

## 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 m<sup>3</sup>/h.

**Upgrade to Vacuum pump 9,2kW:**

Mid-range vacuum, max. flow rate 823 m<sup>3</sup>/h.

**Upgrade to High-pressure vacuum pump 129 m<sup>3</sup>/h:**

Becker oil-free pump, 4.0 kW.

**Upgrade to High-pressure vacuum pump 250 m<sup>3</sup>/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 rychlosť obrábení [mm/s]	Nejvyšší rychlosť rychlopisu [mm/s]	Vŕetená: viz výrobní štítok [kW/RPM]	Max.výkon [kW]	Tlak vzduchu [bar]	Napájení	Příkon [kW]
Typ	Arbeitsfläche [mm]	Breite [mm]	Länge [mm]	Höhe [mm]	Z-Achse [mm]	Leite Weite unter dem Portal [mm]	Gewicht [kg]	Auflösung [mm]	Maximale Fräsgeschwindig- keit [mm/s]	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]	Altézza [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]	Presión del aire comprimido [bar]	Alimentación	Vatiaje [kW]	
Type	Working area [mm]	Width [mm]	Length [mm]	Height [mm]	Z axis [mm]	Clearance under gantry [mm]	Weight [kg]	Resolution [mm]	Maximum moving 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 этикетке 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: 3054	A: 1696 B: 787 C: 1150	175	140	A: 1600 B: 1700 C: 1150	0,00078	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	
 S-ATC-4.5KW24T-ISO30	<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>

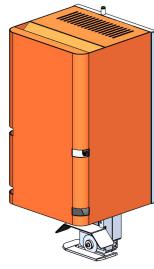
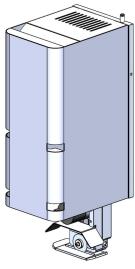
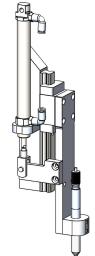
Professional spindles with manual tool change:

Professional routing spindle COMAGRAV 5,6 kW 24.000	
 <b>S-MAN-5.6KW24T</b>	<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
<b>POT9k</b> Pneumatic oscillating knife 9000 strokes/min, 8mm stroke height		
<b>EOT18k</b> Electric oscillating knife 18000 strokes/min, 0.6mm stroke height		
<b>EOT14k</b> Electric oscillating knife 14000 strokes/min, 1.6mm stroke height		
<b>U1 universal module</b> - with tangential rotation - quick lock system for tools (tools are replaceable by hand)		

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