RobotWare Plastics Mould
Software for the Plastics Industry

ABB for easy robot handling
RobotWare Plastics Mould is a unique software especially designed for machine tending and post processing in injection moulding and makes the programming and operation of ABB robots easy. It provides an easy-to-use interface for programming and production, including safe home run, user authorization, production statistics and event log as well as a standardized and structured way of machine tending programming. RobotWare Plastics Mould combined with Euromap/SPI constitutes a configured communication interface between robot and injection moulding machines.

Production efficiency
Production becomes more efficient all through installation, production set-up and optimization of the robot cycle, no matter if you produce mobile telephones or car bumpers. RobotWare Plastics Mould minimizes the learning curve, setup time, error recovery time and improves error diagnostic accuracy. The keyword is EASY.

Increased productivity with RobotWare Plastics
- Less investment in training and quicker to get started with the robot.
- Fast installation with Euromap (12 and 67) and SPI pre-configured standards.
- High Machine Safety thanks to the user authorization system.
- Short start for production.
- High availability through quick error recovery and no need for robot experts.
- High reliability through on-line production overview, safe home run and advanced error handling.
- High flexibility for short product cycles due to easy programming and optimization.

Easy to install
Euromap/SPI is the standardized hardware signal interface between robot and injection moulding machine. It is used for all the hand-shaking signals such as “machine is open”, “machine is closed”, “robot is inside the machine” etc.

The Euromap/SPI is excellent when combined with RobotWare Plastics. The machine modules of RobotWare Plastics Mould are pre-defined with the Euromap/SPI signals, making the robot programming of the part extraction from the machine very easy and quick.

Easy to program
The Program wizard guides the inexperienced robot programmer through making a robot program. In just a few steps a machine-tending program is created. The software is built with symbol programming that hides programming language (RAPID) from the user.

The experienced programmer can utilize the advanced programming possibilities to create and modify unique stations and grippers. The combination of symbol programming and RAPID modifications offers a very powerful and flexible tool to program and modify machine tending programs.
Easy to operate
The operator starts the customized cycles typical for injection moulding (production, run machine without robot, machine warm-up, quality control etc.) by one button tap in the production window. The robot's movement is displayed in real time by the active station indicated by the green and red station icons on the color screen. Production statistics, signal status and error log are presented in a pedagogic fashion.

Safe Home run
Should a problem occur in one of the stations, RobotWare Plastics allows the robot to continue production around the problem, going to an alternative station. The secure and automatic home run system takes the robot safely from any situation where it has stopped without any need to jog the robot in difficult areas. To ensure full safety ‘safety zones’ can be added.

Optimal motion control
The RobotWare family of controller software is designed to make you more productive and to lower the cost of owning and operating a robot. RobotWare ensures optimal process performance through ABB’s advanced Motion Technology that has the most accurate path holding on the market. Motion control is the key to the robot’s performance in the area of path accuracy, speed, cycle time, programmability and synchronization with external devices. By improving these parameters, users improve quality, productivity and reliability.

RobotWare Dispense helps you handle on/off guns as well as proportional guns. Up to five guns can be handled simultaneously in wet or dry mode. RobotWare DieCast is the easy-to-program software for die casting applications.

RobotStudio Plastics Sales Tool is a simulation software for machine tending applications that gives you a quick estimation of both cell foot print and cycle time.

Features RobotWare Plastics Mould
- Euromap 12/67 and SPI signal interface.
- User Authorization System.
- Automatic and safe home run.
- Graphical production window.
- Production statistics.
- Event log and Signal status.
- Status and error indication in colors.
- Picture of produced part.
- Customized cycles used for machine tending.
- Programming wizard with symbols.
- Available for IRB 140, 1400, 1600, 2400, 4400, 6600, 7600 and their different variants.
- Languages: Chinese, Dutch, English, French, German, Japanese, Spanish, Italian and Swedish.

The program wizard contains seven steps to create the cell: name, gripper, cell stations, cell cycles, cell station positions, cell path, check and save.