

## ArcPack for IRB1410

# New RPC welding package offers rapid robotic arc welding

ArcPack is a cost-efficient, easy-to-use, reliable robotic arc welding function package for quality welding in metal fabrication industries.



ABB's extensive experience of welding applications has been applied to the latest version of the robotic welding package, ArcPack, helping you to get your welding applications up and running quickly while maximizing quality and productivity.

### Outstanding welding performance

ABB has introduced a new RPC welding power source suited for MIG (Metal Inert Gas) and MAG (Metal Active Gas) welding automation. The new RPC welding source offers enhanced control of all welding applications. Its advanced control features enable specific process parameters such as voltage, current and gas flow, to be managed via the ABB FlexPendant controller.

Synergic or pulsed welding process variants are available in 400amp or 350amp models. The device offers a quick set up and uses a logical process adjustment to select the optimum parameters for an application.

Also included is ArcPack's Memory Channel function. It enables manufacturers to program different parameters, comprising welding voltage, wire feed speed and additional features such as creep start, burnback or crater fill setting – all within one memory channel. Up to 90 channels are available for programming.

### High reliability

ArcPack is based on the IRB1410 robot, which has been installed in over 14,000 units worldwide. Known for its stiff and robust construction, the IRB1410 provides fast and reliable work cycles that boost productivity. The

robot is proven in arc welding applications, providing outstanding performance and value, while ensuring short payback times.

### Full integration of the welding equipment

To provide the best welding results with high productivity, the ArcPack robotic welding package has integrated all of the welding equipment required for metal fabrication industries. The torch, wire feeder, bobbin plus the power and signal cables are all carefully integrated with the RPC power source, the IRB1410 mechanical arm and the IRC5 robot controller.

### Easy programming

The package also includes the touch screen interface FlexPendant and RobotWare Arc programming software. Combined with the fifth generation IRC5 robot controller, the package delivers superior path motion, user friendly FlexPendant programming, flexible RAPID language and powerful communication capabilities for unmatched quality and improved productivity in arc welding installations.

### User-friendly and safe operation

The FlexPendant is also ideal for monitoring and optimising the production result and overall operation of the welding cell. Arc-welding applications can be monitored as well as the process parameters selected such as voltage, current and gas flow. This unique integration offers control of the welding process in a very efficient way. Cables to the wire feeder on the robot's upper arm are physically protected and signal cables are shielded from outside interference. All combined, this ensures an accurate, reliable and highly productive welding process.

# Technical Data

Technical specifications			
Power source		RPC S-400	RPC P-350
Welding mode		Synergic	Pulsed
Output		400 A @ 80% duty cycle	350 A @ 80% duty cycle
Connection voltage		400 V (-15 ... +20 %)	400 V (-15 ... +20 %)
Fuse, delayed		35A	25A
Rated power at max current		19.5 kVA	16.0 kVA
Load capacity 40°C	80 % ED	400 A	350 A
	100 % ED	380 A	330 A
Open circuit voltage		50 V	50 V
Power factor at maximum current		0.9	0.85
Efficiency at maximum current		0.87	0.88
Dimensions LxWxH (mm)		590 x 230 x 500	590 x 230 x 430
Weight (kg)		35	36
Wire feeder		A314F	
Operating voltage		50 V DC	
Rated power		100 W	
Load capacity 40° C	80% ED	600 A	
	100% ED	500 A	
Operating principle		4 wheel feed	
Wire feed speed		0 ... 25 m/min	
Filler wires	Ø Fe, Ss	0.8 ... 1.6 mm	
	Ø Flux-cored wire	0.8 ... 1.6 mm	
	Ø Al	1.0 ... 1.6 mm	
Welding gun connector		Euro	
Operating temperature range		-20 ... +40 °C	
Storage temperature range		-40 ... +60 °C	
EMC class		A	
Degree of protection		IP23S	
Dimensions LxWxH (mm)		269 x 175 x 169	
Weight (kg)		4.5	
Torch		PSF315	
Cooling		Air cooled	
Cable length		1.5 m	
Bend		25°	
Load capacity		170 A @ 100% duty cycle	
Standard tips		0.8 – 1.2 mm	

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