MECHATRONICS

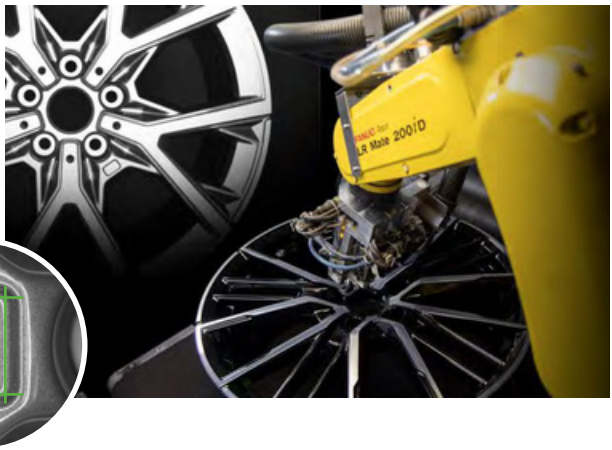
MACHINE VISION APPLICATIONS

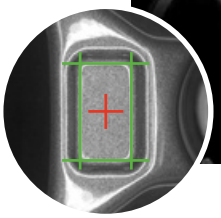
ELVAC

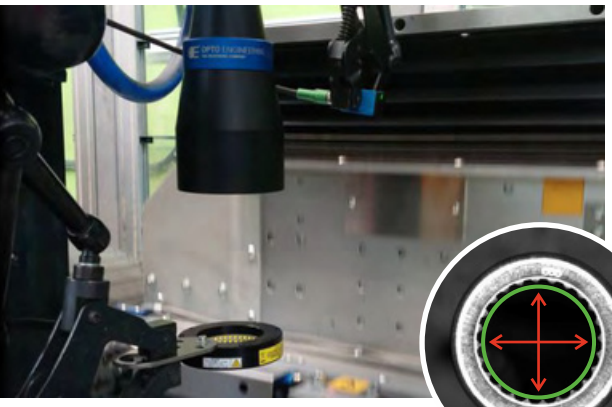
www.elvac.eu

PRECISE POSITIONING OF A 6-AXIS ROBOT

Technology	Multi-camera robotic system with industrial PC
Application	Automated sticker application with a robotic arm, sticker localization, correction after peeling, spot search and placement on aluminum wheels
Detail	Camera system guiding a robotic arm with an accuracy of better than 0.1 mm





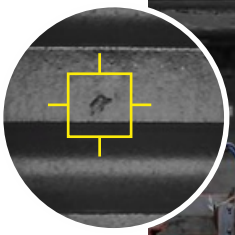


PRECISE MEASUREMENT AT HIGH SPEEDS

Technology	Multi-camera system built on the NVIDIA Jetson platform
Application	Product dimensional inspection and defect detection at high speeds
Detail	Conveyor speed more than 1.5 m/s Evaluation with accuracy better than 0.05 mm

OUTPUT DEFECT INSPECTION WITH HIGH VARIABILITY

Technology	Comprehensive camera system with powerful PC SW applications using neural networks
Application	Output camera inspection of roof tiles, detection of broken corners, scratches and cracks, detailed statistics of the location and frequency of individual defects
Detail	Online evaluation by neural networks, scanning without stopping the product at a line cycle of 300 ms



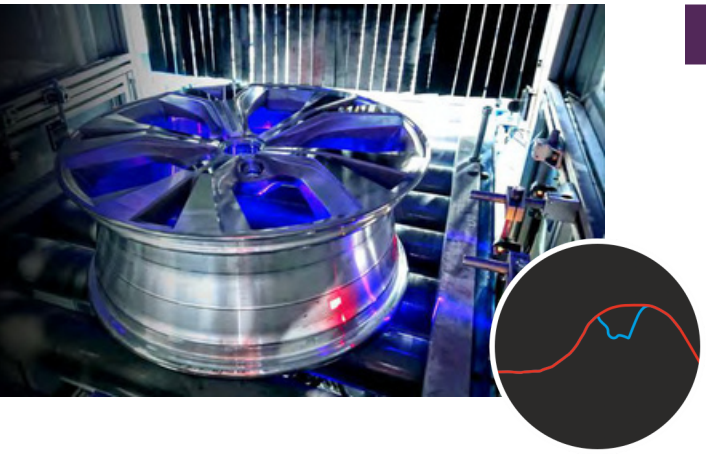
ELVAC
Hasičská 53 700 30
Ostrava - Hrabůvka
Czech Republic

Phone: +420 730 590 882
Email: obchod.elektro@elvac.eu
Web: www.elvac.eu

MECHATRONICS | MACHINE VISION

OPERATOR INSPECTION OF CORRECT ASSEMBLY

Technology	Camera sensors and systems KEYENCE and COGNEX
Application	Inspection of parts before assembly, checking the presence of the part and its orientation, checking the correct connection of the connector
Detail	Assembly control on dedicated assembly tables

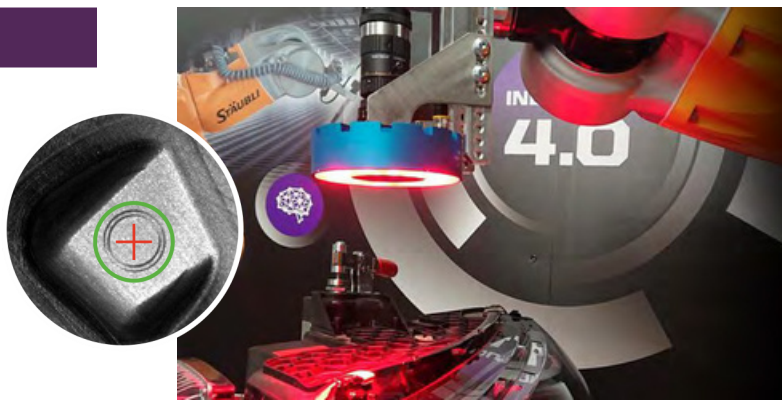


SURFACE DEFECT DETECTION USING 3D SCANNING

Technology	A comprehensive system with a linear 3D scanner and an industrial PC
Application	Porosity detection on machined aluminum wheels before the painting process
Detail	Precise 3D laser measurement with defect detection from 0.1 mm^2

RESEARCH ROBOTICS WORKSHOPS

Technology	Development of robotic systems for precise measurement and absolute quality control
Application	Research projects focused on precise measurements using a camera on a robotic arm and the versatility of the station with adaptive functions and an intuitive user interface
Detail	Science and research



ELVAC
Hasičská 53 700 30
Ostrava - Hrabůvka
Czech Republic
Phone: +420 730 590 882
Email: obchod.elektro@elvac.eu
Web: www.elvac.eu