Arc Welding Solution Arm[™]

Basic Description

FANUC Robotics introduces an integrated Arc Welding Solution Arm. This unique dress-out package provides many advantages over a conventional robotic torch configuration. The dress-out package eliminates the typical torch offset, increasing the stability and reliability of the torch cable assembly. Increased arc density is easily achieved with two or more robots working closely together without interference.

A short torch stand off combined with an in-line coaxial torch rotation maximizes the usable work envelope of the robot. Torch-to-arm interference is eliminated, and circular welding is optimized. By managing the torch cable, wire feeding is stabilized, and the overall welding process becomes more efficient.

The torch dress-out package is available as a retrofit kit and can be easily adapted to new or existing ARC Mate robots.

Features

- Proven industry-leading robotic welding technology.
- Provided as a kit that can be added to the ARC Mate arc welding robots.
- Stabilizes welding torch cable, increasing cable life.
- Increased arc density potential with multiple arms working close together.
- In-line design optimizes wrist motion and is ideal for circular welding.



- Easy cable maintenance and quick replacement of torch cable consumables.
- Best-in-class package size offers increased accessibility.
- Best-in-class J6 motion range minimizes air cut time and optimizes circular welding.
- Elimination of safety clutch optimizes torch stand off, maximizing accessibility and work envelope.
- Compatible with all robotic welding power supply packages.

Benefits

- Utilizes proven ArcTool[®] software platform.
- Ideally suited for WeldPRO[™], simplified off-line programming.

- Retrofit to new or existing ARC Mate robots.
- The arm is not dedicated to the application.
- Increases circular welding potential without cable interference.
- Reduces programming and cycle times with coaxial wrist to torch orientation.
- Rigid weld cable improves torch durability by eliminating orientation "Whip."
- Multiple configurations available to best suit application.
- Collision Guard[™] software option is standard.
- Ability to reach into tight configurations and maintain full torch repositioning.
- Non-proprietary torches and consumables.



Increase Arc-density



Retrofit to existing arms Four-Step Process



1) **Standard Torch** Configuration



3) Install **Dress-out**



2) Remove **Standard Torch**



Integrated **Dress-out Package**

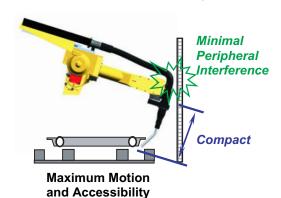
Increased Accessibility



Circular Welding



Confined Linear Welding



Arc Welding Solution Arm Specifications

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Items		AM100 <i>i</i> B/ <i>i</i> Be Package	AM120 <i>i</i> B/ <i>i</i> Be Package
Max Speed (degrees/s)	J1	150	165
	J2	160	165
	J3	170	175
	J4	400	350
	J5	400	340
	J6	520	520
Motion range of wrist axis	J4	240° (-120°++120°)	240° (-120°++120°)
	J5	130° (-130°•+0°)	130° (-130°•+0°)
	J6	480° (-240°•+240°)	480° (-240°•+240°)
Wrist payload capacity (kg)		6	20
Reach (mm)		1373	1667
Stroke (mm)		1017	1282

Note: Dimensions are shown in millimeters. Detailed CAD data are available upon request.

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