18/8



ZEISS Stemi 305 trino



ZEISS Spectrum

The materials

Ferrous materials

Oxidable

- Carbon for Tempering C45 - 42CrMo4 - 39NiCrMo3 - ASTM - A105
- For Casehardening 16MnCr5 - 20MnCr5 - 18NiCrMo
- For Surface Hardening C43 - 40NiCrMo3
- Automatics 11SMnPb30 - 11SMn30 - 11SMnPb37 - 36SMnPb14
- Chrome Bars
 Chrome Tubes (Dimensions: mostly round. In some cases, flat
 and square)
- Mechanical and Hydraulic Pipes
- Square and Triangular Hollow
- Internal h8 <u>Seamless</u> Drawn Tubes
- Seamless Drawn Tubes
- Welded Drawn Tubes
- Non-Structural Alloys
 S235JR, S235J2, S275JR, S275J0, S355J0, S355J2, E295, E335
- Cast Iron

Our extensive chain of suppliers, always in constant expansion and the internal warehouse, allow us to range and find multiple qualities and types of materials.

Below we provide you with a complete list of the most common materials we use as well as more difficult or special materials.

Upon request by our customers, we can provide technical/ informative support about uses or alternative materials to employ.

Stainless steel

- EN 10088-2 EN 10028-7 AISI 304/304L, AISI 321, AISI 316L, 316TI
- EN 10088-3 DIN 1017 AISI 304/304L, AISI 316/316L
- EN 10088-3 AISI 303, 304, 304L, 316, 316L, 316Ti, 321, 310S
- EN 10088-3 AISI 304/304L, AISI 303, AISI 316/316L
- EN 10088-3 DIN 1014 AISI 304/304L, AISI 316/316L
- EN 10088-3 DIN 178 AISI 304/304L, AISI 316/316L
- EN 10056-1 DIN 1028 AISI 304/304L, AISI 316/316L
- EN 1.4307
- Round pipes ASTM A312/ A213 / A269 EN10216-5 AISI304/304L, AISI 316/316L
- Austenitic stainless steel seamless tubes
- Stainless steel perforated bars
- Laser and Waterjet cuts can be made in AISI303, AISI304, AISI316
- And other special materials also available AISI440, AISI 420 1.4028, AISI 630 1.4542, and other special materials
- Steel duplex e superduplex

Non ferrous materials

Aluminium

Series 1000
Series 2000
Series 5000
Series 6000
Series 7000

Brass

- CW612N-CuZn39Pb2 OT59
- CW505L-CuZn30 OT70
 CW614N-CuZn39Pb3 OT58
- CW506L-CuZn33 OT67
- CW617N-CuZn40Pb2 OT58
- CW508L-CuZn37 OT63
- CW618N-CuZn40Pb2AI OT58
- CW509L-CuZn40 OT60
- CW620N-CuZn41PbAI OT58

Tin bronze

- UNI EN 1982
- CC491K
- CC493K
- CuSn12-C
- CC483K

Bronze aluminium

- UNI EN 1982
- CC333G (EX UNI 5275)

Titanium Inconel Ergal

Plastic materials

 PA - POLIAMMIDE AKULON® PA 6G - POLIAMMIDE OMNIAMID POM – POLIOSSIMETILENE OMNIACETAL PET – POLIETILENTEREFTALATO ARNITE PE - POLIETILENE PE HMW / UHMW PP – POLIPROPILENE PTFE - POLITETRAFLUOROETILENE PVDF - POLIVINILDENFLUORURO FORAFLON PC - POLICARBONATO PMMA – POLIMETILMETACRILATO PEEK - POLIETERETERCHETONE PVC - POLIVINILCLORURO PU - POLIURETANO KEVLAR SINTEK VULKOLLAN CARBON FIBRE POLYCARBONATE

Special operations

Special Mechanical Operations

BROACHING TOOTHING SLOTTING

EDM

Plunge EDM

• Wire EDM

- EDM Puncturing
- EDM Grinding

DEEP PUNCTURING LAPPING

GRINDING

- Cylindrical
- Centreless
- Flat

LASER MARKING PUNCHING BENDING		
WELDING		
 Laser Welding 		
 Tig Welding 		
 Mig/Mag Welding 		

Heat Treatments

QUENCHING AND TEMPERING	CARBURIZING	STANDARDISATION	HARDENING	TUME TEFL
STRESS RELIEVING	(CASE HARDENING)	ANNEALING	 Inductive hardening 	MIRR
AGEING	CARBONITRIDING	(complete, isotherm, of machinability, etc)	 Laser hardening 	SUPE
STABILISATION	NITRIDING	TEMPERING	Vacuum hardening	COPP

Superficial Treatments

TENIFER®

NIKEL-CHROME

ELETROLITYC NIKEL COATING

Chemical Nickel Coating

Nickel Plating

CHROME COATING

PASSIVATION

Chromic Passivation

Steel and Titanium Passivation

ELECTROPOLISHING

BRIGHTENING

POLISHING

SHOT PEENING

SATIN FINISHING

SAND BLASTING

ANODIC OXIDATION (ANODIZING)

• Natural / protective

Hard Anodic

• Semi-Hard

Hard to Sample

• Hard to Casting "Super coat" Treatment

BURNISHING

MBLING

FLON COATING

ROR POLISHING

PER LATEX COATING

PPER PLATING

CERAMIC PLATING

SURTEC

GILDING

TUNGSTEN CARBIDE CATAPHORESIS

• Black Cataphoresis

PAINTING

- Water based
- Vulcanization
- Powder based

PICKLING DEHYDROGENATION PHOSPHATING

- Manganese based
- Zinc based (ref. UNI EN ISO 9227)
- Black

GALVANISING

- Hot
- Cold
- Electrolytic
- Spray

METAL PLASTIFICATION

PTFE (Teflon®)

PVD (Phisical Vapor Deposition)

DLC

GEOMET®

- GEOMET® 500 Ref. ISO10683 - EN 13858 - ASTM F1136/F1136 M
- GEOMET® 321

Ref. ISO10683 - EN 13858 - ASTM F1136/F1136 M



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