



RK-132-ECO

CNC ROUTER

FOR AN ECONOMICAL PRICE, A PROFESSIONAL MACHINE

**BEST
SELLER**

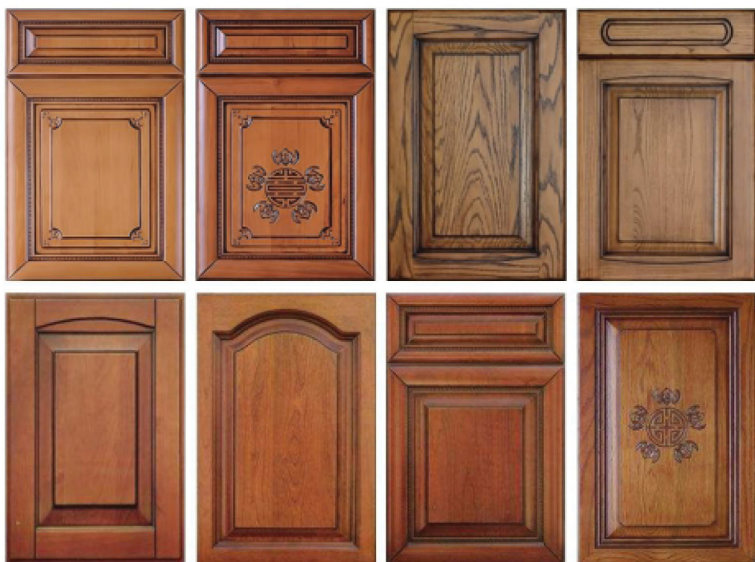


**OPTIONAL VACUUM
TABLE AND PUMP**



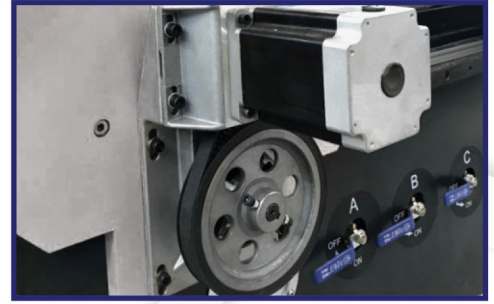
**1 YEAR WARRANTY
AND UNLIMITED SUPPORT**

Working area	1300×2500×200mm
Spindle	3.2kW water cooling spindle
Motor	Yako 2068 stepper and motor
Control system	NC Studio
Driven system	X, Y axis helical rack drive, Z axis Taiwan TBI ball screw
Working table	Vacuum table + pump (or aluminium T-slot table)
Machine bed	Channel steel structure
Max. speed	30m/min
Spindle speed	6000-24000rpm/min
Voltage	220V/380V
Software	Ucancam/ARTCAM
Lubrication system	Manual oil lubrication system
Machine size	3000x2010x1850mm
Weight	1000kg



Stepper motors

Installed on each unit for movement along all axes, they ensure precise positioning of the portal and spindle in accordance with a given program. The torque from the electric motor is transmitted to the drive gears, as well as to the ball screw, through a belt reducer, which in turn provides the necessary reduction ratio and the required force.



Helical rack and pinion transmission along the XY axes

Unlike gears with straight teeth, helical gears engage gradually and not all at once along their entire length. Helical gearing does not have a single pair engagement zone. In a spur gear, the load on the teeth is applied instantly. The teeth in helical gears are loaded gradually as they enter the meshing zone, there are always at least two pairs of teeth in mesh. These factors determine the smooth operation of helical gearing, as well as the reduction of noise and additional dynamic loads compared to spur gearing.



High precision prismatic guides with XYZ bearings

The movements of the portal (Y axis) and the spindle platform (X/Y axis) are carried out along high-precision prismatic guides. This ensures high processing accuracy and durability of the machine without loss of precision parameters. Each bearing has a build-in grease fitting for routine maintenance.



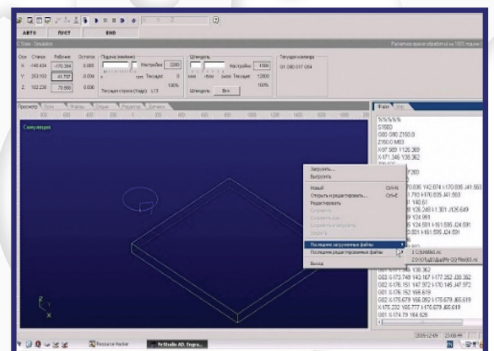
Liquid-cooled industrial electric spindle (3.2kW - 24,000rpm)

The design of this spindle is created in such a way that the heat generated during its operation is removed through a coolant fluid. The coolant can be water or other liquids (antifreeze). The rotation speed (24,000 rpm) and power (3.2kW) makes it possible to process parts made of wood, plywood, as well as chipboard, MDF, plastic, acrylic glass and other materials. The tool in the spindle is replaced manually using a special key.



Machine control system NC Studio

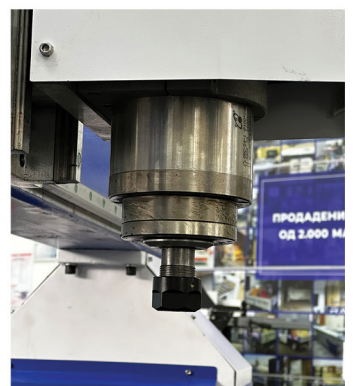
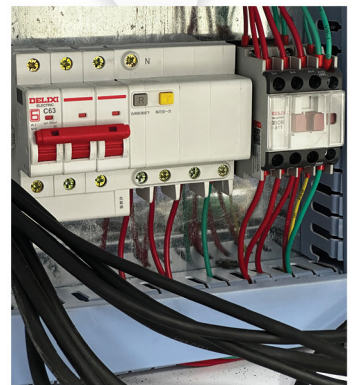
To control the operation of the machine, a CNC rack simulator system is installed, complete with a controller, cable and control board. The system is widely known to many users around the world, is simple and easy to use and has proven itself on machines with manual and semi-automatic tool changing. NC-Studio software, installed on a computer using a controller, visualizes and provides automatic control of high-grade processing. The system uses standard G-codes, which allows you to create processing programs using various popular software products: ArtCam, Type3, SolidWorks, PowerMill, BeCad, Basis-Meb-elshchik, K-3 Furniture.



*To use the system, you need a personal computer with a slot for a PCI card, as well as a monitor, keyboard and mouse.



MODERN FACTORY WITH STRICT QUALITY CONTROLS



OPTIONAL VACUUM TABLE AND PUMP

Max. airflow
530m³/h

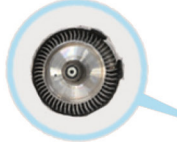


DUSTPROOF
DESIGN



FAN
COOLING

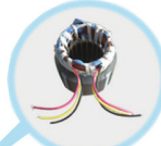
Aluminum impeller



Junction box



Motor 100%
copper coil



Silencer cotton
Silencing net



Filter screen

