



MECAPRO

The versatile milling machine



Other products of the CNC MILLING PRODUCT RANGE



MECAPLUS
High productivity
3 axis CNC milling machine



MECAPLUS-HP
High performance
3 axis CNC milling machine



MECAEASY
Industrial milling machine
small and large format



TRIAX Mobile
Milling center
for precision 3D

STRENGTHS

- Precision milling/cutting CNC machine (router), easy to use with numerous possibilities of customization.
- Designed and realized for a professional use.
- Machining of sheet plates in various fields such as aeronautics, plastic processing and composites, precision mechanics, aluminium processing, advertising and POP...
- Equipment with fixed table in working areas from 1000x1500 mm to 2500x6000 mm as standard and up to 3500 x 16000 in special realization.
- Innovative and efficient vacuum tables with turbine technology or vacuum pumps.
- MECANUMERIC numerical controls as standard or SIEMENS or HEIDENHAIN type as option.
- Quality kinematics integrating industrial components delivered by the world leaders in their field, mounted on stabilized and welded steel frames.
- Options for trades adapted to the current requirements of customers in each activity sector.



Listening



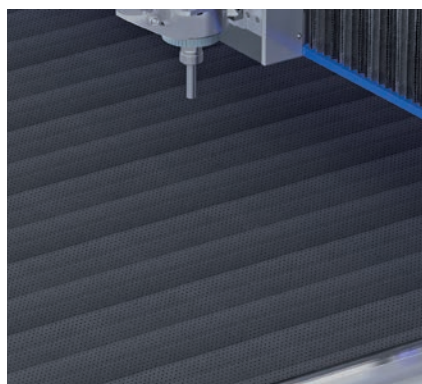
Custom-made



Multi-purpose



100% integrated



MECAPRO

a CNC 3 axes milling machine adapted to various activity sectors

CHARACTERISTICS

- **Structure:** high inertia steel welded mobile frame and gantry.
- **Table top:** aluminium fixed table top with consumable table.
- **Guidance:** grinded steel rails and preloaded ball bearings.
- **Transmission:** high precision ball screw on all axes with double ball screw on X axis Except MPR 6020 : transmission realized by double racks on X axis and ball screws on Y and Z axes.
- **Motorisation:** 3x BRUSHLESS motors 750 W (X1, X2, Y) + 1x 750 W (Z).
Suction nozzle with pneumatic or motorized driving.

| FEATURES | MPR 1015 | MPR 3015 | MPR 3020 | MPR 4020 | MPR 6020 |
|---|---|-----------|-----------|-----------|-----------|
| X-axis travels in mm | 1020 | 3050 | 3050 | 4050 | 6050 |
| Y-axis travels in mm | 1520 | 1520 | 2070 | 2070 | 2070 |
| Z-axis travels in mm | 250/400 | 250/400 | 250/400 | 250/400 | 250/400 |
| Maximum material width | 1640 | 1640 | 2200 | 2200 | 2200 |
| Passage under gantry (standard / option) | 260/405 | 260/405 | 260/405 | 260/405 | 260/405 |
| Maximum speed in mm/sec | 417 | 417 | 417 | 417 | 500 |
| Resolution in mm | 0,0006 | 0,0006 | 0,0006 | 0,0006 | 0,001 |
| Repeatability in mm at 20°C +/- 2° | +/-0,025 | +/-0,025 | +/-0,025 | +/-0,03 | +/-0,075 |
| OPTIONS AND ACCESSORIES | | | | | |
| Vacuum table | | | | | |
| Box vacuum table with two-stage side channel turbine 7.5 kW, 520 m³/h | 1 | 2 | 2 | 2 | 3 |
| Box vacuum table with three or four-stage turbine 15 kW, 1350 m³/h | 1 | 1 | 1 or 2 | 1 or 2 | 2 or 3 |
| Vacuum table with vacuum pump 250 m³/h, 4.5 kW | 1 | 1 | 1 or 2 | 1 or 2 | 2 or 3 |
| Vacuum table with T grooves and two-stage side channel turbine 7.5 kW, 520 m³/h | 1 | 2 | 2 | 2 | 3 |
| Tool cooling systems (frozen air, lubrication...) | ✓ | ✓ | ✓ | ✓ | ✓ |
| Chip and dust suction systems | ✓ | ✓ | ✓ | ✓ | ✓ |
| Adaptative suction nose | ✓ | ✓ | ✓ | ✓ | ✓ |
| Static automatic tool shop, by 6 position module | 1 or 2 | 1 or 2 | 1 to 3 | 1 to 3 | 1 to 3 |
| On-gantry rotating tool shop, capacity 6 tools | ✓ | ✓ | ✓ | ✓ | ✓ |
| Cutting head with a floating or tangential knife | ✓ | ✓ | ✓ | ✓ | ✓ |
| OPTISCOUT (vision registration / compensation system by camera) | ✓ | ✓ | ✓ | ✓ | ✓ |
| Multi tool cutting head for fixed tangential knives or vibrating knife and grooving | ✓ | ✓ | ✓ | ✓ | ✓ |
| Automatic flatness follow up with HF80 and ES351 | ✓ | ✓ | ✓ | ✓ | ✓ |
| OVERALL DIMENSIONS | | | | | |
| Length in mm pumps not included | 2520 | 4600 | 4600 | 5750 | 7330 |
| Width in mm (static tool shop / rotating tool shop) | 2400/2550 | 2400/2550 | 2500/2930 | 2500/2930 | 2500/2930 |
| Height in mm with Z 250 mm | 2300 | 2300 | 2300 | 2300 | 2300 |
| Average weight in kg | 2500 | 3800 | 4500 | 5000 | 7500 |
| SUPPLIES | | | | | |
| Air supply | Pressure: 6 bars / Flow 6 to 40 m³/h | | | | |
| Power supply | 400 VAC three-phases 50 Hz + ground - 20 to 100 A | | | | |

ELECTRO SPINDLES

High frequency electro spindles with electronic continuous variation of the speed.

| Type | Power S1 - S6 in W | Rotation speed rpm | Cooling | Tool change |
|---------|--------------------|--------------------|-------------------------|--------------------|
| HF80 | 2500 - 3200 | 8000 - 40000 | Water with cooling unit | Automatic, SKI20 |
| SEV1090 | 3400 - 4200 | 2000 - 24000 | Air by electric fan | Manual |
| ES929 | 7500 - 10000 | 2000 - 28000 | Air, natural convection | Automatic, ISO30 |
| ES351 | 6500 - 9000 | 2000 - 40000 | Water with cooling unit | Automatic, HSK E32 |

NUMERICAL CONTROL

Standard: MECANUMERIC numerical control CN7000 ISO.

- MHI on mobile control panel with 15 inches touch screen.
- Data entry via Ethernet link RJ45 and 1 USB port.

Options: Numerical control SIEMENS SINUMERIK 840DSL or HEIDENHAIN TNC 640.

