

Multi-purpose Intelligent Robot

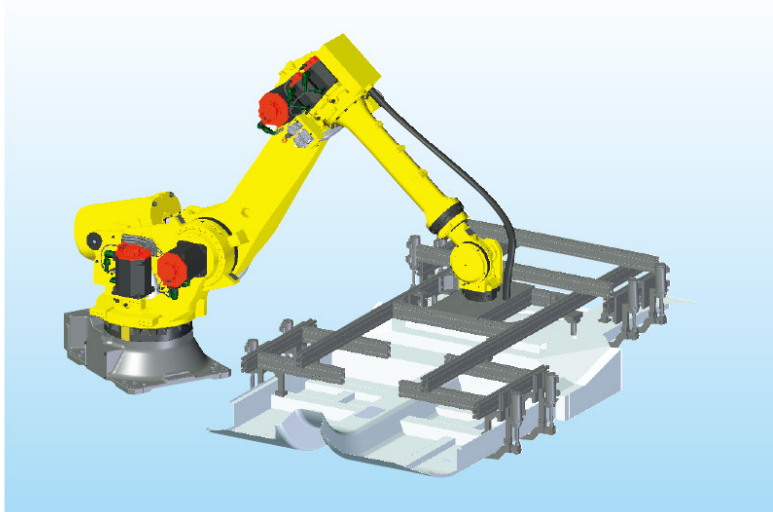
FANUC Robot R-2000iC series



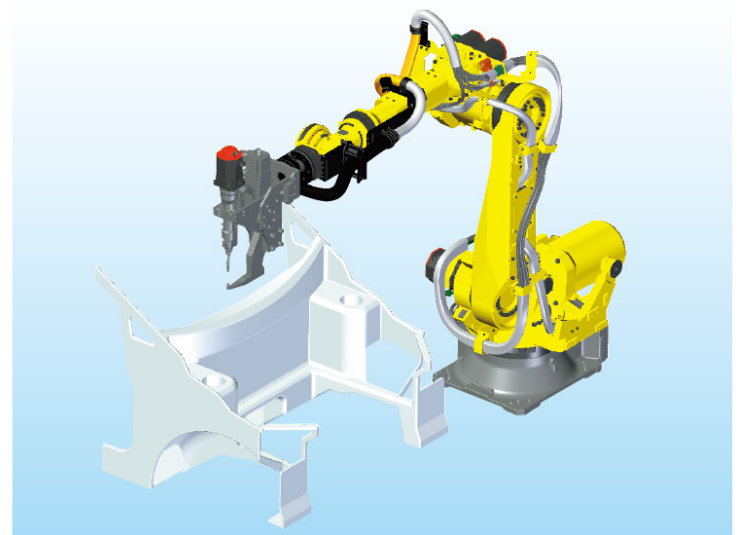
The FANUC R-2000iC robot is a multi-purpose intelligent robot based on FANUC's years of experience and renowned technology. This high performance intelligent robot with outstanding reliability and cost performance will support your needs in a wide range of applications, such as spot welding, material handling and assembly.

- Size and weight reduction of the mechanical unit for a more lightweight and compact robot.
- A lightweight, rigid arm combined with the world's most advanced motion control technology offers significantly improved motion performance, and higher productivity.
- Extensive options are available for various processes, including the spot welding solution arm.
- The new R-30iB robot controller provides an energy regeneration option and a compact cabinet.
- Available with the most advanced intelligent features such as the Learning Robot, Bin Picking, Force Sensing, *i*RVision and Visual Line Tracking.

Application system



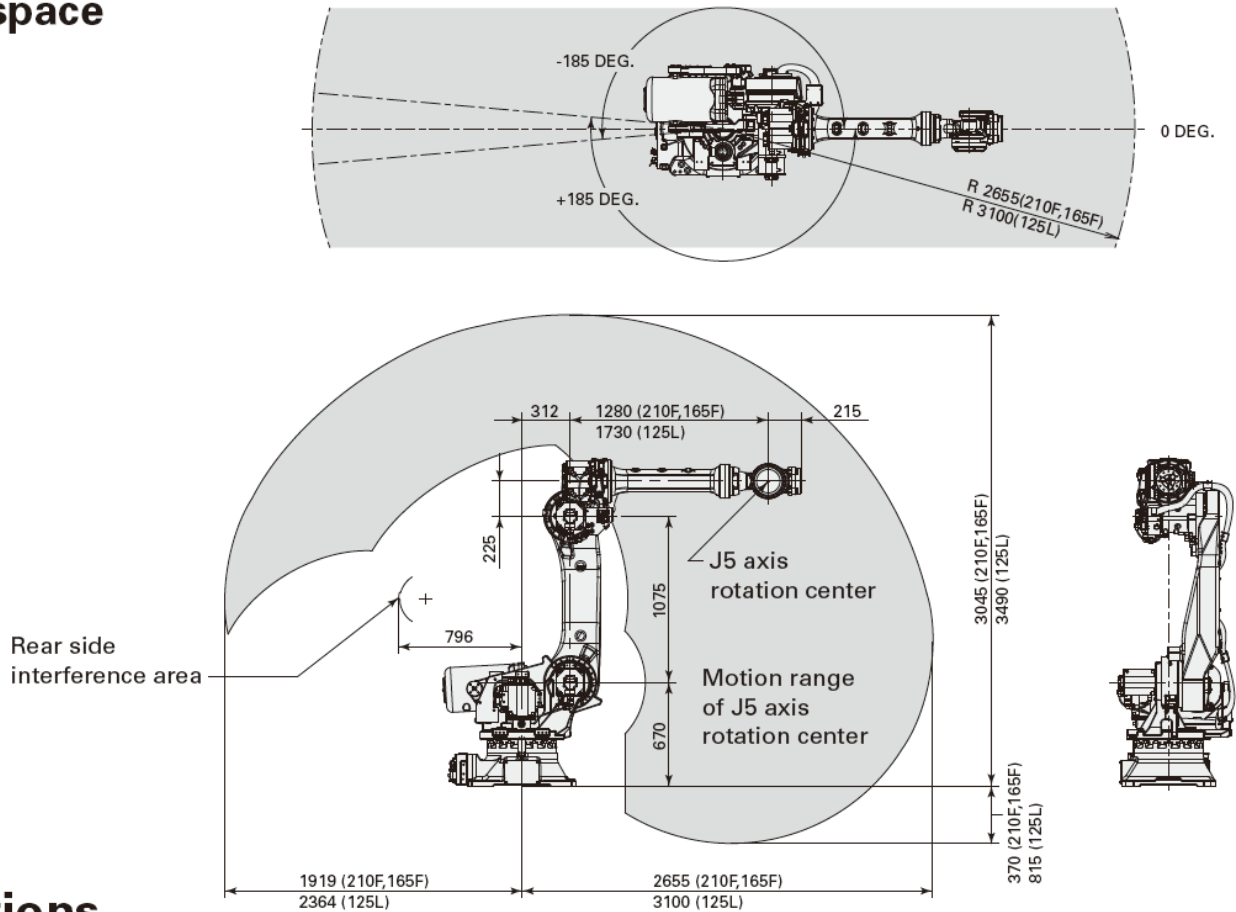
Large part handling



Spot welding

FANUC Robot R-2000iC/210F, 165F, 125L

Operating space



Specifications

Item	Specifications						
	R-2000iC/210F		R-2000iC/165F		R-2000iC/125L		
Type	Articulated Type						
Controlled axes	6 axes (J1, J2, J3, J4, J5, J6)						
Reach	2655mm				3100mm		
Installation	Floor						
Motion range (Maximum speed) Note 1)	J1 axis rotation	370°(120°/s) 6.46 rad (2.09 rad/s)		370°(130°/s) 6.46 rad (2.27 rad/s)			
	J2 axis rotation	136°(105°/s) 2.37 rad (1.83 rad/s)		136°(115°/s) 2.37 rad (2.01 rad/s)			
	J3 axis rotation	312°(110°/s) 5.45 rad (1.92 rad/s)		312°(125°/s) 5.45 rad (2.18 rad/s)			
	J4 axis wrist rotation	720°(140°/s) 12.57 rad (2.44 rad/s)		720°(180°/s) 12.57 rad (3.14 rad/s)			
	J5 axis wrist swing	250°(140°/s) 4.36 rad (2.44 rad/s)		250°(180°/s) 4.36 rad (3.14 rad/s)			
	J6 axis wrist rotation	720°(220°/s) 12.57 rad (3.84 rad/s)		720°(260°/s) 12.57 rad (4.54 rad/s)			
Max. load capacity at wrist	210kg		165kg		125kg		
Max. load capacity on J3 arm	25kg (A)	(A) + (B) < 50kg		25kg (A)	(A) + (B) < 50kg		
Max. load capacity on J3 casing	50kg (B)			50kg (B)	25kg (C)	(C) + (D) < 40kg	
Allowable load moment at wrist	J4 axis	1360 N•m	139 kgf•m	940 N•m	96 kgf•m	710 N•m	72 kgf•m
	J5 axis	1360 N•m	139 kgf•m	940 N•m	96 kgf•m	710 N•m	72 kgf•m
	J6 axis	735 N•m	75 kgf•m	490 N•m	50 kgf•m	355 N•m	36 kgf•m
Allowable load inertia at wrist	J4 axis	147 kg•m ²	1500 kgf•cm•s ²	89 kg•m ²	908 kgf•cm•s ²	72 kg•m ²	735 kgf•cm•s ²
	J5 axis	147 kg•m ²	1500 kgf•cm•s ²	89 kg•m ²	908 kgf•cm•s ²	72 kg•m ²	735 kgf•cm•s ²
	J6 axis	82 kg•m ²	837 kgf•cm•s ²	46 kg•m ²	469 kgf•cm•s ²	40 kg•m ²	408 kgf•cm•s ²
Drive method	Electric servo drive by AC servo motor						
Repeatability	±0.2mm						
Mass Note 2)	1090kg		1090kg		1115kg		
Installation environment	Ambient temperature : 0~45°C Ambient humidity : Normally 75%RH or less (No dew, nor frost allowed) Short term Max. 95%RH or less (within one month) Vibration acceleration : 4.9m/s ² (0.5G) or less						

Note 1) In case of short distance motion, the axis speed may not reach the maximum value stated.

Note 2) Without controller.

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