

newmec

precision mechanics

“

**Excellence
through passion**

”

The Headquarters

NEWMEC: The made in Italy of precision mechanics



35

High precision
machines



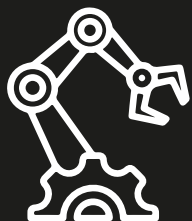
2000

m2 of
production area



4

Obtained
certifications



3

ZEISS Testing
machines



20

Cad-cam active
licences



>60

Specialized
employees

Our TEAM

A group of specialized people



A black and white photograph showing a close-up of industrial machinery, specifically several interlocking gears and shafts. The image is positioned on the left side of the page, partially overlapping the white background.

The made in Italy

Of high precision mechanics

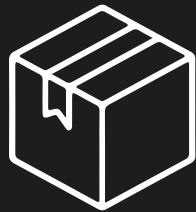
WHO WE ARE

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



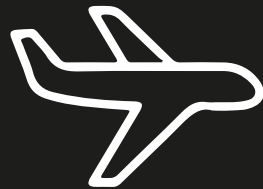
PACKAGING



PHARMACEUTICAL



FORMULA 1



AERONAUTICS



DEFENCE



AEROSPACE

The obtained certifications



ISO 9001:2015



ISO 9100:2015



ISO 14001:2015

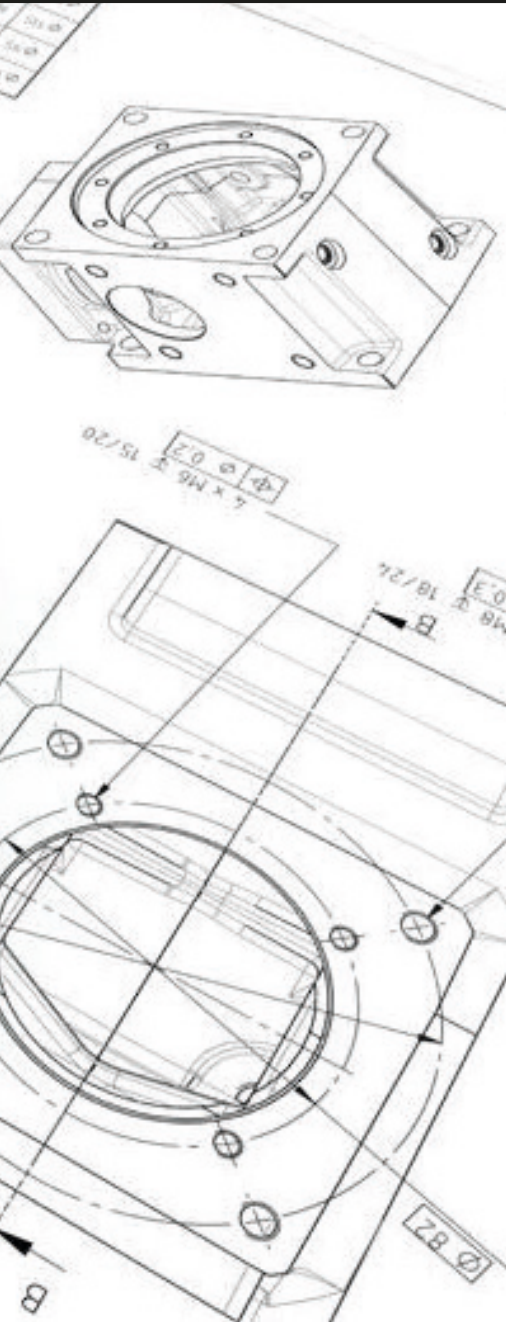
CYBER SECURITY

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 outgoing 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.

VERTIMAG



Turning department

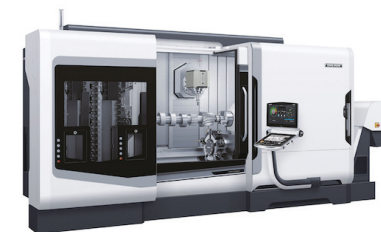
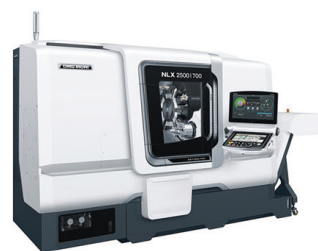
Production area

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.



CNC TURNING MACHINES	Maximum strokes possible		
	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 INTEGREGX 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 strokes possible		
	X axis	Y axis	Z axis
DMG MORI ECOMIL 70 5 axis with Slimline	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 Slimline



HAAS UMC 750 SS
5 axis



MIKRON P 800
5 axis



HAAS UMC-500SS
5 axis



MATSUURA MX-850
5 axis

METROLOGIC ROOM



PGS100



HIPP BORESCOPE VB



CONTURA RDS
10/12/6



ZEISS Stemi 305 trinocular



CONTURA RDS
12/18/8



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 Seamless 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-CuZn40Pb2Al - OT58
- CW509L-CuZn40 - OT60
- CW620N-CuZn41PbAl - 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 FORAFLOX
- PC - POLICARBONATO
- PMMA - POLIMETILMETACRILATO
- PEEK - POLIETERETERCHETONE
- PVC - POLIVINILCLORURO
- PU - POLIURETANO
- KEVLAR
- SINTEK
- VULKOLLAN
- CARBON FIBRE
- POLYCARBONATE

Special operations

Special Mechanical Operations

BROACHING
TOOTHING
SLOTING

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
STRESS RELIEVING
AGEING
STABILISATION

CARBURIZING
(CASE HARDENING)
CARBONITRIDING
NITRIDING

STANDARDISATION
ANNEALING
(complete, isotherm, of machinability, etc)
TEMPERING

HARDENING

- Inductive hardening
- Laser hardening
- Vacuum hardening

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

TUMBLING

TEFLON COATING

MIRROR POLISHING

SUPER LATEX COATING

COPPER 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®)

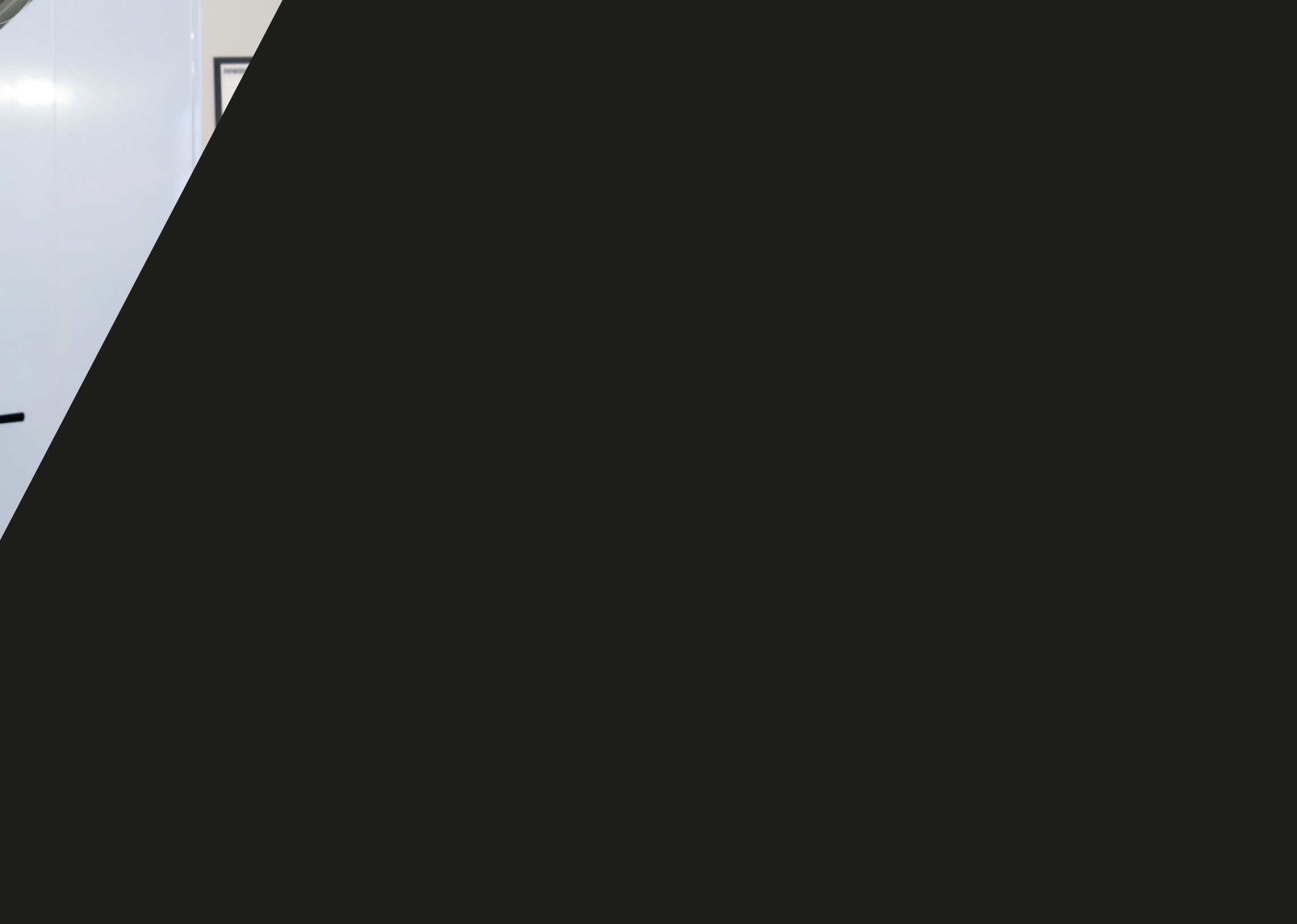
PVD (Physical Vapor Deposition)

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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