Robotics

RobotWare Machine Tending

RobotWare Machine Tending is a flexible controller software for deployment and operation of ABB robots. It provides configurable and powerful tools, including an intuitive graphical user interface, that facilitates trouble-free and safe operation for everyone.



ABB's RobotWare Machine Tending software provides an intuitive and customizable graphical user interface via ABB's powerful FlexPendant control device. It delivers incredible flexibility for the wide array of machine tending applications that exist and makes robot programming for the industry easier than ever before.

With more than 30,000 machine tending robots installed, ABB's decades of experience have culminated in an overhauled system of robotic machine tending software designed with the customer's most common considerations in mind. Although RobotWare Machine Tending can be used very effectively as a standalone piece of software, it is also designed to work seamlessly with RobotStudio Machine Tending PowerPac for an enhanced and streamlined PC-based user experience. For everything from die-casting to injection molding and machining, this new package delivers world class flexibility and ease-of-use.

Tightly integrated system

Although it works effectively as a standalone piece of software, RobotWare Machine Tending can also receive programs generated in the virtual 3D world directly from RobotStudio Machine Tending PowerPac and begin to use them with very little adjustment.

Production monitoring and control

An intuitive and customizable graphical user interface allows for easy production monitoring and control, as well as automatic program and part selection. If more than one robot is working together using ABB's MultiMove technology, each robot is selectable via tabbed pages. User-definable cycles are accessible via large and welllabeled on-screen touch buttons. Cycle times and counts – matched up with part names – are easily viewable.

Powerful coding tool

Whether you are a RAPID programming expert or not, RobotWare Machine Tending has the powerful tools and unlimited access to RAPID programming you need.

Trouble-free operation

A combination of innovative features results in high reliability, high availability and easy maintenance. An automatic, easily accessible and safe HomeRun feature enables even untrained workers to move the robot to a pre-defined home position without the risk for collision.

Error and information messages are color-coded and prominently displayed on screen. An event log makes it easy to track down errors, while powerful debugging features allow an operator to discover where the error exists in the code and correct it.

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Features Overview

Graphical operator screen	Operator screen for production monitoring and robot control. Production and station overview, including status and error indications, cycle information, etc
Cycle handling and program control	Configure and run different production cycles
Station configuration	Configure and display station status, variables and signals
Gripper control	Support multiple tools per program. The tool can be manually opened or closed. Set-up, visualize and execute grip sequences
Part configuration	Configure and display part data and information. Secure that correct part, tool and program are used
Signal configuration	Overview of signals used in program
Automatic HomeRun	Move the robot to Home Position in a safe way without collision. Easy and secure with one but- ton click. Quick error recovery in case of stop
Service and	Easy definition and execution of service and
Setup routines	setup routines, e.g. Tool check, Calibration
HotEdit	Simplified modification of robot positions to improve robot movements
Error handling	Advanced error handling simplify trouble- shooting and improve uptime
RAPID Framework	Flexible and structured RAPID framework that reduce programming time, trouble-shooting and future re-programming



System requirements

The following system requirements must be met in order to use RobotWare Machine Tending.

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Supported robot	All six-axis robots
models	
Robot control system	IRC5 or later
Software RobotWare	5.15 or later
Required RobotWare	Flexpendant Interface, Worldzones
options	(included in RobotWare Machine Tending)

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Related products

RobotWare Machine Tending can be complemented with other ABB software products and accessories in order to further improve robot machining performance and productivity.

RobotStudio Machine Tending PowerPac

RobotStudio Machine Tending PowerPac – an add-on for RobotStudio, ABB's powerful PC-based programming tool – provides a platform for quick, easy creation and editing of machine tending robot cells in a 3D virtual environment.

For more information please contact:

www.abb.com/robotics

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