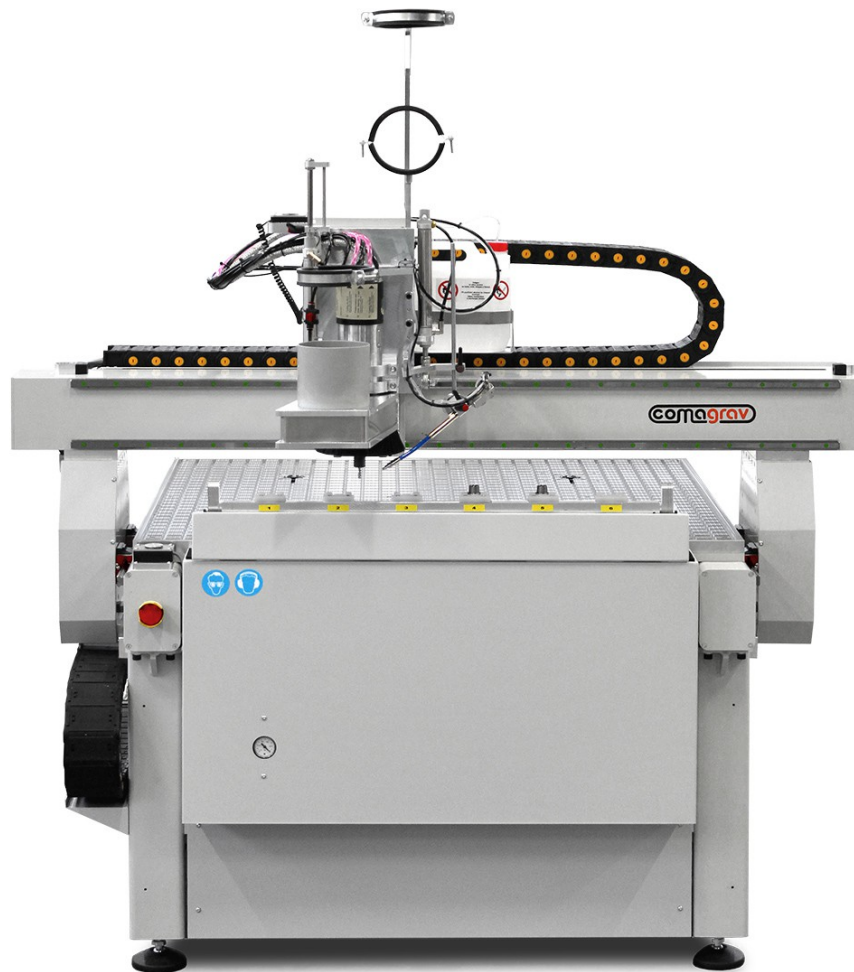


COMAGRAV MISTRAL

Product information



COMAGRAV MISTRAL are industrial CNC routers and engravers for processing high quality materials. They are space-saving 3D devices for milling, machining, engraving and scanning.

COMAGRAV MISTRAL is successfully used in many workshops. It is available in one worktable size. Combines the robustness of large COMAGRAV routers with compact dimensions.

You can choose from professional spindles with power up to 5.6kW and with automatic tool change.

Depending on the complexity of production and equipment requirements, you can choose between a stepper and servo version.

Properties

- working area 1100x1005mm
- feedrate up to 300mm/s (servo), up to 150mm/s stepper version (120mm/s working)
- clamping up to 120mm thick material
- automatic tool length measurement
- spindles with power up to 5,6kW
- high-speed spindles with speeds up to 60.000 RPM
- high pressure vacuum worktable with vacuum pump (phenolic)
- T-slot worktable as default option for manual clamping
- Vectric Cut2DPro software
- support for CAM programs
- library of materials and presets (servo)
- PILOT TDP controller (servo)

Optional

- dust collecting
- spray cooling for aluminium
- solid vacuum table made of aluminium alloy
- automatic tool change (servo only)
- covered storage for 6 tools (for ATC)
- ISO or HSK toolholders (for ATC)
- cyclone dust collector with integrated spray cooling system
- DELL PC and Windows 10 IoT Enterprise
- pre-installed Teamviewer remote access (along with PC)
- panel for operator with built-in PC, LCD and ON/OFF/E-STOP buttons
- camera system for reading registration marks
- QR code support
- compatibility with RIP softwares

Parameters

	MISTRAL	MISTRAL servo
Basic frame	steel, partially welded	
Gantry	140x140mm aluminium alloy	
Drives	Ballscrews in XYZ, linear ball guides	
Motors	microstep	AC servo Mitsubishi 400W
Control	PILOT	PILOT Advanced
Z sensor	flexible sensor	for manual spindle: flexible sensor for automatic toolchange: fixed sensor and flexible sensor
Worktable	Vacuum table or T-slot table	
Vacuum	high pressure, phenolic resin (optional aluminum)	
Vacuum zones	4	
Controller software	PILOT	PILOT TDP
Tool change	manual	manual or automatic
ATC storage	-	6 tools in a covered storage
Camera system	optionally	
Control PC	DELL Corei3	
OS	Windows 10 IoT Enterprise	

COMAGRAV MISTRAL 1000 VACUUM



Phenolic resin vacuum table and manual spindle.

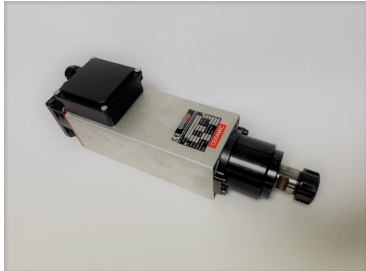
COMAGRAV MISTRAL 1000 SERVO ATC

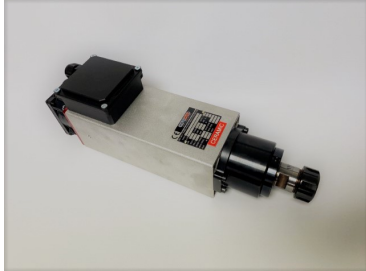


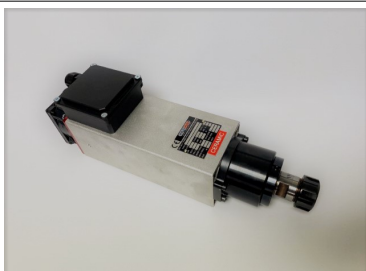
T-slot table, automatic tool change, control panel with PC.

Spindles

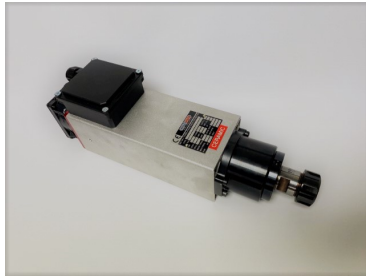
We install professional spindles with manual or automatic tool change for COMAGRAV MISTRAL.

Professional routing spindle COMAGRAV 730 W	
 <p>S-MAN-730W24T</p>	<p>Ideal for engraving and milling of common materials. (plastics, acrylic, brass, aluminium, MDF, wood, etc.). Includes 1 collet, nut and keys.</p>
	<p>Tool change: manual Bearings: ceramic Power: 730 KW RPM: up to 24.000 Clamping: mechanical, ER20 collets Cooling: by air turbine on top of the shaft, ideal for shift work Other features: hardened shaft, balanced nut.</p>

Professional routing spindle COMAGRAV 2 KW	
 <p>S-MAN-2KW24T</p>	<p>Ideal for engraving and milling of common materials. (plastics, acrylic, brass, aluminium, MDF, wood, etc.). Includes 1 collet, nut and keys.</p>
	<p>Tool change: manual Bearings: ceramic Power: 2 KW RPM: up to 24.000 Clamping: mechanical, ER25 collets Cooling: by air turbine on top of the shaft, ideal for shift work Other features: hardened shaft, balanced nut.</p>

Professional routing spindle COMAGRAV 2 KW FAN cooled	
 <p>S-MAN-2KW24T-FAN</p>	<p>Ideal for engraving and milling of common materials. (plastics, acrylic, brass, aluminium, MDF, wood, etc.). Includes 1 collet, nut and keys.</p>
	<p>Tool change: manual Bearings: ceramic Power: 2 KW RPM: up to 24.000 Clamping: mechanical, ER25 collets Cooling: by air, electric fan, not intended for 8h work. Other features: hardened shaft, balanced nut, quiet operation.</p>

Professional routing spindle COMAGRAV 5,6 KW



S-MAN-5.6KW24T

Ideal for engraving and milling of common materials.
(plastics, acrylic, brass, aluminium, MDF, wood, etc.).
Includes 1 collet, nut and keys.

Tool change: manual

Bearings: ceramic

Power: 5,6 KW

RPM: up to 24.000

Clamping: mechanical, ER25 collets

Cooling: by air turbine on top of the shaft, ideal for shift work

Other features: hardened shaft, balanced nut, high performance.

Professional routing spindle COMAGRAV 2 KW 60.000



S-MAN-2KW60T

Precise and powerful spindle for engraving and milling of aluminium alloys, brass, steel, stainless steel, plastics, etc.

Not recommended for wood milling.

Cooling is provided by liquid, the cooling circuit and the unit are included in the delivery.

Requires dry and clean compressed air (2bar).

Includes cooling system, 3 UP collets, nuts and keys.

Tool change: manual

Bearings: hybrid

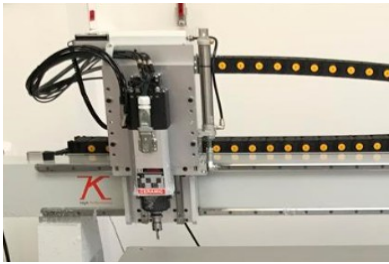
Power: 1,2 KW (S1) 2 KW (S6)


RPM: up to 60.000


Clamping: mechanical, ER11 collets with ultra precision grade

Cooling: by flowing liquid

Other features: ultra precise clamping, high performance, extremely high speed, quiet operation.

ATC professional spindle 1,1 KW	
 <p>M-ACS-ATC-1.1KW24T-ISO20-COVER</p>	<p>High frequency spindle with automatic tool change. Ideal for milling of common materials (plastics, acrylic, brass, aluminium, MDF, wood, etc.). Pneumatic tool clamping with ISO20 holders. Includes 4 holders equipped with ER16 collets. Automatic cover of tool storage. Spindle cooling by electric fan. Linear storage for 6 tools. Second sensor for automatic tool length measurement. Requires dry and clean compressed air. Includes linear tool storage, 4 collets, 4 toolholders and keys.</p>
	<p>Tool change: automatic Bearings: ceramic Power: 1,1 KW RPM: up to 24.000 Clamping: pneumatic, ISO 20 toolholders, ER16 collets Cooling: by electric fan. Other features: covered tool storage at the front.</p>

ATC professional spindle 3,6 KW 40.000	
 <p>M-ACS-ATC-3.6KW40T-HSKE25-COVER</p>	<p>High frequency spindle with automatic tool change. Ideal for milling steel, aluminium, brass, stainless steel, acrylic, plastics, etc. Pneumatic tool clamping with HSKE25 holders. Includes 4 holders equipped with UP ER16 collets. Automatic cover of tool storage for 6 tools. Spindle cooling by liquid. Second sensor for automatic tool length measurement. Requires dry and clean compressed air. Includes linear tool storage, 4 collets, 4 toolholders and keys.</p>
	<p>Tool change: automatic Linear storage for 6 tools with automatic cover. Bearings: ceramic Power: 3.0 KW(S1)/3.6 KW(S6). RPM: up to 40.000 Clamping: pneumatic, HSKE25 toolholders, ER16 UP collets Spindle cooling by liquid, delivery include active flow cooling. Other features: covered tool storage at the front, quiet operation.</p>

ATC professional spindle 3,6 KW 50.000	
 <p>M-ACS-ATC-3.6KW50T-HSKE25-COVER</p>	<p>High frequency spindle with automatic tool change. Ideal for milling steel, aluminium, brass, stainless steel, acrylic, plastics, etc. Pneumatic tool clamping with HSKE25 holders. Includes 4 holders equipped with UP ER16 collets. Automatic cover of tool storage for 6 tools. Spindle cooling by liquid. Second sensor for automatic tool length measurement. Requires dry and clean compressed air. Includes linear tool storage, 4 collets, 4 toolholders and keys</p>
	<p>Tool change: automatic Linear storage for 6 tools with automatic cover. Bearings: ceramic Power: 3.0 KW(S1)/3.6 KW(S6). RPM: up to 50.000 Clamping: pneumatic, HSKE25 toolholders, ER16 UP collets Spindle cooling by liquid, delivery include active flow cooling. Other features: covered tool storage at the front, quiet operation.</p>

COMAGRAV MISTRAL SERVO

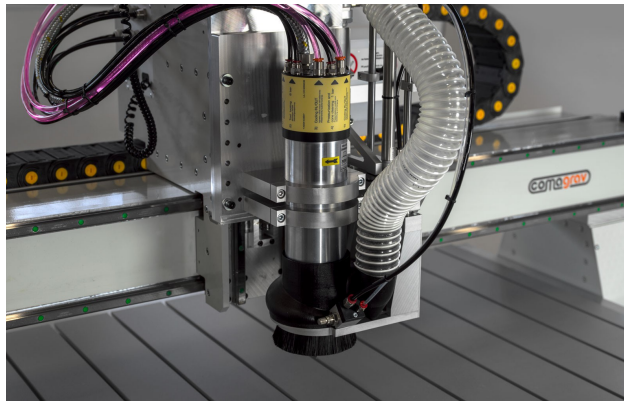
COMAGRAV MISTRAL 1000 SERVO ATC



opened cover of the automatic tool change and storage for 6 tools

T-slot table, spindle 3,6 KW 50.000, cyclone dust collector with integrated cooling

COMAGRAV MISTRAL 1000 SERVO ATC



cyclone dust collector with integrated cooling system

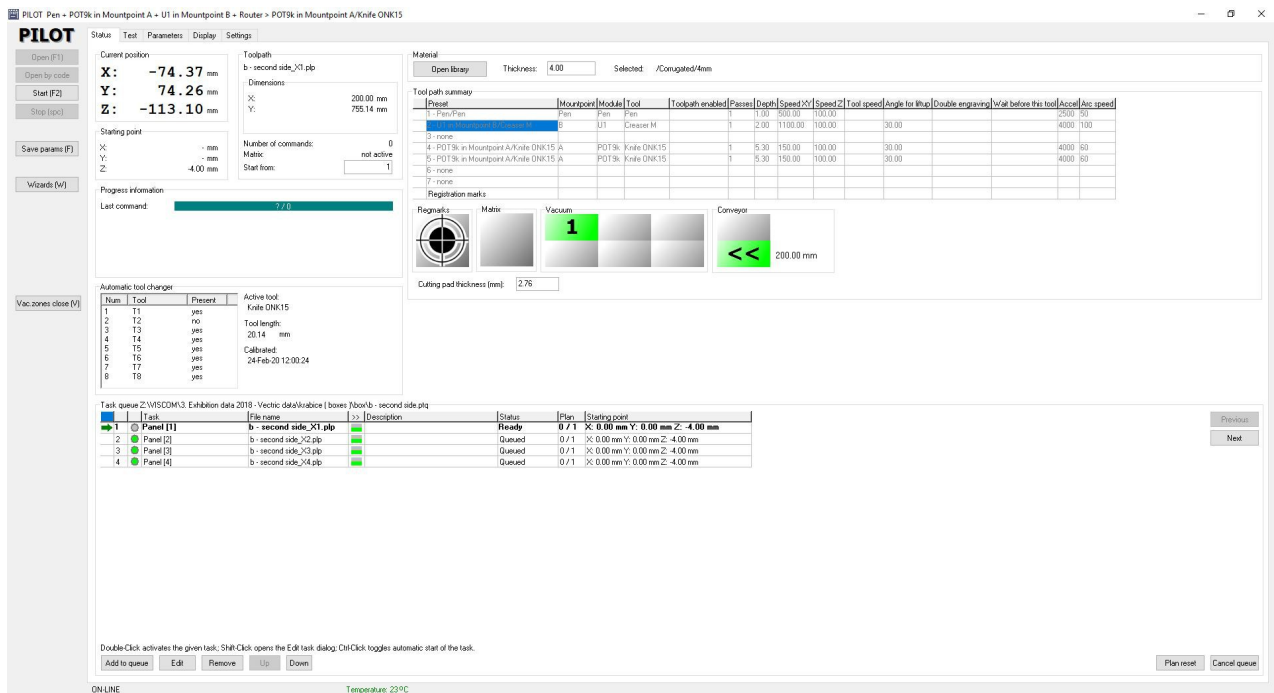
Dimensions and weights

Technické parametry / Technische Parameter / Parámetros técnicos / Technical parameters / Технические характеристики

Typ	Pracovní plocha Šířka x Hloubka [mm]	Šířka [mm]	Hloubka [mm]	Výška [mm]	Osa Z [mm]	Světlost pod portálem [mm]	Hmotnost [kg]	Rozlišení [mm]	Nejvyšší rychlost obrábění [mm/s]	Nejvyšší rychlost rychloupasu [mm/s]	Vieteno: viz výrobní štítek [kW/RPM]	Max.výkon [kW]	Tlak vzduchu [bar]	Napájení	Příkon [kW]
Typ	Arbeitsfläche [mm]	Breite [mm]	Länge [mm]	Höhe [mm]	Z-Achse [mm]	Lichte Weite unter dem Portal [mm]	Gewicht [kg]	Auflösung [mm]	Maximale Fräsgeschwindig- keit [mm/s]	Maximale Vorschubgeschw- indigkeit [mm/s]	Spindel: siehe Typschild [kW/ RPM]	Max.Leistung [kW]	Druckluft [bar]	Stromversorgun- g	Strombedarf [kW]
Modelo	Superficie de trabajo [mm]	Larghezza [mm]	Lunghezza [mm]	Altezza [mm]	Eje Z [mm]	Luz de paso bajo el portal [mm]	Peso [kg]	Resolución [mm]	Velocidad máxima de fresado [mm/s]	Velocidad máxima de desplazamiento [mm/s]	Motor de corte: ver etiqueta [kW/RPM]	Potencia [kW]	Presión del aire compresido [bar]	Alimentación	Vataje [KW]
Type	Working area [mm]	Width [mm]	Length [mm]	Height [mm]	Z axis [mm]	Clearance under gantry [mm]	Weight [kg]	Resolution [mm]	Maximum milling speed [mm/s]	Maximum moving speed [mm/s]	Spindle: See label [kW/RPM]	Max.power [kW]	Compressed air pressure [bar]	Supply	Power requirement [kW]
Тип	Рабочая зона Ширина x Глубина [мм]	Ширина [мм]	глубина [мм]	Высота [мм]	Ось Z [мм]	Дорожный просвет под портала [мм]	Вес [кг]	Разрешение [мм]	Максимальная скорость обработки [мм / с]	Максимальная скорость быстрого [мм / с]	Стебель: см этикетку продукта [кВт / RPM]	Максимальная мощность [кВт]	Давление воздуха [бар]	мощность	Потребляемая мощность [кВт]
Mistral 1000 servo	1100 x 1005	A: 1680 B: 1160	A: 1640 B: 1640 C: 1760 (1790)	A: 1440 B: 830 C: 2350(3000)	130	130	A: 420 B: 320 C: 450	0,00033	300	300	0,33/24000 0,5/24000 0,6/21600 0,73/24000 2/24000 5,6/24000 2/60000	5,6	7	3 x 400VAC/50Hz /16A	2,2kW + spindle
Mistral 1000 servo ATCL	1100 x 1005	A: 1680 B: 1160	A: 1700 B: 1700 C: 1820(1850)	A: 1440 B: 830 C: 2350(3000)			A: 440 B: 340 C: 470								
Mistral 1000	1100 x 1005	A: 1680 B: 1160	A: 1640 B: 1640 C: 1820(1850)	A: 1440 B: 830 C: 2350(3000)			A: 400 B: 300 C: 430								

A: Základní stroj / Machine in basic configuration
B: Veikost stolu bez portálu (Pro transport) / Table size without gantry (For transport)
C: Konzole odsávání / Dust collector steel ramp

PILOT control system and software compatibility



PILOT is compatible with HP-GL and G-code. It is possible to open data from CAM and graphics programs.

For the servo version, we install PILOT TDP, which supports work with RIP programs. Expect support for Caldera, Onyx, Colorgate, Asanti, Flexi,...

Free plug-ins for Adobe Illustrator and Corel Draw are also available (for generating print marks and exporting cutting data in DXF).