

COMAGRAV NOTUS EVO

Product information



COMAGRAV NOTUS EVO is a professional CNC router designed for signmaking and light industry.

It is a powerful machine for processing plastics, aluminum, PMMA, composites, wood, steel, and similar materials.

The main characteristics include a welded steel construction, stress-relieved for high cutting precision. The machine is equipped with AC servo technology for maximum reliability and achieving high speeds.

For cutting soft materials, the machine can be upgraded with a MULTI module featuring tangential knives, pneumatic oscillating knife, electric oscillating knife, motorized cutting disc, and other tools.

Camera system is available for digital finishing jobs created with your digital printer.

Standard equipment:

- Working area 2100x3150mm
- Z axis movement 175mm
- Clearance under gantry 140mm
- Feed rate up to 500 mm/s
- Resolution 0.00078mm
- AC servo Mitsubishi 750W, planetary gearboxes, rack & pinion system
- Linear guides for precise and quiet operation
- Welded steel baseframe, stress-relieved for maximum precision
- High-pressure vacuum table made of phenolic resin
- Vacuum pump 5.5kW with silencer
- Professional electrospindle 5.6kW 24.000 RPM
- Dust collector with cyclone effect
- Automatic tool length measurement using Z sensor
- Z sensor TOP for automatic setting of material and underlay thickness
- Vectric Cut2DPro software for professional routing
- CAM programs support
- PILOT A+ controller with Windows
- DELL or HP PC with OS Windows 10 IoT Enterprise LTSC
- Pre-installed Teamviewer for remote access and diagnostics
- Ethernet connection for network connectivity

Optional equipment

Automatic Tool Change (ATC)

ATC 4.5kW professional spindle with automatic tool change

- High-frequency HSD spindle with ceramic bearings.
- Power: 3.8 KW (S1) / 4.5 KW (S6).
- Speed: up to 24,000 RPM.
- Pneumatic tool clamping with ISO30 standard holders.
- Linear storage for 8 tools.
- Includes 4 holders with ER32 collets.
- Electric fan cooling.
- Automatic dust collection with cooling system.
- Requires clean and dry compressed air.

Camera Recognition System

COMAGRAV camera recognition system

- System with advanced deformation algorithms.
- Camera reads 2, 3, or 4 registration marks from printed media.
- Automatic adjustment of routing or cutting job directly on printed material.
- Camera can locate the edge of the material for automatic starting point setting.
- The controller calculates position, rotation, deformation, and print size in real-time.
- Supports QR codes.
- Compatible with RIP software (Onyx, Asanti, Flexi, Caldera, Printfactory, Illustrator, CorelDraw, etc.).

MULTI PACKAGE

Multifunctional upgrade for tangential cutting

- For the installation of tangential modules.
- Oscillating knives (electric, pneumatic), tangential tools, motorized cutting discs, etc.
- Includes extended gantry (+400mm) to reach the complete worktable with all tools.
- Includes camera recognition system.
- Includes automatic Z laser sensor for tool length measurements.

Available Cutting Bundles:

- Sign Bundle (for soft materials):

Electric oscillation knife head (EOT14k) - 14,000 strokes/min, stroke 1.5mm.

* Ideal for foams, corrugated cardboard, re-boards.

* Includes Universal Module U1 with tangential rotation.

* Tools: Knife U1, V-Cut U1.

- Sign HD Bundle (for rigid materials):

* Pneumatic oscillation knife head (POT9k) - 9,000 strokes/min, stroke 8mm.

* Powerful cutting in rigid media (PVC), rubber, gaskets, heavy-duty re-boards.

* Includes Universal Module U1 with tangential rotation.

* Tools: Knife U1, V-Cut U1.

Vacuum Options

Aluminum vacuum worktable:

Upgrade from the standard phenolic version.

Additional Vacuum pump 5.5kW:

Mid-range vacuum, max. flow rate 431 m³/h.

Upgrade to Vacuum pump 9,2kW:

Mid-range vacuum, max. flow rate 823 m³/h.

Upgrade to High-pressure vacuum pump 129 m³/h:

Becker oil-free pump, 4.0 kW.

Upgrade to High-pressure vacuum pump 250 m³/h:

Becker oil-free pump, 5.5 kW.

6 vacuum zones:

Front panel with valve control for easy zone management.

Other Accessories

Professional operator panel:

Steel case with industrial buttons (START, STOP, E-STOP) and storage drawers.

Industrial dust collecting machines:

Various models available for continuous duty.

Spray cooling system

Integrated into dust collector with cyclone effect

Starter set of tools

18 tools in 3mm, 4mm, 6mm and 8mm diameter for plastic, aluminum, PMMA, wood, MDF, etc.

Parameters

	NOTUS EVO
Baseframe	welded steel, annealed
Gantry	150x100mm steel
Drives	rack&pinion system in XY axes ballscrew in Z axis precision planetary gearboxes
Motors	AC servo Mitsubishi 750W
Controller	PILOT Advanced TDP
Z sensors	Z sensor TOP for material and underlay Fixed sensor for tool length measurement
Working table	high pressure vacuum table, phenolic resin (optionally aluminium)
Vacuum	5,5kW pump with silencer
Vacuum zones	6
Spindle	5.6kW electrospindle, 24000 RPM, ER25
Tool change	manual or automatic
ATC storage	linear for 8 tools
Camera system	optionally
Control software	PILOT TDP
Control PC	Intel Corei3 (DELL or HP)
OS	Windows 10 LTSC IoT Enterprise

Machine Dimensions

COMAGRAV NOTUS EVO 2131

- Working area: 2100 x 3150 mm
- Z axis movement: 175 mm
- Clearance under gantry: 140 mm
- Maximum speed: 500 mm/s
- Resolution: 0.00078 mm

Applications

COMAGRAV NOTUS EVO is ideal for:

- Signmaking and advertising production
- Plastic and PMMA processing
- Aluminum and brass milling
- Composite material cutting
- Wood and MDF processing
- Light industry
- Prototyping and packaging production

Software and Support

- Vectric Cut2DPro - Professional routing software included as standard.
- PILOT TDP - Advanced control software with Windows interface.
- Teamviewer - Pre-installed for remote support.
- Material and preset library for quick setup.
- CAM programs support - Compatibility with professional CAM systems.
- RIP programs support - Compatibility with professional RIP systems

Dimensions and weights

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 rychloposuvu [mm/s]	Vřeten: viz výrobní šiték [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 comprimido [bar]	Alimentación	Vatíaje [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]
NOTUS EVO 2131	2100 x 3150	A: 2818 B: 3473 C: 2172	A: 4367 B: 4367 C: 4210	A: 1696 B: 787 C: 3054	175	140	A: 1600 B: 1700 C: 1150	0,00078	500	500 Max. 1150 (additional safety may be required)	ATC 4,5/24000 MAN 5,6/24000	5,6	7	3 x 400VAC/50H z/16A	3,5 kW + Spindle power

A: Rozměr stroje / Machine size

B: Multifunkční jednotky a Lineární zásobník / Multifunctional units and Linear storage ATC

C: Velikost stolu bez portálu (Pro transport) / Table size without gantry (For transport)

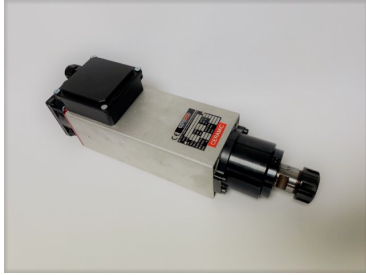
Spindles

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

Professional spindles with automatic tool change:

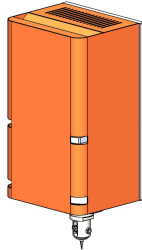
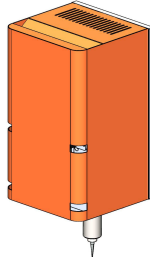
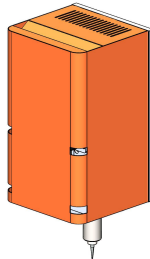
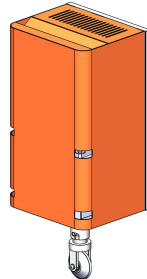
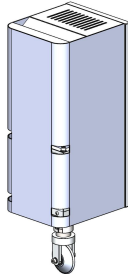
ATC professional spindle 4,5 KW 24.000	
 <p>S-ATC-4.5KW24T-ISO30</p>	<p>High frequency spindle with automatic tool change. Ideal for cutting common materials (acrylic, plexiglass, brass, aluminum, MDF, wood, etc.). Pneumatic tooling ISO30. 4 toolholders included equipped with ER32 collets. Cooled with electric fan. Linear storage for 8 toolholders. Requires clean and dry compressed air. Includes a linear storage, 4 collets, 4 toolholders and wrenches for tightening.</p>
	<p>Tool change: automatic Bearings: ceramic Power: 3,8 KW(S1)/4,5 KW(S6) RPM: up to 24.000/min Clamping: pneumatic, ISO30 toolholders, ER32 collets Cooled with electric fan.</p>

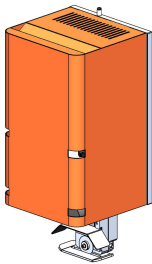
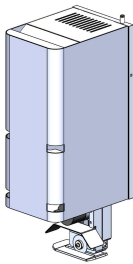
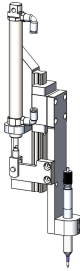
Professional spindles with manual tool change:

Professional routing spindle COMAGRAV 5,6 kW 24.000	
 <p>S-MAN-5.6KW24T</p>	<p>Ideal for engraving and cutting common materials (plastics, plexiglass, brass, aluminum, MDF, wood, etc.). Contains 1 collet, nut and keys.</p>
	<p>Tool change: manual Bearings: ceramic Power: 5,6 kW RPM: up to 24.000/min Clamping: mechanic, ER25 collets Cooling of spindle is provided by air turbine on the top of shaft. Other features: hardened shaft, balanced nut, great power.</p>

Available modules and tools (requires MULTI head option)



	MODULE A	MODULE B
POT9k Pneumatic oscillating knife 9000 strokes/min, 8mm stroke height		
EOT18k Electric oscillating knife 18000 strokes/min, 0.6mm stroke height		
EOT14k Electric oscillating knife 14000 strokes/min, 1.6mm stroke height		
U1 universal module - with tangential rotation - quick lock system for tools (tools are replaceable by hand)		

<p>Motorised cutting disc</p> <p>For rotary cutting tools 25mm, 28mm, 32mm, 66mm Custom for 160mm discs.</p>		
<p>Pen</p>		
<p>Drag knife</p>		