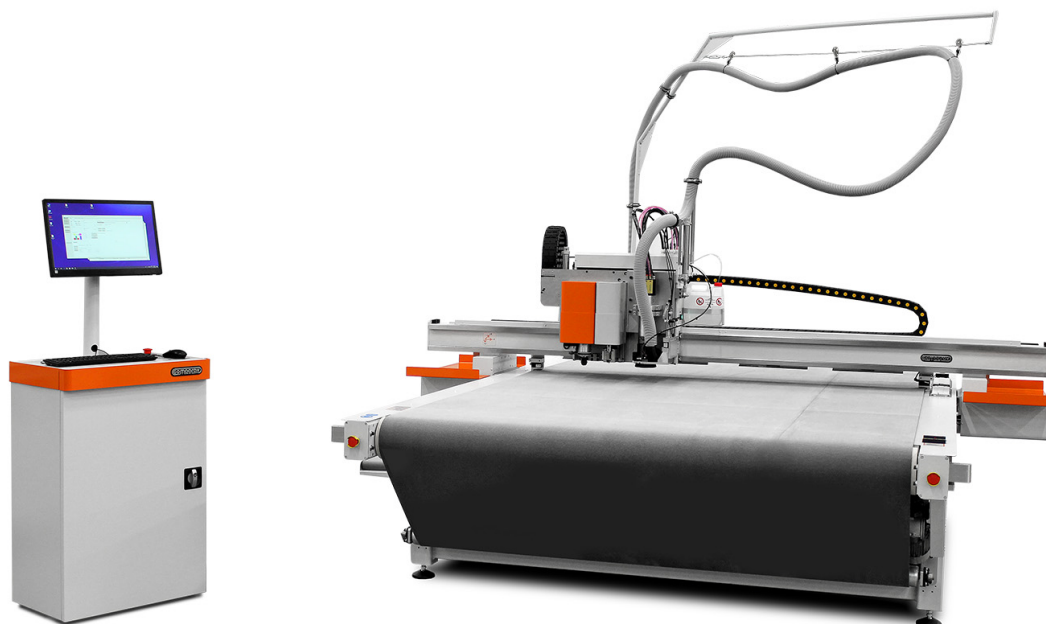


COMAGRAV DIGI CORSA

Product information



COMAGRAV DIGI CORSA is a dynamic professional flatbed cutter for marking, packaging, design, sales support, industry, advertising and powerful milling.

Quick, reliable and powerful machine for professionals. Wide range of knives and tools brings unlimited possibilities to your business.

COMAGRAV DIGI CORSA cuts the widest range of materials. Table equipment is tuned with emphasis on quality and cutting speed. Milling with automatic tool change, oscillating and direct cutting, creasing, labeling, etc. Easy operation and compatibility – that's the new DIGI CORSA.

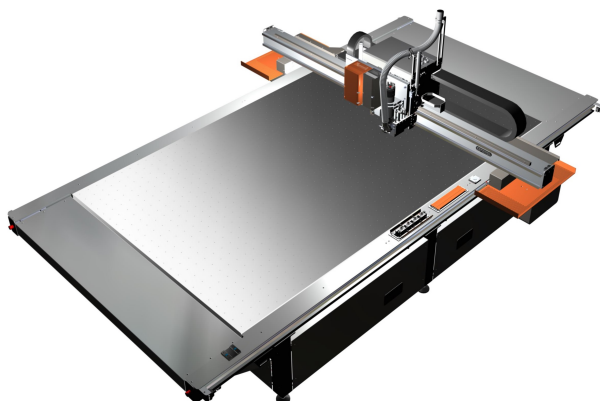
Main features

- working size from 1700x2500mm to 3400x3000mm
- speed up to 1150mm/s
- 60mm material thickness cutting
- position for spindle, 2 cutting modules and 1 tool with pneumatic parking (pen or drag knife)
- automatic tool length measuring
- aluminium vacuum worktable with blower
- 6 vacuum zones controlled from the software
- additional noise reduction for vacuum
- wheel controller for moving XYZ axis separately with highest precision
- library of materials and presets
- camera system for registration marks
- QR codes support
- automatic cutting mode (DIGI CORSA RC)
- conveyor belt (DIGI CORSA RC)
- automatic centering of conveyor belt (DIGI CORSA RC)
- roll-off units passive and active for rolls up to 1000kg
- worktable extension
- PILOT TDP controller
- DELL PC and Windows 10 IoT Enterprise
- Teamviewer remote support software preinstalled
- control panel for operator with space for PC, LCD and ON/OFF/E-STOP buttons
- Vectric Cut2DPro software
- compatibility with RIP softwares

Parameters

	DIGI CORSA	DIGI CORSA RC
Baseframe	steel	
Gantry	aluminium 140x140mm (optionally carbon fiber composite)	
Drive system	helical rack and pinion system, planetary gearboxes	
Engines	XYZ 750W AC servo Mitsubishi	
Planetary gearboxes	standard	
Controller type	PILOT Advanced	
Z sensors	static laser sensor for cutting tools (precision <0,05mm) and flexible Z sensor for routing tools (precision <0,01mm)	
Worktable	heavy duty aluminium cast vacuum table	
Vacuum	blower 5,5 kW	
Vacuum zones	6 zones with electric regulation, operated from the software	
Controller software	PILOT TDP	
Tool change	Manual (ATC - optionally)	
MULTI heads	2 modules + 1 spindle + pen or drag knife	
Pen tool	optionally	
Material cut-off	optionally	
Camera system	standard	
Control PC	DELL Corei3	
OS	Windows 10 IoT Enterprise	
Conveyor	no	yes

COMAGRAV DIGI CORSA 2034



COMAGRAV DIGI CORSA heads + ATC



Dimensions and weights

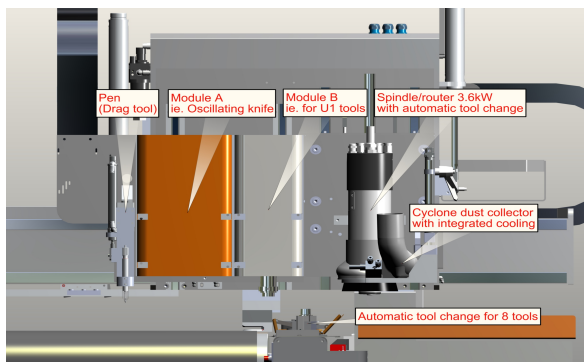
Typ	Pracovní plocha Šířka x Hloubka [mm]	Šířka [mm]	Hloubka [mm]	Výška [mm]	Osa Z [mm]	Světlost pod portálem [mm]	Hmotnost [kg]	Rozlišení [mm]	Nejvyšší rychlost obrábění [mm/s]	Nejvyšší rychlost rychloposuvu [mm/s]	Max.zrychlení [mm/s ²]	Včetně: viz výrobní štítek [kW/RPM]	Max.výkon [kW]	Tlak vzduchu [bar]	Napájení	Příkon [kW]
DIGI CORSA 2034	2000 x 3400	A: 3180 B: 2320	A: 4800 B: 4500 C: 5000	A: 1700 B: 785 C: 3200	175	80	A: 2300 B: 1500 C: 2350	0,00075	1150		5000	ATC 3.6/40.000 ATC 3.6/50.000	3,6	7	3 x 400VAC/50Hz /16A	7 kW
DIGI CORSA 2034RC	2000 x 3400	A: 3180 B: 2320	A: 4800 B: 4500 C: 5000	A: 1700 B: 785 C: 3200	175	80	A: 2350 B: 1550 C: 2400	0,00075	1150		5000	ATC 3.6/40.000 ATC 3.6/50.000	3,6	7	3 x 400VAC/50Hz /16A	7,8 kW
DIGI CORSA 2134	2120 x 3400	A: 3300 B: 2440	A: 4800 B: 4500 C: 5000	A: 1700 B: 785 C: 3200	175	80	A: 2350 B: 1600 C: 2400	0,00075	1150		5000	ATC 3.6/40.000 ATC 3.6/50.000	3,6	7	3 x 400VAC/50Hz /16A	7 kW
DIGI CORSA 2134RC	2120 x 3400	A: 3300 B: 2440	A: 4800 B: 4500 C: 5000	A: 1700 B: 785 C: 3200	175	80	A: 2400 B: 1600 C: 2450	0,00075	1150		5000	ATC 3.6/40.000 ATC 3.6/50.000	3,6	7	3 x 400VAC/50Hz /16A	7,8 kW




A: Základní stroj / Machine in basic configuration





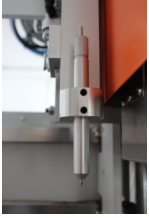


B: Velikost stolu bez portálu (Pro transport) / Table size without gantry (For transport)

C: Konzole odsávání / Dust collector steel ramp

Available modules and tools



	MODULE A	MODULE B	SPINDLE	DRAG TOOL
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				

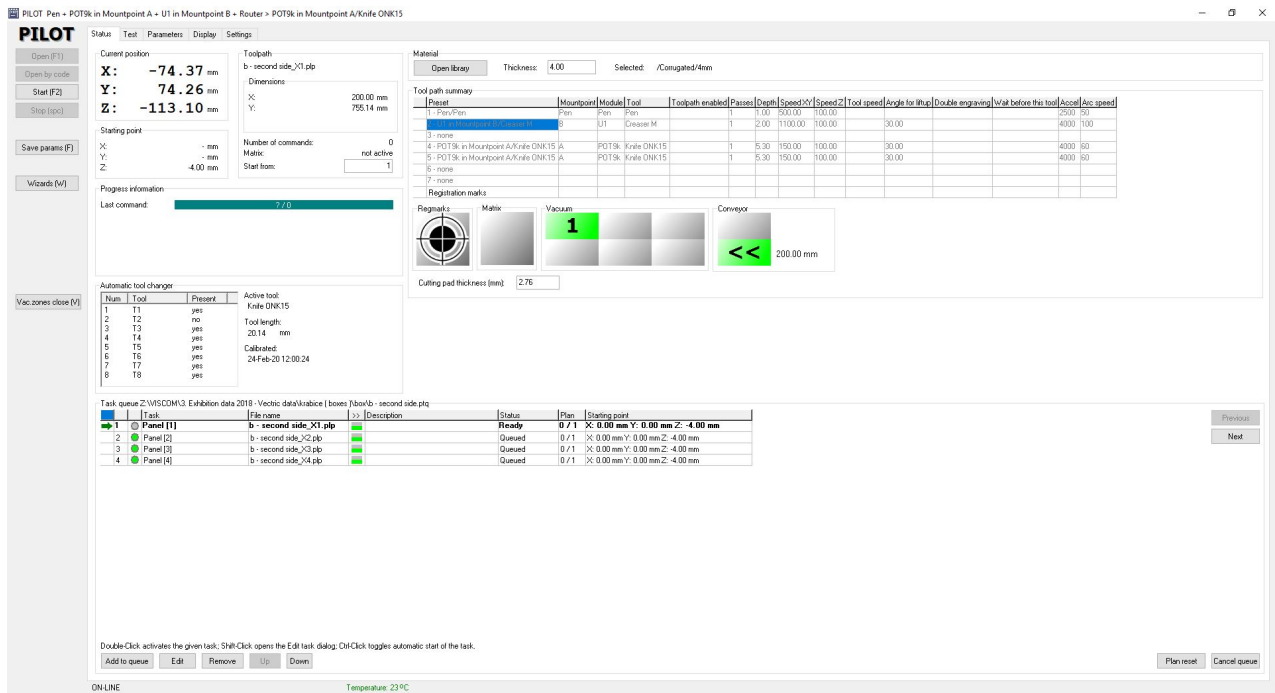
U1 universal module - with tangential rotation - quick lock system for tools (tools are replaceable by hand)				
Motorised cutting disc For rotary cutting tools 25mm, 28mm, 32mm, 66mm Custom for 160mm discs.				
Pen				
Drag knife				•
Professional ATC spindle 3.6kW 40.000RPM Professional electrospindle with hybrid ceramic bearings with continuous regulation by frequency inverter. Cooling is provided by liquid, includes chiller. Dust collecting machine with 3 motors. Dust collector fully automatic with floating function. Integrated spray cooling system.				
Professional ATC spindle 3.6kW 50.000RPM Professional electrospindle with hybrid ceramic bearings with continuous regulation by frequency inverter. Cooling is provided by liquid, includes chiller. Dust collecting machine with 3 motors. Dust collector fully automatic with floating function. Integrated spray cooling system.				

U1 tools (for U1 universal module)

Tools for cutting, creasing, etc.

							
Kiss-cut	V-cut	Pen	CUW Pizza knife	CRW 2PT Creasing wheel in sizes 2pt, 3pt, 4pt	U1 CRW Creasing wheel in sizes S,M,L	U1 DR 1.45 Direct knife	U1 DR 0.63 Direct knife

PILOT controller and Software compatibility



The screenshot displays the PILOT software interface, which is a CNC controller. The interface is divided into several sections:

- Top Left:** A sidebar with buttons for "Open (F1)", "Open by code", "Start (F2)", "Stop (F3)", "Save params (F)", and "Vac zones (V)".
- Top Center:** A "Current position" section showing coordinates: X: -74.37 mm, Y: 74.26 mm, Z: -113.10 mm. Below this is a "Starting point" section with X, Y, Z coordinates and a "Number of commands" field.
- Top Right:** A "Toolpath" section showing "b - second side_X1.plp" and "Dimensions" (X: 200.00 mm, Y: 755.14 mm). Below this is a "Material" section with "Open library", "Thickness: 4.00", and "Selected: /Comugated/4mm".
- Middle Left:** A "Progress information" section showing a progress bar at 7/0 and a "Last command" field.
- Middle Center:** A "Registration marks" section with icons for "Matrix", "Vacuum", and "Conveyor". Below this is a "Cutting pad thickness (mm)" field with the value 2.76.
- Middle Right:** A "Tool path summary" table with columns: Report, Mountpoint, Module, Tool, Toolpath enabled, Passes, Depth, Speed, Speed 2, Tool speed, Angle for lith, Double engraving, Wait before this tool, Accel, Acc speed. The table lists several tool paths, including "b - second side_X1.plp" and "b - second side_X2.plp".
- Bottom Left:** An "Automatic tool changer" table with columns: Item, Tool, Present, Active tool. It lists tools 1 through 8, with "Kite ONK15" as the active tool.
- Bottom Center:** A "Task queue" table with columns: Task, File name, Description, Status, Plan, Starting point. It lists tasks 1 through 4, including "b - second side_X1.plp" and "b - second side_X2.plp".
- Bottom Right:** A "Plan reset" and "Cancel queue" section.

PILOT TDP is vector based CNC controller for the highest precision and dynamics.

PILOT TDP is compatible with HP-GL format, DXF and G-code.

There exist drivers for COMAGRAV in many popular RIP softwares, making the cutting process very intuitive. Expect support from Caldera, Onyx, Colorgate, Asanti, Flexi, ...

We have available free plug-in for Adobe Illustrator and for CorelDraw (creates registration marks and exports cutting data).

Roll-off units

For continuous cutting of rolls with COMAGRAV DIGI CORSA RC machine, customer can choose from several solutions.

For vinyl cutting and for rigid light rolls the passive roll-off unit is fine.

For heavy rolls (100kg and more) and for sticky media the active roll-off unit is required, because solely the moving cutting pad and pneumatic bars on back side of the gantry cannot ensure precise unwinding. In some cases, passive is still enough.

For long job (ie. 20, 30, 50 meters) the active unit with lateral movement is recommended.

For other specific requirements, please ask us.

COMAGRAV roll-off units:

Passive (no engines) **or active** units – with motorised unwinding are available.

The unit can have **quick locks** for easy fixing of the roll.

We can supply **pneumatic cylinders** for the media. (specify inner diameter).

The active unit can be equipped with **lateral movement** with sensor for parallel winding. It is ideal for long jobs and for big diameter of rolls.

The unit can be programmed for **roll-off or roll-on function** (for rewinding) or both.

For special purposes (requirement for quick material change, special roll storage, etc) we can produce roll-off unit with **trolley system**. Rolls are fixed for cutting in advance in the trolley, and trolley is easy to remove and install without additional loading mechanism. It means **no time wasted** during unloading and loading.

During request, specify maximum weight and maximum diameter of rolls. We can supply roll-off units for **up to 1000kg heavy rolls!**

The active roll-off units are programmed with PLC.

Roll-off units features and options

- passive
- passive with central shaft
- active (motorised unwinding, rewinding)
- with additional lateral movement
- for heavy rolls up to 1000kg
- with quick lock system
- with pneumatic cylinders
- with removable trolleys

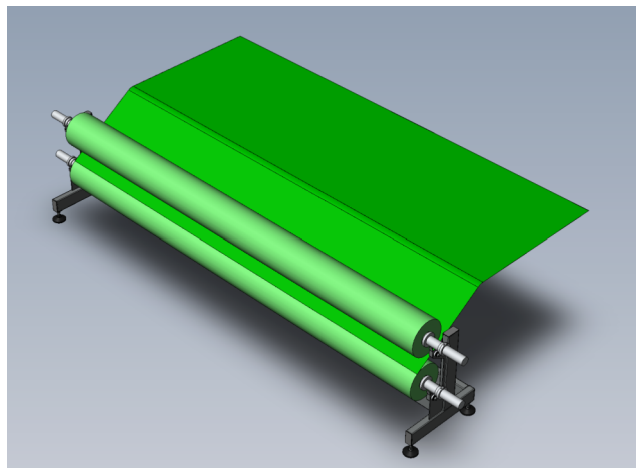
Passive unwinder with two cylinders



Passive unwinder with central shaft



Passive unwinder with 2 central shafts



Active unwinder

With dancer, pneumatic cylinder and quick locks, for heavy rolls up to 1000kg.



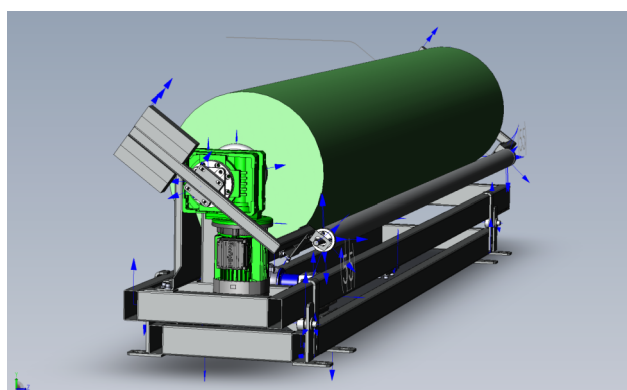
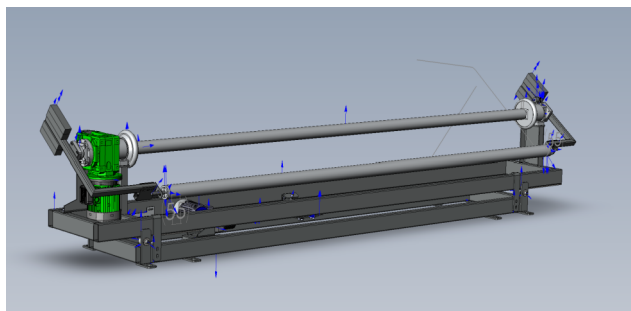
COMAGRAV DIGI 3430RC with active unwinder

Active unwinder with lateral movement

With dancer, pneumatic cylinder and quick locks, for heavy rolls up to 1000kg.



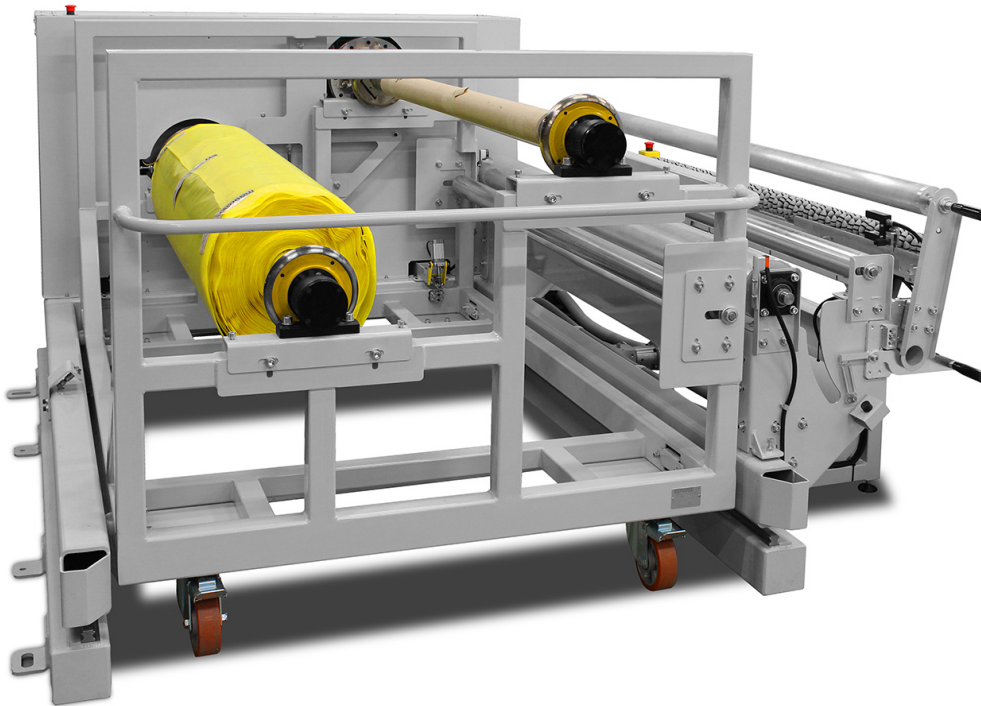
COMAGRAV DIGI 3450RC with active unwinder



Active unwinder with lateral movement, rewinding shaft and trolley system

Includes quick locks, pneumatic cylinders, dancer, additional cylinder for media distribution and additional roller for media spreading.

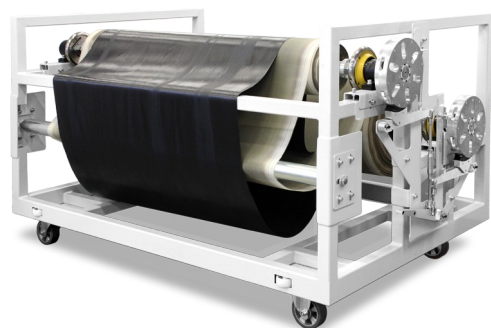
This is customised roll-off unit with all possible features.



Complete system.

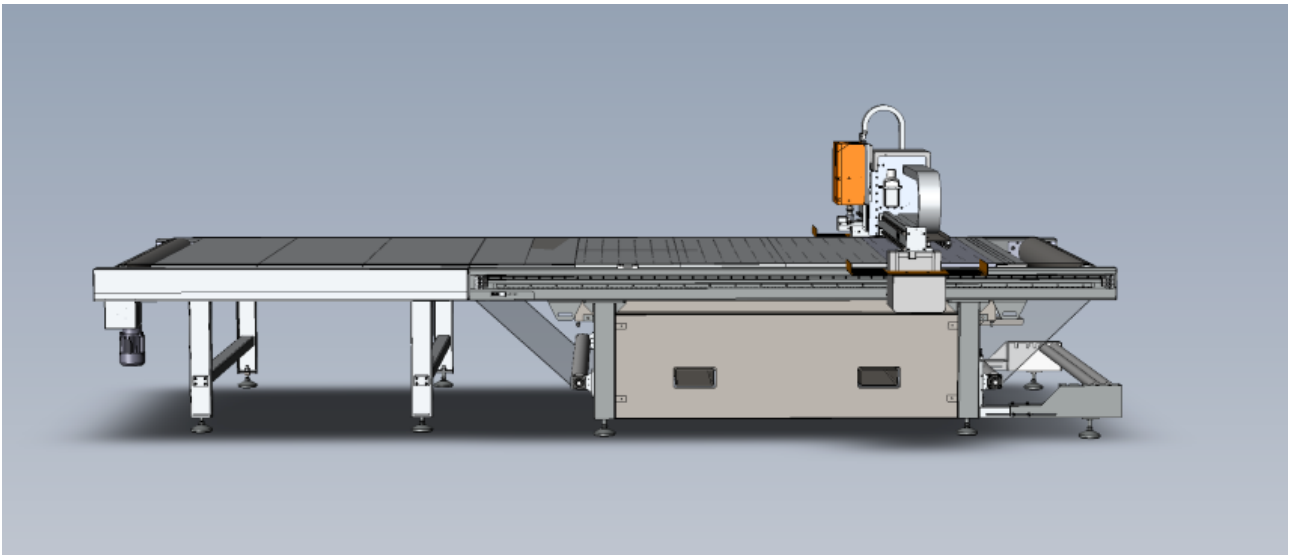


Roll-off base for the trolley.



The trolley with installed media.

Worktable extensions (DIGI RC)



Adds extra space in front of worktable for picking cut material safely (even when machine is running).

Depending on the model, different extension lengths are available (+1500mm, +2000mm, +2500mm, +3000mm, ...).

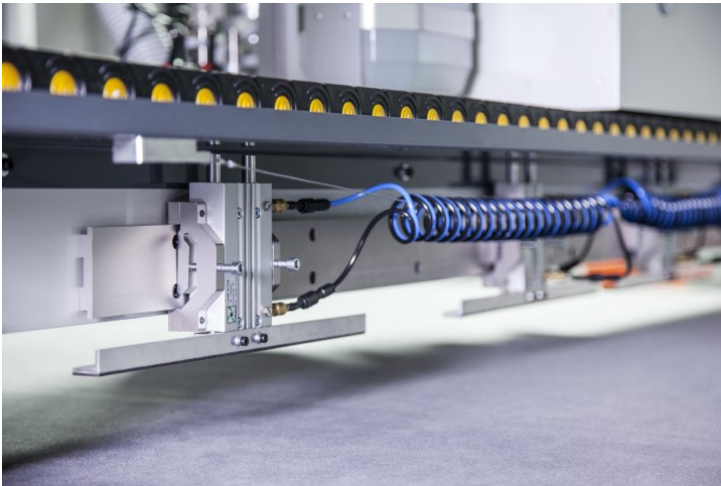
The extension creates safe zone for workers.

The extension is available also for loading side – means no machine standstill during serial production.

This feature is upgradeable for all installed DIGI RC machines.
New conveyor belt must be installed during the upgrade.



Pneumatic bars at back side of the gantry (DIGI CORSA RC)



This is standard equipment for DIGI CORSA RC.

Pneumatic bars automatically push the media against the cutting pad during unwinding. This prevents media to slip.

Bars are adjustable in position and depending on gantry size, there are installed 2, 3 or more pieces.

Customised machines

(custom size, loading zone, unloading zone, etc.)

COMAGRAV has team of developers and they are ready to implement your special demands. In example we can produce customised loading zone, unloading zone, customised roll-off units, custom tools and much more.

