TrueView transforms robotic manufacturing processes
TrueView vision guided robotic (VGR) systems see and react to changes within the industrial work environment enabling ABB robots to precisely locate the pose of a work object.

TrueView makes robot vision simple
The TrueView function package provides a complete robot vision solution including hardware and software. ABB provides standard VGR modules to save robot programming time, and a TrueView FlexPendant GUI to provide factory workers with a simplified access point for troubleshooting and calibration.

Integrated ABB vision is low maintenance and reliable
With over 200 systems installed and seven years of continuous design innovations, TrueView is a reliable and robust vision solution for ABB robots.

Vision guided robotics provides savings
Manage variation in part styles and part location
Eliminate costly precision fixturing, mechanical part crowding and dunnage
Automate operations that previously required human interaction

Increases “Up-Time” and eliminates robot crashes by seeing the part on racks
Enhances quality using basic inspection and part identification techniques

Main Applications
Material handling
Machine tending
Glueing and sealing
Press automation
Powertrain assembly
Body-in-white

TrueView 5.12™
Vision Guided Robotics
TrueView 5.12™
Vision Guided Robotics

TrueView 5.12 Vision Platform

Xi2DTM
- Single or multi camera 2D information in 3 degrees of freedom (x, y, Rz)
- Error proofing using feature present / absence and part identification
- Calculate tolerances and positioning data for quality checks

IDM2.5DTM
- Single camera information in 4 degrees of freedom (x, y, z, Rz)

SC3DTM
- Patented single camera 3D technology provides a full six degrees of freedom for rigid parts (x, y, z, Rx, Ry, Rz)

Technical Data

Supported Robot Types
Robot Controller   IRC 5
Robot Type   All IRB robot arms

Robot Controller Configuration Requirements
Hardware   Analog/Digital Combi Board
RobotWare   Release 5.12
PC Interface   FlexPendent Interface
Communication   PC SDK

Performance
Vision Accuracy   +/- 1 mm (part dependent)
Vision Processing Time   .5 sec for 2D applications
                        1 – 3 seconds for 2.5D and 3D applications
Typical Part Movement   +/- 15 degrees, +/- 300 mm

Standard Hardware
Camera   Sony CCD cameras (analog)
          JAI and Baumer GigE cameras (digital)
Lens   8 or 12mm (standard)
Lights   Red LED light bars (8" or 12" standard) with analog control by robot
Industrial PC   180W Power-Supply -
               DDR II 1G 667MHZ memory
               Intel Core 2 Duo T7500@2.2 GHZ CPU
               Hitachi 160G HDD
               Windows XP Pro + SP2