



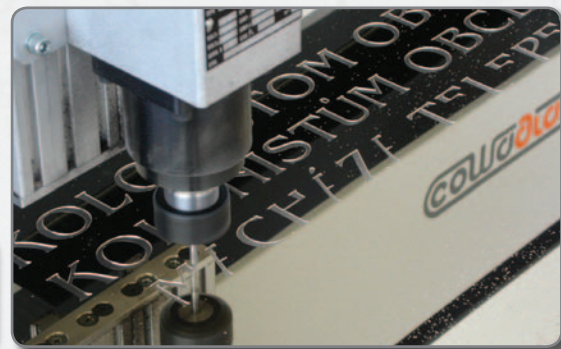
CNC cutting and routing machines

## MISTRAL

### Compact high performance CNC router

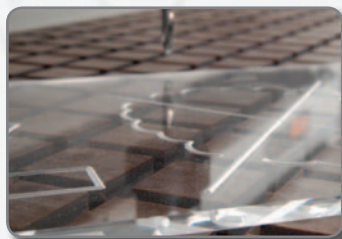
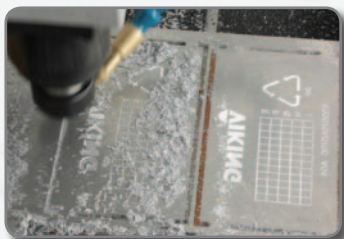
This is multifunctional machine COMAGRAV MISTRAL for cutting, routing, scanning and engraving.

It combines proven COMAGRAV router technology with compact construction.



### COMAGRAV MISTRAL features

- routing and engraving spindle
- vacuum table
- AC servo motors
- oscillating knife
- Z axis automatic adjustment
- camera system for accurate positioning to print marks
- combi-head with oscillating knife and creasing wheel
- combi-head with oscillating knife and tangential knife for vinyl sheet cutting
  - 3D laser scanner
  - 3D contact scanner
  - professional software
  - cooling system
  - dust collector







# MISTRAL

Introducing the third generation of our popular CNC machine COMAGRAV MISTRAL, designed for engraving, routing, cutting and scanning. There are a wide range of functions available and you can choose between two types of worktables. Offering a variety of equipment options, we prefer individual consultation with future users, helping us satisfy our customers' production needs. In addition to the favoured stepper motors, AC servo motors are also currently on offer, mainly used in high-speed 3D modelling and efficient surface engraving.

The standard equipment of COMAGRAV MISTRAL includes a steel base that ensures extreme stability and is detachable, providing easy manipulation in laboratories and offices (removable on request in models with servo motors). This feature makes the machine suitable for installation in any space, which is usually only possible with desktop machines. Moreover, the construction using a moving gantry and a stationary table proves space-saving. To achieve weight economy, modern materials were used, namely aluminium alloys. Unique profiles of our design were utilized in large table routers COMAGRAV ZONDA and COMAGRAV NOTUS. Most materials used in production are fully recyclable.

COMAGRAV MISTRAL is an original 3D router with a wide application in routing, engraving, moulding, drilling, milling, modelling, cutting and scanning, etc. Imposing wood relief routing, aluminium alloy sheet moulding, masterly signmaking, plastic panel moulding, brass plate engraving and engraving of control panel (including all openings and inscriptions), are only some of its capabilities. It is likewise suitable for imprinting advertising gifts. COMAGRAV MISTRAL machines are designed for use in businesses machining plastic, wood, MDF, non-ferrous metals, resin and acrylics. Featuring first-rate technology and modern construction, the machines are ready to be at your service for years on end.

Among the most popular items of optional equipment is the camera system. It is able to locate imprinted motifs on the worktable and to adjust the tool trajectory accordingly, achieving correspondence between print and trajectory. Thanks to the application of the COMAGRAV controlling unit, we are able to maintain a highly affordable price for the camera system.

The system works in cooperation with the spindle, oscillating knives and combi-heads, which combine a knife and creasing wheel. This makes COMAGRAV MISTRAL suitable for package prototyping and soft material cutting, particularly corrugated cardboard, lightweight advertising boards, leather and textile.

Other equipment options include a 3D contact or laser scanner. They facilitate the loading of models into your PC, and the subsequent editing and copying. As a result, COMAGRAV MISTRAL is effective in large-quantity production of repeated 3D motifs which would otherwise require manual cutting.

All COMAGRAV machines work in 3D as standard. MISTRAL features a high-performance 3-axis controller PILOT designed for smooth axis movement. High accuracy of router positioning and very good repeatability are the main characteristics of our first-rate machines, developed for quality production.

### Controlling unit:

PILOT 3D controller for Windows XP/Vista (32 bit systems)

### Drive components:

- Stepper motors or AC servo motors
- Ballscrews in all axes
- Microstepping mechanism for stepper motors
- High-precision linear ball bearings in X, Y and Z axis

### Optional equipment:

- Professional software Delcam ArtCAM Insignia
- Professional software Delcam ArtCAM PRO
- Spray cooling system
- High-pressure vane vacuum pump and vacuum table
- Slot for dust collector
- Industrial dust collector
- 3D contact scanner
- 3D laser scanner
- Oscillating tangential knife
- Combi-head: oscillating knife + creasing wheel
- Combi-head: oscillating knife + tangential knife for vinyl sheet cutting
- Camera system for print marks



### Standard equipment:

- Professional software Delcam ArtCAM Express
- Aluminium T-slot work table
- Automatic Z axis sensor
- Emergency STOP buttons

	Working area	Machine dimensions	Weight	Resolution	Feed rate	Z axis shifting distance	Gantry clearance	Spindle power
COMAGRAV MISTRAL 900	685 x 990 mm	107 x 157 x 127 cm	220 kg	0.00625 mm	0.5 - 100 mm/s	130 mm	140 mm	2000 W, 24000 RPM
COMAGRAV MISTRAL 1000	1050 x 1005 mm	143 x 157 x 127 cm	300 kg	0.00625 mm	0.5 - 100 mm/s	130 mm	140 mm	2000 W, 24000 RPM
COMAGRAV MISTRAL 1000 SERVO	1050 x 1005 mm	152 x 157 x 148 cm	300 kg	0.00625 mm	0.5 - 300 mm/s	130 mm	140 mm	2000 W, 24000 RPM