



SCANNING TECHNOLOGY

The technology of non-contact laser scanning is actively developing worldwide. Various industries and science demand new applications for laser scanners. For example, the development of cognitive technologies in robotics has led to further improvement of contactless control technologies.

LASER SCANNERS

BASIC SPECIFICATIONS

Laser: red (658 nm), blue (450 nm), green (532 nm), and infrared (808 nm)

Housing: compact, standard and large

Frequency: 60Hz - 1.7kHz

Scanning Precision: 0,005..0,1 mm

Interface: Ethernet 1Gb/100Mb

Power Supply: 12-36V, 5W

Class: IP67

Additional options: IP68, protective glass, quick-release fastenings, air blowing and cooling

Software: AN Viewer and special software tailored for many industrial applications including welding control, robotics, CNC machines, automation, etc.





Scanners offer advanced options such as:

Possibility to apply filters in real time

Mathematical calculations

Possibility to design and load custom software into the scanner and make custom calculations, flash, data transfer protocol, etc.



LASER SCANNERS APPLICATION

- Manufacturing and Shipbuilding
- Industrial Automation
- Machine Vision
- Quality Control
- Military Industry
- Transportation
- Electronics

- Electronics
- Metallurgy
- Energy Industry
- Welding
- Biology
- Medicine
- Criminology

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- Art and Archaeology
- Food Industry
- Plastic Production
- Woodworking
- Packaging and Post Services





MANUFACTURING AND SHIPBUILDING

- Quality control (automated measurements, comparing manufactured parts or assemblies against drawing or standard on parameters of tolerances)
- Control the parts position in a robotic assembly
- Check the position of the parts in the assembly
- Assembling quality assurance
- Quality control of painting
- Control of body and interior geometry
- Scanning the geometry of the body and interior
- Detection of defects (scratches, cracks, chips, dents)
- Determination of the contact sizes of exclusive elements
- Welding quality control
- Monitoring the integrity of materials (defects)
- Control of the geometry of parts (flat beam, the transverse dimensions of the beam correspond to the standard)





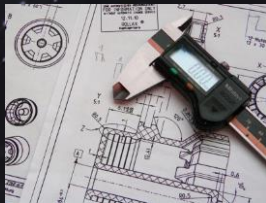
INDUSTRIAL AUTOMATION

- Detecting the presence of an object, objects counting
- Determining objects and materials integrity (automated fast sorting and packaging)
- Geometry control
- Determination of the level of liquids, granules of plastics, degree of extruders filling
- Measurements of the thickness of materials at various stages



QUALITY CONTROL

- Checking parameters of manufactured parts or assemblies against drawing or standard
- Checking for the presence and location of holes
- Checking the accuracy of complex shapes (radius, rounding, etc.)
- Bolts and washers scanning





TRANSPORTATION

- Control of road surface
- Vehicle size control
- Monitoring the geometry of tire treads
- Scanning of railroad tracks
- Vehicle geometry control
- Scanning the geometry of the train wheels on the go



WELDING

- Monitoring the position of joints in real time
- Scanning the parameters of the weld seams
- Control of position of seams on autonomous welding tractors
- Control the position of welds on welding robots





ELECTRONICS

- Control of the presence and dimensions of all electronic components



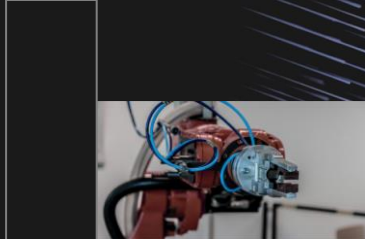
MILITARY INDUSTRY

- Control of internal geometry of gun barrels



METALLURGY

- Controlling the sheets position on the cutting lines
- Determination of bending radius
- Determination of radius and geometry of pipes
- Controlling the position and availability of material in
- the hard-to-reach places (high temperatures), including marking technological sites





ENERGY INDUSTRY

- Control of geometry and integrity of the structure elements in hard-to-reach areas (nuclear reactors)
- Control of geometry and integrity of structures (boilers, pipes)
- Control of the geometry of transmission power lines



BIOLOGY

- Seeds scanning for analysis of geometric deflection at different stages of maturation



MEDICINE

- Scanning stumps for prosthetics
- Foot scanning
- Scanning of teeth / gums





CRIMINOLOGY

- Models for remote and computer 3D analysis
- Determining the thread of the gun barrel (gun identification)



ART AND ARCHAEOLOGY

- Scanning works of art for electronic museums Scanning of deteriorating samples of archaeological
- artifacts and their surfaces



FOOD INDUSTRY

- Calculation of volumes / geometry on packaging lines
- The definition of geometry on the lines of cutting cattle carcasses





PLASTIC PRODUCTION

- Monitoring the state of the molds
- Casting quality control



WOODWORKING

- Layouts scanning
- Control of the geometry of saw timber
- Control log geometry for sawing
- Control joints, gluing layers of laminated veneer lumber



PACKAGING AND POST SERVICES

- Scanning multiple objects to find out gaps and spaces to be filled with packaging material such as foam, determine shapes of foam pieces and create an optimal shaped package





bringing your business
to the next level
