# FANUC Robot ARC Mate 01B



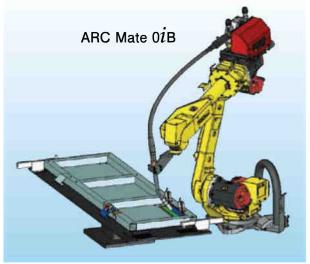


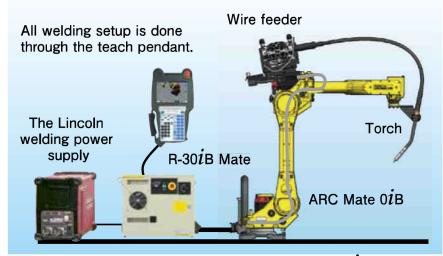
### **Features**

The FANUC ARC Mate  $0\dot{t}$ B robot is an extremely lightweight and compact low cost robot, specifically designed for arc welding applications. The ARC Mate  $0\dot{t}$ B will work for a wide variety of arc welding applications, including smaller parts that are normally done with manual welding.

- The lightweight and compact arm design of the ARC Mate 01B provides a highly reliable package that is optimized for arc welding applications that require delicate motion.
- The latest servo technology provides high-speed and accuracy of the robot motion and minimizes the interaction of the operator to increase the efficiency of the arc welding system.
- Digital communication between the latest Lincoln Arc Welding Power Supply and the ARC Mate 01B provides superior control and performance, creating the highest quality weld.
- Various welding waveforms such as thin metal spatter-less welding and highly-controlled pulse welding can be applied to almost any application for an optimized weld.
- The R-30*i* B Mate controller has the latest arc welding software available, including 4D graphics for easy programming and operation.

### **Application system**



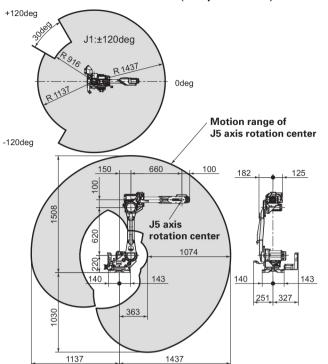


Small part arc welding system with the ARC Mate 01B

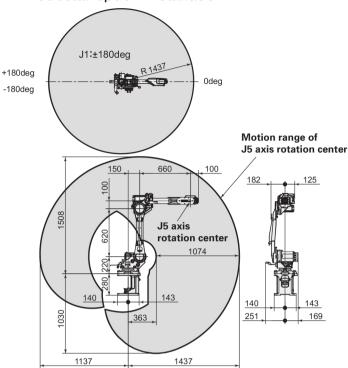
## FANUC Robot ARC Mate OIB

### **Operating space**

### Standard installation (no pedestal)



#### Pedestal option installation



**Robot Specifications** 

Model		ARC Mate $0i$ B
Controlled axes (Note 1)		6 axes (J1、J2、J3、J4、J5、J6)
Reach		1,437 mm
Installation		Floor, Upside-down, Angle mount
Motion range	J1 axis rotation	240[360]°(225°/s) 4.19[6.28] rad (3.93 rad/s) (Note 4)
	J2 axis rotation	250°(215°/s) 4.36 rad ( 3.75 rad/s)
(Maximum speed)	J3 axis rotation	455°(225°/s) 7.94 rad ( 3.93 rad/s)
(Note 2, 3)	J4 axis wrist rotation	380°(425°/s) 6.63 rad ( 7.42 rad/s)
	J5 axis wrist swing	280°(425°/s) 4.89 rad ( 7.42 rad/s)
	J6 axis wrist rotation	720°(625°/s) 12.57 rad (10.91 rad/s)
Maximum laod capacity at wrist		3kg
Allowable load moment at wrist	J4 axis	8.9 N⋅m
	J5 axis	8.9 N⋅m
	J6 axis	3.0 N⋅m
Allowable load inertia at wrist	J4 axis	0.280 kg⋅m²
	J5 axis	0.280 kg⋅m²
	J6 axis	0.035 kg⋅m²
Repeatbility		± 0.08mm
Repeatability		99[145]kg (Note 4)
Installation environment		Ambient temperature : 0 ~ 45°C
		Amibient humidity:
		Normal 75%RH or less
		(No dew nor frost allowed)
		Short term : 95%RH or less
		(within one month)
		Vibration acceleration : 4.9m/s² (0.5G) or less



Note 1) In case of using robot combined with aux. axis, please consult with FANUC.

Note 2) In case of short distance motion, the axis speed may not reach the maximum value stated.

Note 3) Motion range of wrist axis may be restricted by torch to less than the values given.

Note 4) The value in [ ] shown above need the pedestal option.



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