

# FANUC Robot ARC Mate 100iD



## FEATURES

FANUC Robot ARC Mate 100iD is a torch cable integrated arc welding robot with an enhanced dress-out ability, specifically designed for arc welding applications.

- The unique gear drive mechanism realizes the slim arm of the torch cable integrated robot.
- Welding cable utilities backside the wire feeder can be integrated in the enlarged J1 hollow tube. It makes system setup easy.
- Not only the torch cable but also the sensor cable can be integrated in the J3 arm due to the enlarged J4 and J6 hollow tubes. The wire feeder can be compactly mounted backside of the J3 arm.
- Higher rigidity of the arm provides high speed and high accuracy of the robot motion. It can enhance the productivity of the system.
- Off-line teaching by ROBOGUIDE (Option) reduces touch-up cost.
- Latest intelligent functions with *i*RVision (integrated vision) and coordinated motion with the positioner are available.

## Application system



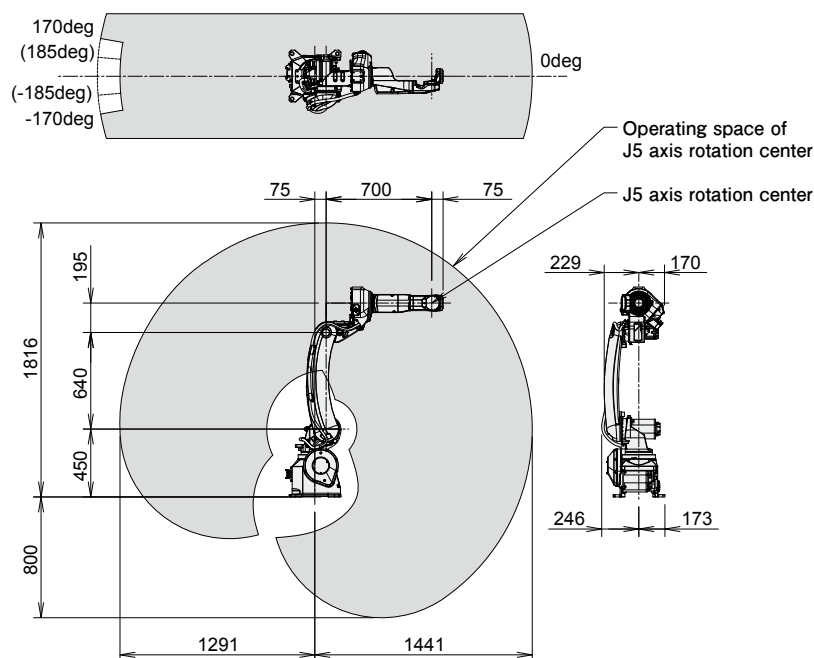
Automotive part welding system



Stainless part welding system

## Operating space

# ARC Mate 100iD



## Specifications

Model		ARC Mate 100iD
Type		6axes(J1,J2,J3,J4,J5,J6)
Reach		1441 mm
Installation		Floor, Upside-down, Angle mount
Motion range (Maximum speed) (Note 1, 2)	J1 axis rotation	340° / 370°(Option)(260°/s) 5.93 rad / 6.46 rad(Option)(4.54 rad/s)
	J2 axis rotation	235° (240°/s) 4.10 rad (4.19 rad/s)
	J3 axis rotation	455° (260°/s) 7.94 rad (4.54 rad/s)
	J4 axis wrist rotation	380° (430°/s) 6.63 rad (7.50 rad/s)
	J5 axis wrist swing	360° (450°/s) 6.28 rad (7.85 rad/s)
	J6 axis wrist rotation	900° (720°/s) 15.71 rad (12.57 rad/s)
Max load capacity at wrist		12 kg
Allowable load moment at wrist	J4 axis	22.0 N·m
	J5 axis	22.0 N·m
	J6 axis	9.8 N·m
Allowable load inertia at wrist	J4 axis	0.65 kg·m <sup>2</sup>
	J5 axis	0.65 kg·m <sup>2</sup>
	J6 axis	0.17 kg·m <sup>2</sup>
Repeatability		± 0.04 mm
Mass (Note 3)		145 kg
Installation environment		Ambient temperature : 0 to 45°C Ambient humidity : Normally 75%RH or less (No dew nor frost allowed), Short term 95%RH or less (within one month) Vibration acceleration : 4.9m/s <sup>2</sup> (0.5G) or less

Note 1) In case of angle mounting, J1 and J2 axis motion range are restricted.

Note 2) During short distance motions, the axis speed may not reach the maximum value stated.

Note 3) Without controller.

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