

ABB combines robot controller and PLC to support enhanced automation possibilities

The newly integrated ABB PLC and robot controller offers cost saving, ease of use and powerful performance for robotic production cells.

August 23, 2010.

ABB has introduced an integrated PLC and robot controller for robot cell applications, offering powerful performance in a single unit. Combining ABB's flexible AC500 PLC with its IRC5 robot controller, the newly integrated unit eliminates the cost and space of a separate PLC cabinet and greatly reduces the time associated with the set up and operation of robotic production cells.

With up to three local I/O boards plus bus communications for remote I/Os, the integrated controller provides users with a single point of control for a range of production cell functions, including peripheral production equipment such as grippers, feeders and ancillary machines. All of the main communications standards, including DeviceNet, PROFIBUS DP, CANopen and Modbus TCP are supported, as well as wireless communications, making the integrated controller suitable for virtually any factory site.

To help simplify programming and operation a software framework is included which removes the need to set-up a communication infrastructure between the robot controller and PLC. The framework includes user friendly interactive displays on the robot controller interface device, the FlexPendant. This all means the integrator can start on a higher level and concentrate on the specifics of the installation.

Since its launch in 2006 the AC500 PLC has proven popular with OEMs and plant operators looking for a system that can be easily expanded to meet changing requirements. A key benefit of the PLC is its flexibility. Using the Control Builder software, programmers are empowered by a complete, unified development environment including all six IEC61131-3 programming languages and tools for configuration, debugging and visualization.

Available from summer 2010, the IRC5 controller with the integrated AC500 PLC offers a one-stop solution for truly expandable and scalable programming based on a user-friendly, high performance and low-cost automation platform.

For more information please contact:

Mats Myhr, ABB Product Manager for robot controllers

mats.myhr@se.abb.com