

# Robot combined multi-spindle 5 faces milling center **OM-430R**

Drilling, milling, tapping of 5 faces by one  
chucking with 4 axes CNC control



- A gantry scalar robot is built in the machine for supply and collection of workpieces. The robot runs near under the machine roof in the splash room and does not need extra space. The machine contributes to save floor space as its conventional model.
- Tools are fixed in line horizontally and vertically. Tip-to-tip is so fast as 0.8 second.
- With quick change holder, tools can be one-touch changed.
- Workpiece supply and collection point can be designed flexibly at the position to meet the users' production line
- Users can select the combination of the tools best to suit to the workpieces to be machined, like "horizontal 3 + vertical 2", "horizontal 2 + vertical 3" or "angular direction"

## Machine standard specifications

| Item        |                    | Description      |                        |            |     |
|-------------|--------------------|------------------|------------------------|------------|-----|
| Capacity    | Work size          | mm               | 100 x 100 x 100        |            |     |
| Spindle     | Number of tools    | Horizontal       | 4                      |            |     |
|             |                    | Vertical         | 3                      |            |     |
|             | Speed              | Horizontal 1~4   | min <sup>1</sup>       | max 12,000 |     |
|             |                    | Vertical 1,2     |                        | max 12,000 |     |
|             | Speed              | Vertical 3       | max 7,000              |            |     |
| 主軸ユニット先端形状  |                    |                  | BIGゴールドスターホルダ (Option) |            |     |
| Column      | Travel             | mm               | X axis : 390           |            |     |
|             |                    |                  | Y axis : 150           |            |     |
|             |                    |                  | Z axis : 150           |            |     |
|             | Rapid traverse     | m/min            | X axis : 15            |            |     |
|             |                    |                  | Y axis : 15            |            |     |
| Z axis : 15 |                    |                  |                        |            |     |
| C axis      | Travel             |                  | ±360°                  |            |     |
|             | Rapid traverse     | min <sup>1</sup> | 60 (rotations)         |            |     |
| Motors      | Horizontal spindle | 1~4              | kw                     |            |     |
|             | Vertical spindle   | 1~2              |                        | 1.1/3.7    |     |
|             |                    | 3                |                        | 1.1/3.7    |     |
|             | C axis             |                  |                        | 0.75       |     |
|             | Column             | X axis           |                        |            | 1.4 |
|             |                    | Y axis           |                        |            | 1.4 |
| Z axis      |                    |                  | 1.4                    |            |     |
| 電源電力        |                    | KVA              | 1.4                    |            |     |
| 機械高さ        |                    | mm               | 2,140                  |            |     |
| 所要床面積       |                    | mm               | 1,365×1,880            |            |     |
| 機械質量        |                    | kg               | 2,200                  |            |     |

## Standard accessories

- Lubricator
- Tool box and tool kit
- Machine base

## CNC options

- C axis closed loop
- Multiple repetitive cycle (G70~G76)
- Polar coordinate interpolation
- Custom macro

## Work samples at JIMTOF 2008



Zoom cam for CCTV  
(surveillance) camera  
Material : A5056

## Control unit

| Item                        | Description  |
|-----------------------------|--|
| NC control unit             | FANUC/S 32i  |
| Display                     | 7.2 inch L.C.D. (mono-chrome)  |
| Axes controlled             | 4 axes (X, Y, Z, C) Simultaneous 3 axes  |
| Least input incremental     | X, Y, Z axes : 0.001, C axis : 0.001   |
| Interpolation               | Linear, Circular   |
| Auxiliary function          | M 2 digits   |
| Spindle function            | S 5 digits   |
| Tool function               | T 1 digits   |
| Tool offset                 | 32 pairs   |
| Part program storage length | 40m  |
| Rapid traverse override     | 0 ~ 150 %  |
| Interface                   | RS232C and memory card   |
| Robot                       | DENSO "XR-G series"  |
| Others                      | Run hour and parts count display<br>Optional stop, Geometry offset<br>Program number search, Single block<br>Feed hold, Emergency stop, Block delete<br>Sequence number search |

## Machine options

- 5 inch pneumatic precision chuck
- Cutting tool spindle nose : Regofix/ Alps ER-32, BIG goldstab holder
- Air blower, Automatic door open/close device, Door interlock
- Tool tip coolant device, Work light, Foot switch for chuck open/close
- Sensor of tool tip top damage, Signal tower (3 colors),
- Counter in NC display

## Dimensions

