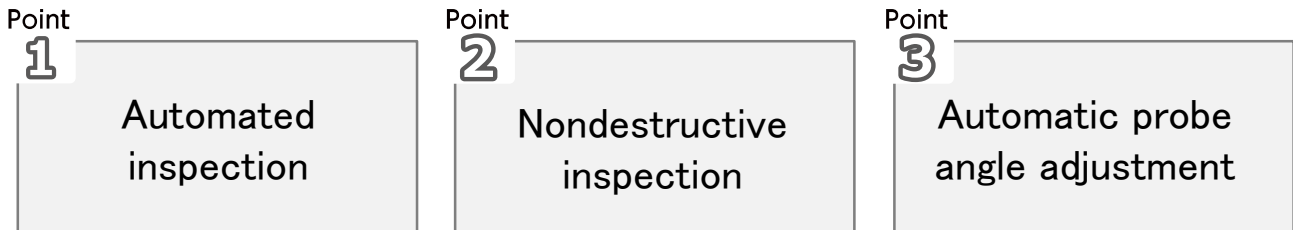


Save labor and improve the quality of automobile manufacturing

Spot Welding Inspection Robot



Product and Service Features

Robot system for automating spot welding inspection

Matrixeye™ and our robot control technology combine to automate spot welding inspection. The articulated robot is equipped with an ultrasonic probe, couplant dispenser, and position correction camera, making it possible to automate ancillary work necessary for measurement.

Nondestructive inspection of spot welds using Matrixeye™

Matrixeye™ uses an aperture synthesis technique combined with our proprietary 3D phased array function, which allows nondestructive inspection of spot welds. In addition, the ability to measure the weld diameter enables direct numerical management.

Weld inclination estimation engine to automatically adjust the probe angle

Our proprietary engine estimates the weld inclination angle based on 3D ultrasonic reflection intensity data from Matrixeye™. The angle of the inspection probe on the articulated robot is automatically adjusted based on the estimated weld inclination angle so that the probe is placed on the weld at an appropriate angle.

