IRB 6700 SpotPack
Spot Weld Function Package

ROBOTICS

IRB 6700 SpotPack is a function package for spot welding that is completely configured and ready-to-use. The solution is a combination of hardware and software modules. It is an ideal solution for manufacturers looking for a safe spot welding process and long-term optimized production.

Extensive experience for optimum production
ABB has extensive experience developing spot-welding equipment to solve unique requirements. ABB has been delivering function packages for the automotive and general industries for more than 25 years, guaranteeing a solution to optimize production.

A complete ready-to-use package
IRB 6700 SpotPack is specifically designed to be a ready-to-use and reliable solution for spot-welding applications. All hardware, software and electrical modules needed to complete a function package are included. The components are designed and configured to easily interface with each other. The system uses a great software platform where customer unique features also can be configured.

Main benefits
• Completely configured and tested equipment ready before delivery that allows for fast and easy commissioning.
• Single supplier of robot and SpotPack/DressPack guarantees simultaneous delivery and verified system functionality.
• Configurable for various requirements thanks to a modular design to meet specific process requirements.
• Available for both robot-carried guns as well as for stationary guns.
• ABB standard solutions with verified suppliers guarantees fast and accurate spare part deliveries.
• Optimized and feasible solution available in early project stage through virtual controller, simulation models and full documentation.
• Modular solution that can be used on many robot variants, for example IRB 6700 and IRB 7600.
Components

Besides the robot, the components in the SpotPack includes DressPack LeanID, spot welding cabinet, spot welding software, spot welding gun, water and air unit and tip dresser.

1. DressPack LeanID

DressPack LeanID is a partly integrated dress pack that makes the production more secure and flexible. It reduces the cable wear that leads to fewer cable replacements which increase productions uptime. Suits also well for 3D simulation.

2. Spot welding cabinet

The spot welding cabinet contains the electric components and circuits needed for spot welding application. It has the welding controller build in and is fully controlled from the robot controller via the spot welding software. The capacity and functionality depends on the choice of different options. The cabinet has a large size to support maintainability.

3. Spot welding software

The Spot welding software is simple and has complete functionality, but is still flexible to adaption for specific needs. It contributes with reliability and quality in the production and is available for robot carried and stationary welding guns.

4. Spot welding gun

The FlexGun is a simple and robust modular spot welding gun with parallel arm movement enhancing arm to guarantee process quality. It is designed for heavy electrode force, has its center of gravity near the robot attachment and is easy to integrate and maintain. Same configuration are used for robot carried or stationary guns. As a standard there are two types of guns – "X" or "C/J", and 12 different variants in those, which offers a wide range of welding solutions.

5. Water and air unit

The water and air unit is fitted on the base of the robot and contains components for water and air distribution and control within the SpotPack. It is available for both robot carried guns as well as for stationary guns and is controlled from the robot controller via the spot welding software. The capacity and functionality depends on the choice of different options.

6. Tip dresser

The tip dresser makes dressing in one fast step with even and preset cutting conditions. It is a reliable and safe product that secures fast commissioning. There are a wide range of customized electrode types available on request. The same tip dresser can be bolted on the floor for robot carried guns or put on a swing arm for tip dress of stationary welding guns.