

# ROUTRON CNC ROUTERS



# ROUTRON: CNC ROUTER FOR UNIVERSAL USE





#### **IT'S FAST.**

- **Fast programming**, thanks to the high level of technology of the latest in CNC programs.
- **Fast working**, by reducing down-time times of positioning of heads and by obtaining maximum performance of tools in all types of jobs.
- **Fast set-up**, with its simple and original worktable, complete with all mechanical and vacuum clamps.

#### **IT'S POWERFUL.**

- **Powerful cutterhead** (10 HP continuous power) capable of carrying out any type of job - even heavy routing without vibrations or breakdowns.
- **Powerful CNC controls**: equipped with a series of features extremely important in woodworking (support graphic and teach-in), interfaced for operator reference during all machining and programming activity. Equipped for fast connection to automatic programming terminal (even during machining) especially when carrying out complex routing.
- **Powerful memory capacity**, for basic version 32,000 characters (up to 64,000 on request) this enables a large number of programs to be available, each one selected by dialling a corresponding number on the keyboard.

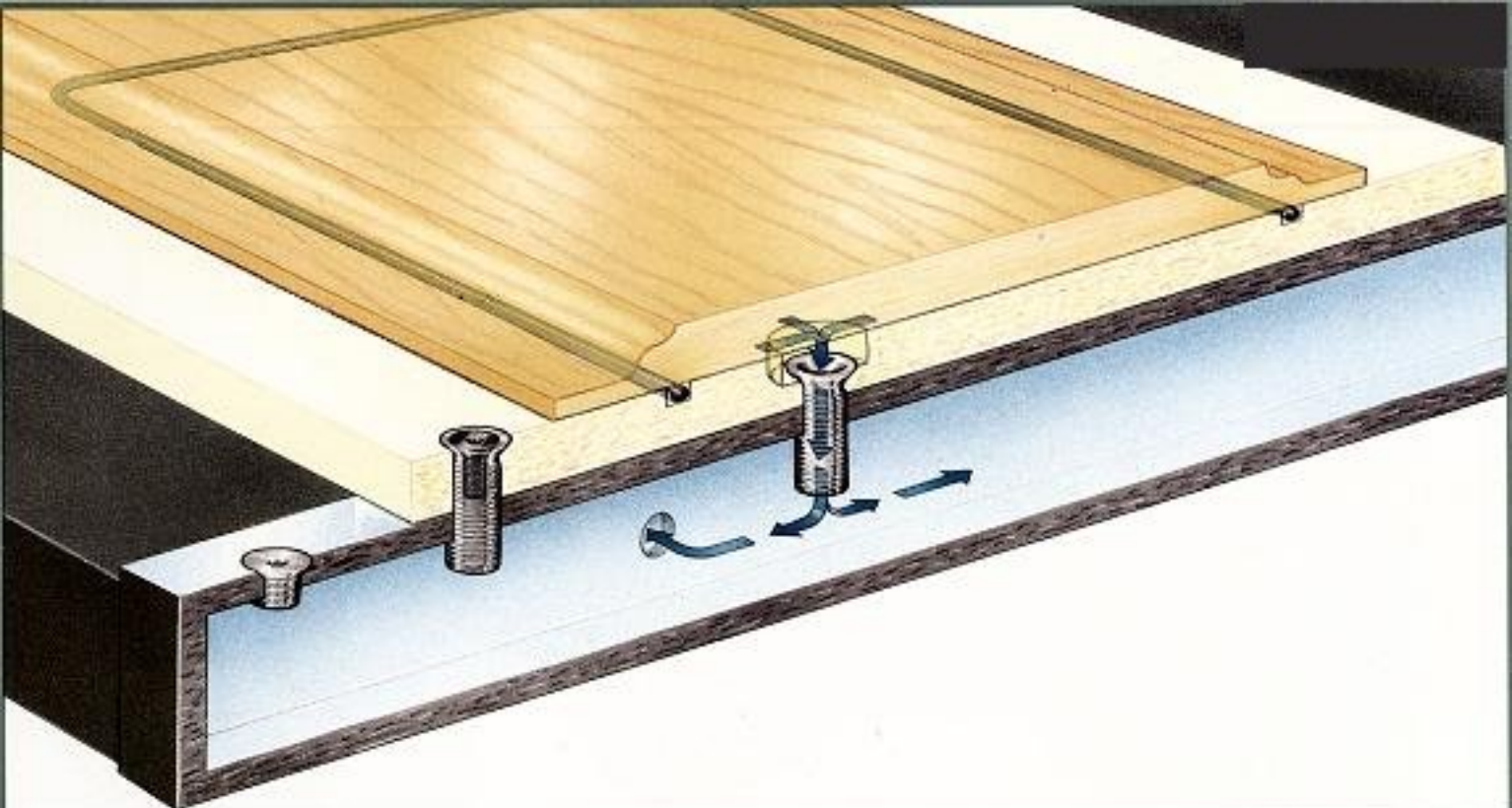


**EASY PROGRAMMING:** the CNC control monitor with semi-graphic display automatically shows any errors. Teach in is standard, automatically displaying sample of workpiece if dimensions or drawings are not available. Tool information table showing correction and compensations of length and radius.



**IT'S VERSATILE.** Drilling heads and/or special tapping units are available for inside threading, enabling completion of complex components in one set-up.

**EASY TO USE.** main control panel and monitor are ideally positioned for operator's use. Easy access to worktable facilitates loading and unloading. Use of pre-set tools enables accurate, rapid and complex routing in only one set-up.



**QUICK SET-UP.** Workpieces and mechanical fixtures are easily set on table and anchored to points placed grid-wise at a regular distance. Standard bored bushings are used for vacuum hold-down of workpiece to machine table, vacuum chuck being automatically connected without the need of traditional tubes or other types of connections.



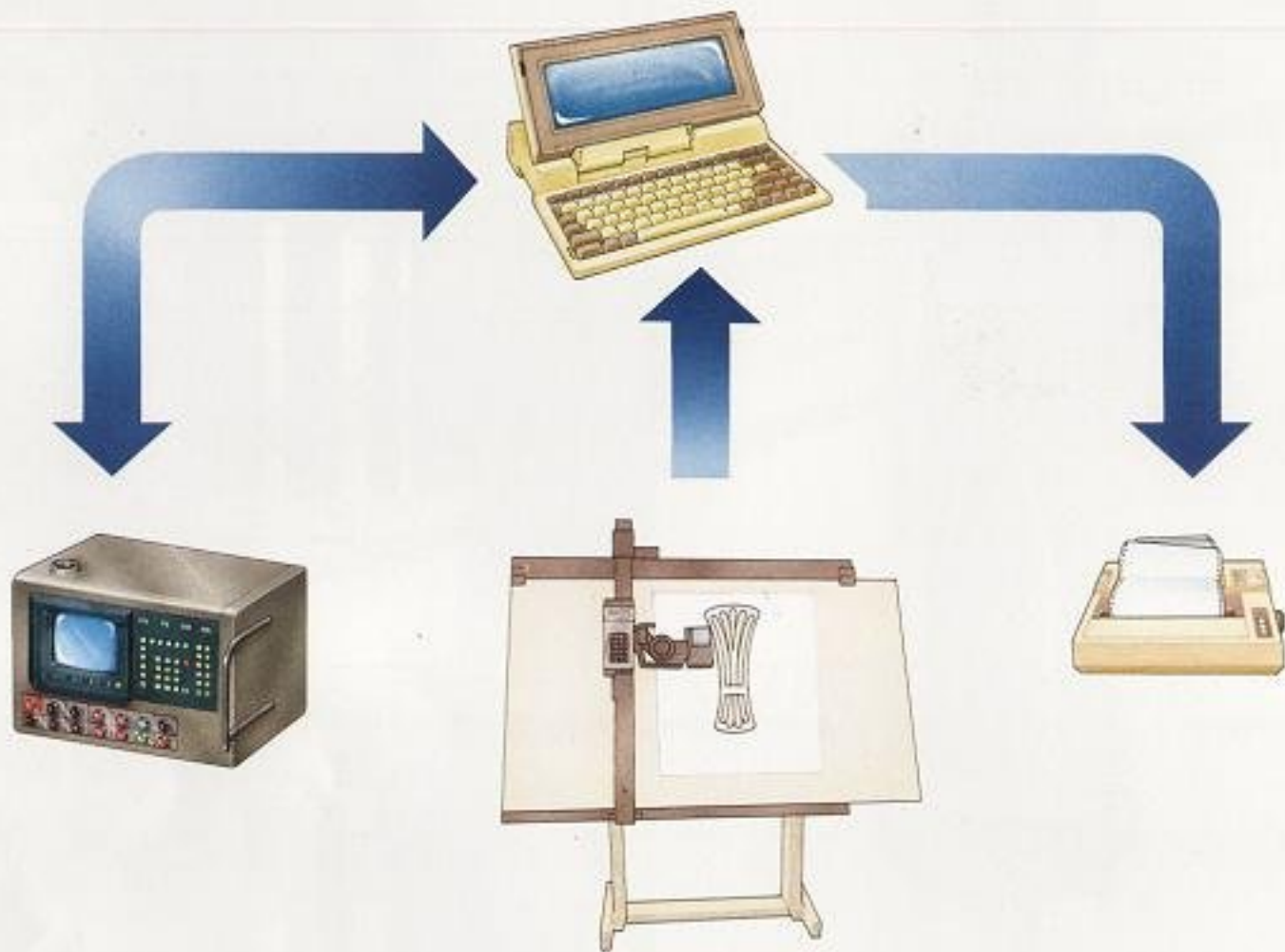
**TABLE.** Designed for easy use, of highly reinforced tubular steel with weight balanced to suit high speed work. Running on hardened ground steel bars by means of preloaded ball bushings, with automatic back-lash. D.C. motor drive is connected to ball screws by serrated belts ensuring maximum reliability; encoder with incremental transducer.



**HEAD.** Of new original design. A large vertically mobile cylinder houses a powerful, low-noise, high speed spindle (up to 18,000 rpm). Cylinder incorporates a dust exhaust system which cools motor, and is controlled by thermic probe. Routing spindle in its new practical design is of a sturdy construction and offers maximum reliability. Quick collet is available on request for tool change, with push button control on main control panel.

# ROUTRON: EASY PROGRAM DEVELOPMENT

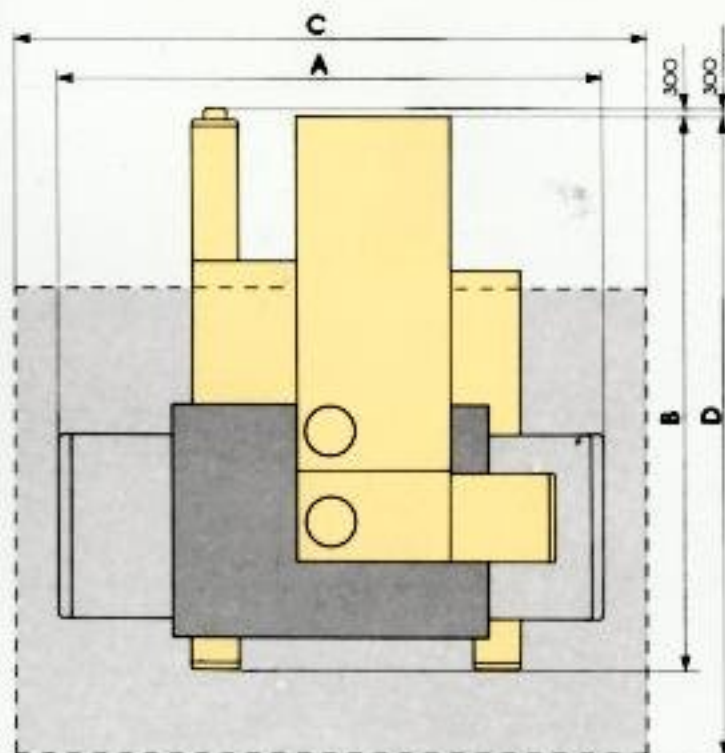
## THE SYSTEM AND ITS PERIPHERALS



**ROUTRON** is classed as a high precision machine integrated by an easy, flexible and always accessible electronic intelligence. Its use is made even simpler by the specific programs (Software) which SCM has developed specially for electronic units. The core of the automatic programming system is a "Personal Computer" which dialogues with the control unit and which, depending on need, may be equipped with other peripheral units. The SCM Software develops the part program through a simple statement of coordinates and this is possible from the very first, simple program level using a personal computer. No calculation is required by the operator as the program is developed whilst the machine is working and, at the right moment, the program can be verified by displaying it on the video of the control unit. On the other hand, a higher programming level features a specific software which enables to quickly and simply draw-up the workpiece on the personal computer video and have it machined immediately after by ROUTRON.

# TECHNICAL SPECIFICATIONS

DIMENSIONI D'INGOMBRO (mm) OVERALL DIMENSIONS (inches)	ROUTRON 912 1230x915 (48"x36")	ROUTRON 921 2135x915 (84"x36")
<b>A</b>	2130 (83 <sup>55</sup> / <sub>64</sub> )	3250 (128")
<b>B</b>	2200 (86 <sup>5</sup> / <sub>8</sub> )	2200 (86 <sup>5</sup> / <sub>8</sub> )
<b>C</b>	2500 (96 <sup>27</sup> / <sub>64</sub> )	4300 (169 <sup>19</sup> / <sub>64</sub> )
<b>D</b>	2500 (96 <sup>27</sup> / <sub>64</sub> )	2500 (96 <sup>27</sup> / <sub>64</sub> )
IN ALTEZZA (mm) HEIGHT (inches)	3000 (118 <sup>1</sup> / <sub>8</sub> )	3000 (118 <sup>1</sup> / <sub>8</sub> )



Worktable size	1230 x 915 mm (48" x 36")	2135 x 915 mm (84" x 36")
X - axis travel	1230 mm (48")	2135 mm (84")
Y - axis travel	915 mm (36")	915 mm (36")
Z - axis travel	300 mm (11 <sup>13</sup> / <sub>16</sub> ")	300 mm (11 <sup>13</sup> / <sub>16</sub> ")
Vertical travel for head setting	200 mm (7 <sup>7</sup> / <sub>8</sub> ")	200 mm (7 <sup>7</sup> / <sub>8</sub> ")
Pneumatic rise and fall of heads	100 mm (3 <sup>15</sup> / <sub>16</sub> ")	100 mm (3 <sup>15</sup> / <sub>16</sub> ")
Standard spindle bore	N. 2 Morse Taper	N. 2 Morse Taper
Spindle speeds	12.000/18.000 rpm	12.000/18.000 rpm
Power of spindle drive motor	7.5 kW (10 HP) at 18.000 rpm	7.5 kW (10 HP) at 18.000 rpm
Working feed speed	0 ÷ 15 m/min (0 ÷ 590 ipm)	0 ÷ 15 m/min (0 ÷ 590 ipm)
Quick positioning speed	25 m/min (984 ipm)	25 m/min (984 ipm)
Brake for rapid shutdown of tool	Electronic	Electronic
Exhaust air diameter outlets	N. 2 x 150 mm (5 <sup>25</sup> / <sub>32</sub> ")	N. 2 x 150 mm (5 <sup>25</sup> / <sub>32</sub> ")

**Main optional:** Tool holding chuck with collet cone ISO 30 / Static frequency converter for stepless spindle speed variation from 1200 to 18000 rpm / Pneumatic boring unit / Program terminal.