

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 robot is available to meet a variety motion range.
- 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



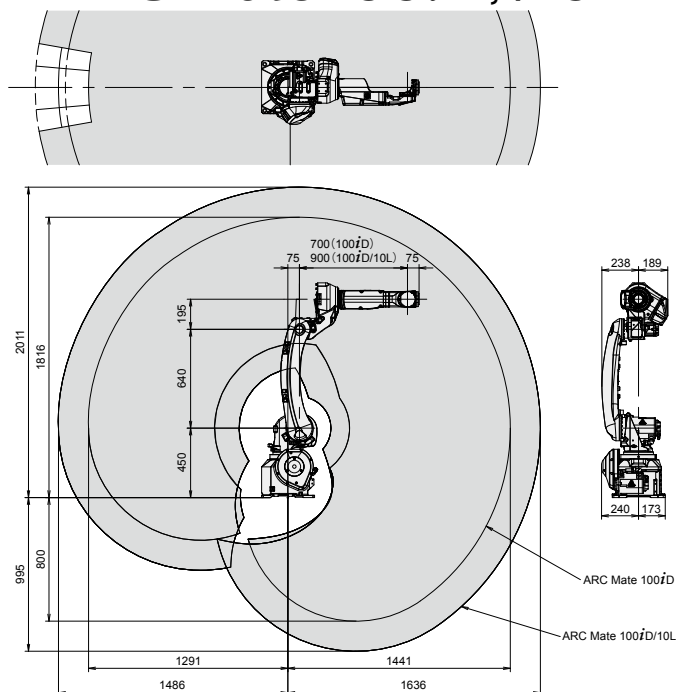
Automotive part welding system



Stainless part welding system

Operating space

ARC Mate 100iD, /10L



Specifications

Model		ARC Mate 100iD	ARC Mate 100iD/10L
Type		6axes(J1,J2,J3,J4,J5,J6)	
Reach		1441 mm	1636 mm
Installation		Floor, Upside-down, Angle mount	*Floor, Upside-down for 4 brake type
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	10 kg
Allowable load moment at wrist	J4 axis	26.0 N·m	22.0 N·m
	J5 axis	26.0 N·m	22.0 N·m
	J6 axis	11.0 N·m	9.8 N·m
Allowable load inertia at wrist	J4 axis	0.90 kg·m ²	0.65 kg·m ²
	J5 axis	0.90 kg·m ²	0.65 kg·m ²
	J6 axis	0.30 kg·m ²	0.17 kg·m ²
Repeatability (Note 3)		± 0.02 mm	± 0.03 mm
Mass (Note 4)		145 kg	150 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 ² (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) Compliant with ISO9283.

Note 4) Without controller.

FANUC CORPORATION

Headquarters Oshino-mura, Yamanashi 401-0597, Japan

Phone: 81-555-84-5555 Fax: 81-555-84-5512 <http://www.fanuc.co.jp>

Overseas Affiliated Companies

FANUC America Corporation
FANUC Europe Corporation, S.A.
SHANGHAI-FANUC Robotics CO., LTD.
KOREA FANUC CORPORATION
TAIWAN FANUC CORPORATION
FANUC INDIA PRIVATE LIMITED
FANUC SINGAPORE PTE. LTD.
FANUC THAI LIMITED
FANUC MECHATRONICS (MALAYSIA) SDN. BHD.

3900 West Hamlin Road, Rochester Hills, MI 48309-3253, U.S.A.
Zone Industrielle, L-6468 Echternach, Grand-Duché de Luxembourg
No. 1500 Fulian Road, Baoshan Area, Shanghai, China
101, Wanam-ro(st), Seongsan-gu, Changwon-si, Gyeongsangnam-do, 642-290 Republic of Korea
No.10, 16th Road, Taichung Industrial Park, Taichung, Taiwan
41-A, Electronics City, Bangalore, 560 100, India
No.1 Teban Gardens Crescent, Singapore 608919, Singapore
1301 Pattanakarn Road, Kwaeng Suanluang, Khet Suanluang, Bangkok 10250 Thailand
No.32, Jalan Pengacara U1/48, Temasya Industrial Park, Section U1, Glenmarie, 40150 Shah Alam, Selangor Darul Ehsan, Malaysia
JL. Boulevard Bukit Gading Raya Blok R, Jakarta 14240 Indonesia
10 Healey Circuit, Huntingwood, NSW 2148, Australia
17 Loper Ave. Aeroport Industrial Ests. Spartan Ext.2 P.O.Box 219, Isando 1600, Republic of South Africa

Phone: 1-248-377-7000 Fax: 1-855-774-7051
Phone: 352-727777-1 Fax: 352-727777-403
Phone: 86-21-5032-7700 Fax: 86-21-5032-7711
Phone: 82-55-278-1200 Fax: 82-55-284-9826
Phone: 886-4-2359-0522 Fax: 886-4-2359-0771
Phone: 91-80-2852-0057 Fax: 91-80-2852-0051
Phone: 65-6567-8566 Fax: 65-6566-5937
Phone: 66-2-714-6111 Fax: 66-2-714-6120
Phone: 60-3-7628-0110 Fax: 60-3-7628-0220
Phone: 62-21-4584-7285 Fax: 62-21-4584-7288
Phone: 61-2-8822-4600 Fax: 61-2-8822-4666
Phone: 27-11-392-3610 Fax: 27-11-392-3615

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ARCMate100iD(E)-03, 2017.11, Printed in Japan