



#### CNC MACHINING



#### CNC MACHINING ► PRECISION MECHANICS

varieties and services.

Cutting-edge machines have been installed over the years and the highly qualified personnel has always had an eye on technological innovation both for the tooling machines and the equipment on board of the machines.

We are able to offer mechanical works for third-parties for both the turning and milling operations and to follow the entire production cycle from the raw to the final product.

Our machines are located in a 10,000 sqm plant and feature a wide range of machining







# MILLING MACHINES

#### ► MCM FORERUNNER



CNC (Computerized Numerical Control) machining centres in a FMS (Flexible Manufacturing System) composed of 8 "forerunner" machines

- Linear motors with spindles operating at a speed of 28,000 rpm;
   Possibility to work pieces up to 200 kilos
- Maximum size 600 x 550 x 500 m
- 154 pallet positions
  2.000 shared tools

High precision levels, finishing and speed (2g acceleration) in compliance with particularly close tolerances







## MILLING MACHINES ► MCM CLOCK 1200





CNC machining centers in a FMS line composed of four machines of the Clock 1200 series; Each machine is equipped with HSK100 spindles able to work any type of material at a speed of 14,000 rpm;

- Possibility to work pieces up to 500 kg;
- Maximum size 1,100 x 750 x 750 mm
- ▶ Maximum path 1,200 x 850 x 850 mm (X-Y-Z axes)
- ▶ 74 pallet positions
- ▶ 900 shared tools

Production of middle size components.







# MILLING MACHINES

#### ► MCM JET-FIVE



CNC machining centers in a FMS line composed of 2 machines of the JET-FIVE series;

- ▶ 1 machine equipped with a spindle on 4 axes at a speed of 14,000 rpm;
- ▶ 1 machine equipped with a spindle on 5 axes at a speed of 14,000 rpm;
- Possibility to work pieces up to 3,000 kilos (pallet and equipment are included)
- Maximum size 2,750 x 1,700 x 1,300mm
- Maximum path 3,000 x 2,000 x 1,800 (X-Y-Z axes)
- ▶ 28 pallet positions
- ▶ 480 shared tools















## MILLING MACHINES ► MCM JET-FIVE TAMBURO





CNC machining centers in a FMS line composed of 1 machine1 of the JET-FIVE TAMBURO;

- ▶ 1 machine equipped with a spindle on 5 axes at a speed of 20,000 rpm;
- Possibility to work pieces up to 2,000 kilos (pallet and equipment are included)
- Maximum size 10,000 x 2,000 x 600mm
- ▶ 760 shared tools









# CNC TURNING CENTERS ► BIGLIA CNC TURNING



▶ 2 CNC turning centers equipped with motorized tools, with C axis rotation, counter-spindle and bar loading; ▶ 3 CNC turning centers motorized tools and tailstock;

Motorized tools combine the advantages of a CNC turning with a 4-axis machining center; All turning center are equipped with equipment for polygon operations, rigid tapping operations and synchronization of the two spindles









- ▶ 4 traditional milling machines equipped with horizontal spindle and universal bi-rotary head;
- 4 traditional turning machines;











LVD AXEL High speed and quality CO2 laser cutting system

- Maximum cutting thickness: 25 mm iron/ 20 mm stainless steel / 15 mm aluminium
- Automatic system of loading/unloading pallet change
- ▶ 85 drawers for the storage of 3,000 x 1,500 mm metal sheets/ 3,000 kilo capacity
- ▶ Quick lens (5", 7.5" and 10") change

Production of light carpentry components that are later subjected to bending, welding and riveting. Fully automatic drilling and cutting sensors.

High-speed fly-cut technology no piercing mode to optimize repetitive processing cycles.









STRIPPIT VX-1525 punch press with KUKA pick & sort robot system

- > 20 ton/m high-quality hydraulic system;
  > Four 88,9 mm (3.5") autoindexable stations;
- Maximum material thickness: 3 mm

Metal sheet loading and semi-finished product unloading with KUKA pick & sort robot system; Quick tool change system;

Forming & quiet punch cycles with deforming and silent punching system.











LVD bending machines

- ▶ 1 PPEB 320 ton x 3 m bending machine
- ▶ 1 PPEB 170 ton x 3 m bending machine

Easy-form patented system correcting and checking the bend angle; Offline programming software.











More than 1,000 sqm are completely devoted to the welding/spot-welding and component assembly operations through riveting TIG/MIG robot welding system, 8 axes with rotary table, 4 m working area

- TIG/MIG welders with qualified operators







# QUALITY CONTROL

DEPARTMENT



Air-conditioned metrology lab for the quality control of the manufactured products, equipped with very high-precision equipment. Machines for three-dimensional inspection controlled by Zeiss Calypso software:

- Zeiss Contura
- ZEISS retrofit Dea Mistral
- FARO mechanical arm

Wolpert duroter, Equotip portable duroter, Diavite roughness meter Ceramic plane-parallel primary blocks, Taral resetter, sliding calipers, comparators, centesimal and millesimal micrometers for internal and external spaces, depth micrometers, intertest and pupytast.

▶ ISO 9001:2015 quality certification









#### SMIMEC S.p.A.

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#### **Opening Time:**

Monday - Friday: 08:00 - 12:00 am / 01:30 - 05:30 pm Saturday - Sunday: Close

"Nothing great was ever achieved without enthusiasm" Ralph Waldo Emerson

# THANK YOU FOR WATCHING

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