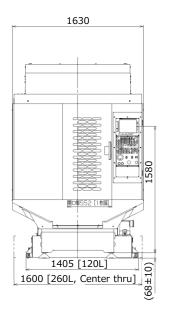
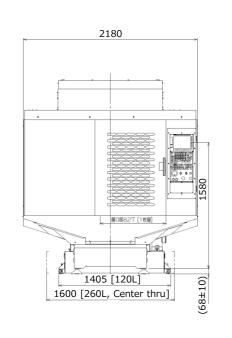
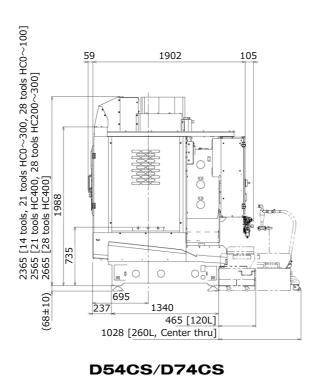
## **Specification**

Item		D54CS	D74CS
Capacity	Travel of axes	X : 500 mm Y : 400 mm Z : 330 mm (400 mm) *option	X : 700 mm Y : 400 mm Z : 330 mm (400 mm) *option
Table	Working space	650 mm × 400 mm	850 mm × 400 mm
	Capacity of workpiece mass	300 kg (400 kg) *option	300kg (400 kg) *option
Spindle		Basic: Max. 10,000 min <sup>-1</sup> /Continuous rating 3.7 kW/1 minute rating 13 kW High torque: Max. 10,000 min <sup>-1</sup> /Continuous rating 4.0 kW/1 minute rating 15.5 kW High acceleration: Max. 12,000 min <sup>-1</sup> /Continuous rating 10 kW/1 minute rating 34 kW Tapping: Max. 12,000 min <sup>-1</sup> /Continuous rating 10 kW/1 minute rating 34 kW High speed: Max. 24,000 min <sup>-1</sup> /Continuous rating 4.5 kW/1 minute rating 26 kW	
Rapid traverse rate		X,Y: 54 m/min Z: 60 m/min *changes by tool weight setting	
Turret	Max. tool mass [total mass]	28 tools: 1.5 kg[24 kg], 2 kg[30 kg], 3 kg[38 kg], 4 kg[46 kg] *only Servo turret 21 tools: 2 kg[23 kg], 3 kg[33 kg], 4 kg[46 kg] 14 tools: 2 kg[15 kg], 3 kg[22 kg], 4 kg[30 kg]	
	Tool change time (Tool to Tool)	28 tools: 0.7 s / 21 tools: 0.6 s / 14 tools: 0.6 s *with fastest setting of Servo turret	
Accuracy	Bidirectional accuracy of positioning of an axis	Less than 0.006 mm *ISO230-2:1988	
	Bidirectional repeatability of positioning of an axis	Less than 0.004 mm *ISO230-2:1997,2006	
Control unit		FANUC Series 31i-B5 Plus	
Machine size	Machine height	2433 mm ±10mm *when without high-column	
	Floor space	1630 mm × 2090 mm	2180 mm × 2090 mm
	Mass of machine	Approx. 2050 kg	Approx. 2150 kg







**D54CS D74CS** 

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https://www.fanuc.co.jp/

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## **High-Reliability and High-Performance Compact Machining Center**

## **FANUC ROBODRILL DC series**



## **D54CS**

X-axis stroke:500mm Y-axis stroke:400mm

# Full model change

## The Brand New ROBODRILL

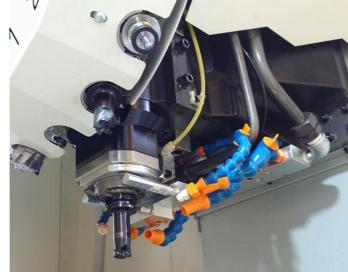


**D74CS** 

X-axis stroke:700mm Y-axis stroke:400mm

A-97152-00763EN\_03





## Cycle time reduction technology

#### **Level-up of feed axes**

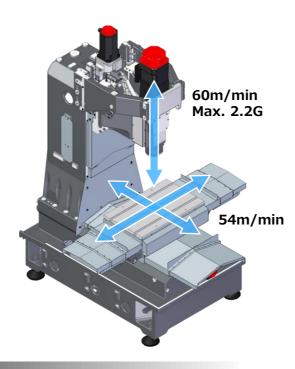
- Z-axis speed 60m/min, Max. acceleration 2.2G XY-axes acceleration are also enhanced
- Smooth transition between paths by Smart overlap 2

#### **New High-acceleration spindle**

- Max. speed 12,000min<sup>-1</sup>
   Continuous rating 10kW and 1 minute rating 34kW
- New high-rigidity spindle unit is ideal for high-efficiency machining of aluminum parts

#### **New G-codes**

- The new G-codes, well received in the DiB Plus series, has been taken to the next level!
- More efficient machining is achieved by G181 new mode with new technology to shortens non-cutting time, and the new canned cycles



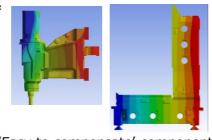
## Thermal displacement control technology

## New mechanism reducing thermal displacement

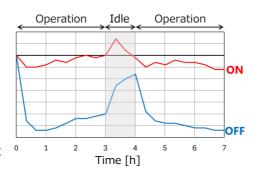
- Thermal displacement itself is reduced by redesigning structure of drive system
- Reduction of 'tilt' by reviewing the structural components using heat transfer analysis, makes it easier to compensate thermal displacement.

## **New thermal displacement compensation**

- Estimation formula for thermal displacement has been refined, improving compensation accuracy.
- Temperature sensors equipped as standard, enable real time tracking room temperature.
- Stable machining is achieved without warming-up machine, contributing to energy savings.



'Easy to compensate' components



Example of compensation result (Z-axis, temperature drift  $5^{\circ}$ C)





## Measures against chips

#### **New machine cover**

• Pursuing the chip evacuation, thoroughly eliminating areas where chips accumulate.

#### **Improvement of coolant options**

- New concept nozzles for efficient chip flush have been adopted, replacing the internal piping which was one of the areas of chip accumulation.
- New center-through coolant unit that applies a cyclone filter for reducing maintenance and longer life

Diffusion type coolant nozzle



Chip flush

#### Other features

#### **FANUC's latest Servo system**

- ai-D series servo with improved motor output and energy efficiency has been adopted
- Integrated amplifier reduces occupying space in the cabinet and enhances expandability for system integration.

## **Machining mode setting function**

- The popular machining mode setting function has also been tuned and added new functions to suit the new model.
- With intuitive screen operation, even beginners can easily and reliably improve productivity.







Latest information of ROBODRILL is available on our website.

https://www.fanuc.co.jp/en/product/robodrill/index.html