

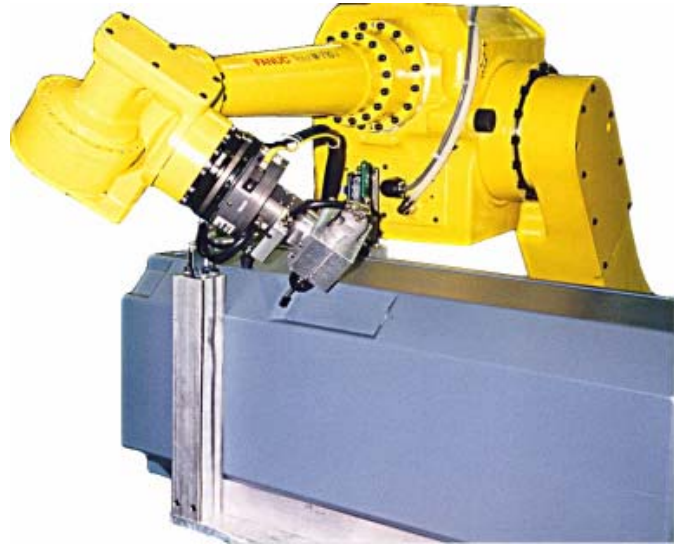
# URC Dual Station Router

## Six Axis Cutting System

The URC Six Axis Router system is designed for routing and drilling non-metallic parts.

Two slide indexer stations optimize cycle time.

Cut and drill any part at virtually any angle!



URC Automation

### Benefits

URC's 6 Axis dual station router system allows for fast, high precision secondary operations on your molded plastic parts or other non-metallic materials. Complex paths for contour cutting are easily achieved with very repeatable results.

Dual slide indexer stations make handling time transparent to the process. Robot can reach under the part for material removal.

- High accuracy and high speed to insure quality parts at the lowest cycle time.
- High up-time system designed for 24/7 operation.
- Faster cycle time with throughput up to 25% over a single fixed station router system
- Many cutting tools can be used including right angle drills and routers, step drills, and a variety of router bits.
- Easy to learn programming and operations.

### System Features

- 6 axes of motion to cut and drill at almost any angle.
- Quick change tool changer with 2 tools, tool covers. Up to 6 tools can be programmed for each part.
- Collision sensor for protection of robot tooling during setup and operations.
- Wire mesh enclosure with maintenance door provide optimal safety.
- Safety mats with zone monitor allow safe loading of fixtures on slide indexers.
- The teach pendant is used for recording positions, jogging the robot, and creating and editing programs.
- Two slides for mounting fixtures with 110 inches of travel for indexing parts into the cell.
- Built in diagnostics.

### Program Features

- Preparatory codes, feedrate and target position for each step.
- Positions can be edited or taught and are usable for other program steps without retooling.
- Circular and linear interpolation allow for complex blended paths.
- Background program can control fixture clamping circuits.
- Full range of logic, math and I/O functions.
- URC provides shell programs for all cutting and tool change functions. Only the actual cutting path has to be taught for new parts.

This system is turn-key, ready to be programmed to run your part in production!

# URC 6 Axes Dual Station Router

Items	Specifications
Robot	6 Axis FANUC robot specifically designed for material removal applications
Footprint	12' x 18'
Tool changer	Pneumatic tool changer
Tool nests	2 standard nests with tool holders and automatic tool covers, can use up to 6 tool nests
Tools	(1) .9 HP air router, (1) .9 HP drill standard
Collision sensor	Pneumatically adjustable breakaway sensor to protect robot tooling during program setup
Slide indexers	Pneumatically actuated linear slides with 200 lb payload, 110" of travel and 10 inch /sec speed
Safety enclosure	Wire mesh with maintenance door, interlock safety switches
Safety mats / zone monitor	Each slide indexer is surrounded by zoned mats which prevent motion of slide when operator is loading fixtures
Operator console	E-stop, Clamping, Run, Hold, Reset functions
Maximum radius reach	67.2 (M710iB), 74.2 (M16iBL) inches
Horizontal stroke from radius	51.3 (M710iB), 62.0 (M16iBL) inches
Repeatability	+-.006 (M710iB), +-.004 (M16iBL) inches
Maximum speed	80 inches / sec
Mechanical brakes	All axes
Mechanical weight	3500 lbs
Fixtures (option)	URC can design fixtures to hold your part
Additional Tools (option)	Step drill, cutoff wheel, right angle router and drill, straight router and drill



URC can provide a variety of router solutions including a mobile 6 axis router and a three station 6 axis router. Custom configurations are also available.



Need just one fixed tool instead of a tool changer? URC can customize our systems to meet your needs!

System Features	Description
Step/Auto program run	Single step forward/backward, auto run
Editing functions	Insert, Add, Delete, Cut, Copy, Paste, Create
Teach pendant	All system functions available
Absolute pulse encoders	No homing of robot required
Feed rate override	VFine, Fine, 1 to 100% of program speed
Guided entry editing	Requires minimal keystrokes with drop down menus and fill in the blank templates
I/O diagnostics	Examine, force and simulate
Jog / Teach	Via Teach Pendant
History log	Shows status and error messages
Program Functions	Ranges
Preparatory	Joint, Linear, Circular, non-motion
Program speed	Up to 80 inches /sec for non-cutting motion
Cutting speed	Dependant on material, typically 1 to 4 inches /sec
Output	On, Off, Pulse
Input	Wait On/Off, transfer to register, branch to label if On/Off
Sub routine	Branch to named routine
Registers	Clear, input, transfer, add, subtract, multiple, divide, compare
Relational operators	=, <, >, <=, >=, <
Branching	Based on relational operators, inputs, unconditional branches
Other	Dwell, cycle time, block end, program end

For more information about URC's routing systems, call **URC** at:

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