

ArcPack for IRB 1410

Arc Welding Function Package



IRB 1410 ArcPack is a cost-efficient, easy-to-use and reliable robotic arc welding function package for quality welding of primarily mild steel for several applications in metal fabrication industries. IRB 1410 ArcPack is based on the IRB 1410 which has been installed in over 14,000 units worldwide out of which most for arc welding.

Knowledge of the Process

ABB's wide experience of welding applications has been applied to the design and tuning of the IRB 1410 ArcPack. This experience will assist you to get your welding operation up and running quickly while maximizing quality and productivity.

Easy-to-use

- New generation IRC5 controller with touch screen FlexPendant and intuitive control of welding process.
- ABB's highly developed ArcWare software provides the tools for unmatched quality and productivity in an arc welding installation.
- High speed and accurate positioners ready to add-on.

Good Quality

ABB robot, process equipment and welding software ensure high and persistent welding quality on steel.

High Reliability

- Well proven and highly reliable IRB 1410 arc welding robot and software.
- World class standard arc welding micro processor controlled process package with automatic protection against overload and foreign particles.
- Standardized and well tested function package.

Fast and Qualified Support

- Dedicated support from ABB.
- Quality spare parts available worldwide through ABB global distribution network.
- Dedicated arc welding team at your service.



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Full Integration of the Process Equipment

To reach the best welding results and high productivity, all components in an arc welding function package must be of high quality & performance and well integrated with each other. In ArcPack, the torch, the wire feeder plus the power and signal cables are carefully integrated with the power source, the IRB 1410 mechanical arm and the IRC5 controller. The hardware integration is combined with software integration.

Easy Programming

The programming of the complete robot welding station, including both the robot and welding programs, is performed from the unique ABB teach pendant called the FlexPendant. It has a large colour touch screen for easy and efficient communication. Single point-of-programming together with the interactive touch screen control is the unique ABB standard concept for highly productive on-line programming. In addition, ABB has the most accurate TCP control on the market, which makes easy re-orientation of the gun possible regardless of the mounting of the gun.

User-friendly and Safe Operation

Also for the operation of the welding cell, the FlexPendant is an efficient tool to monitor and optimize the production result. The robot operation as well as the process parameters such as voltage, current and gas flow etc. are controlled from the FlexPendant. This unique integration gives you the power to control the welding process in a very efficient way. Cables to the wire feeder on the robot's upper arm are physically protected either in a standard and well proven hose package or are lead inside the robot arm. The signal cables are shielded from outside interference. Combined this ensures an accurate, reliable and highly productive welding process.

TECHNICAL DATA

Arc welding robot IRB 1410

See separate data sheet

Arc Welding and Motion Software

- Full control of power source from FlexPendant
- Easy parameter settings
- Functions for safe weld-start and re-start
- Motion functions for optimized welding
- Highest TCP accuracy on the market
- Highly efficient anti-collision detection

Power Source & Wire Feeder

- Inverter type power source RPB 420/320
- RPB 420: Output current 420A with duty cycle 70%, 400A at 100%
- RBP 320: Output current 320A with duty cycle 100%
- Complete integration with robot
- Parameter settings made on FlexPendant
- Wire feeder for 1.0 - 1.2 mm wires and speeds between 0.5 - 30m/min

Welding Torch

- PSF 310, Air-cooled
- PKI 500, Water-cooled
- High accuracy of both torch and robot TCP
- Quick replacement of torch and cable assembly
- Long life cycle contact tips available