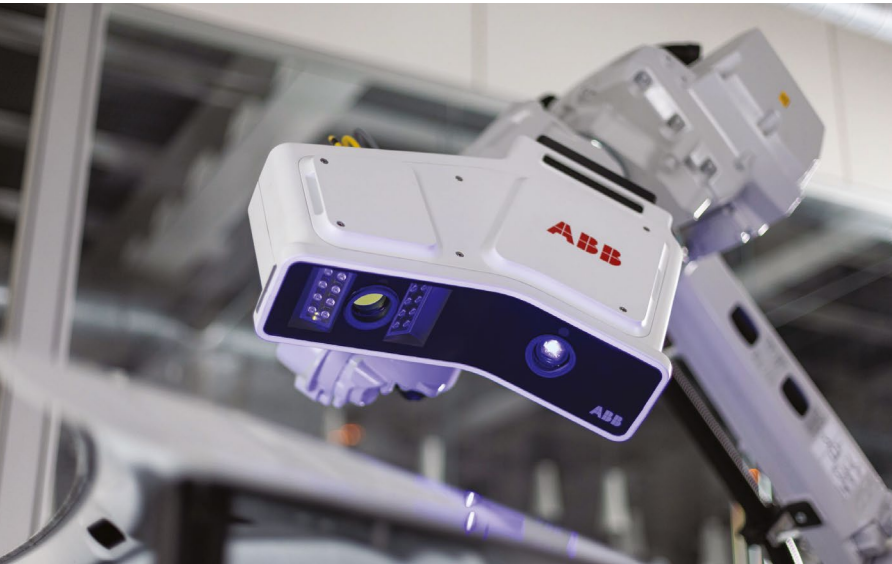


3DQi In-Line

In-Line quality inspection in one single step



ABB's 3DQi In-Line combines the accuracy and repeatability of structured-light technology with the speed and flexibility of a robot to inspect 100% of your manufactured parts

About the solution

ABB's 3DQi In-Line solution combines the benefits of ABB's robots and proprietary machine vision and software to enable fast and accurate inspection of the geometry and quality of complex parts after stamping, welding, die casting and other manufacturing processes. Using pre-integrated software and vision technology, 3DQi can check the quality of a wide variety of parts without disrupting the production flow.

Performance

The solution combines the speed of the 3D proprietary vision technology and the flexibility of the ABB robots, enabling faster scans and trajectories.

3DQi Software Suite

The 3DQi Software Suite offers intuitive tools to analyze the data and results of the product quality inspection:

- Quality Control HMI
- PolyWorks Inspector™ Standard
- Process monitoring and analytics
- Reports

Digital twin - RobotStudio®

The digital twin enables the simulation of custom applications to test and demonstrate optimum configurations and to support the engineering and commissioning phase. The RobotStudio® plugin

simplifies the programming of new parts thanks to an auto path planning function.

Applications

- Geometrical inspection
- Welding seam inspection
- Key components presence control

Configuration

3DQi InLine is offered as a pre-configured functional module consisting of:

- 3D Optical Scanner
- ABB Robot
- Calibration Unit
- Touch Screen (HMI)
- Robot Controller
- Vision Cabinet
- Software

Additional offering

OmniVance 3DQi Off-Line Cell



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3D Optical scanner specs:

Main Application	In-line quality inspection
Field Of View (mm) (X/Y/Z)	340 x 270 x 200
Speed	0,1 seconds
Size (mm) (L x W x H)	460 X 380 X 150
Resolution	12/5.7/1.4 MP
Sensor Weight	12 Kg
Protection	IP5X
Stand-off distance	410 mm
Accuracy	22 microns
Robots	IRB 2600ID IRB 4600-40/2.55

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Scope of supply:



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