



see. control. automate.



ROVI Indexing Inspection Systems

ROVI is an inspection system with a rotary or linear indexing device, which positions each individual part in front of one or several sensor units. The system has been designed for parts with complex geometries or very high inspection requirements. In addition

to surface and geometrical defects, the system can also detect defects on threads. In combination with robots and individual handling systems, self-sufficient, high-performance inspection cells are created for a multitude of applications.



Quality is Everything



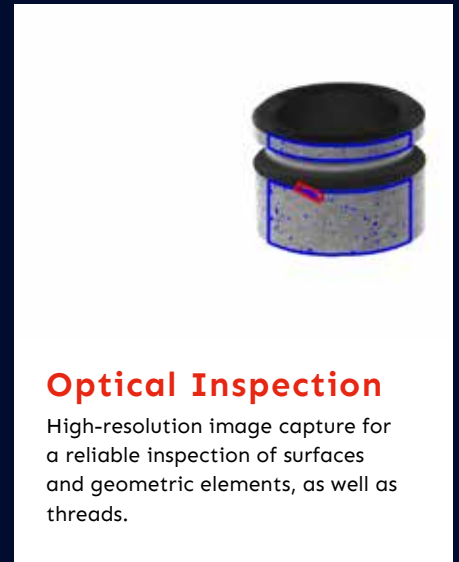
Parts

Suited for parts made of different materials such as metal, plastics, rubber & other elastomeric compounds, silicone, sintered metal.



Indexing Table

Rotary or linear system that individually positions each part in front of or underneath the sensors.



Optical Inspection

High-resolution image capture for a reliable inspection of surfaces and geometric elements, as well as threads.



Feeder

Fully automated feeding and separation of parts, for example with ascending conveyors or bowl feeders.



Bunker

Bunkers with different capacities are available for extended autonomous run times.

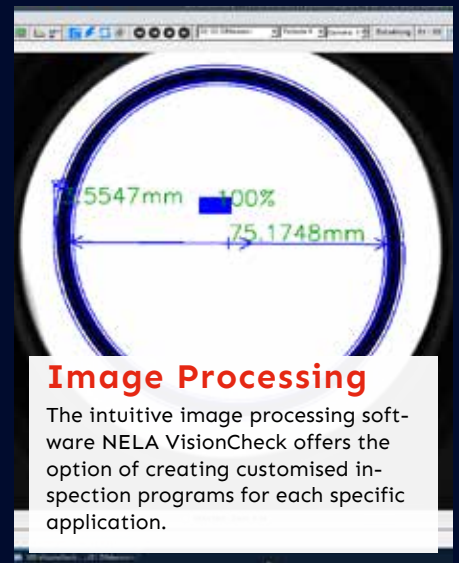


Image Processing

The intuitive image processing software NELA VisionCheck offers the option of creating customised inspection programs for each specific application.



Customized Solutions

Pick and place units and handling robots are available for special inspection tasks that cannot be handled by a standard system, e.g. 360° rotation.



Sorting

Parts are classified and sorted as OK or NOK parts. Statistics include data for the entire system, as well as for individual sensors.



Packaging

OK parts can be diverted automatically to a box changer or packaging system.

Benefits for Your Production:



Technical Information:

- Indexed system with stretch/squeeze technology
- Dimensional accuracy inspection and defect inspection on front and side surfaces as well as lateral surface
- Throughput of up to 1,800 parts per hour
- Optimised for part size: OD 15mm - 100mm
- Measuring accuracy: from $\pm 1 \mu\text{m}$
- Robust machine design with high-quality technological components
- Powerful multi-core processors for maximum inspection speeds
- Closed system design for maximum purity

Specifications:

	ROVI
	Indexed Inspection System
Dimensions (L x W x H) without feeder	approx. 220 x 1200 x 2260 mm
Electrical power supply	3/N/PE 400V/50 Hz 16 A
Compressed air supply	6 – 10 bar
Throughput	from 2 sec. per part
Number of sensor units	up to 9 units
Adjustment of sensor units	Manual or automatic
Dimension of parts (standard)	15 - 100 mm
Interfaces (optional)	DCE, SPC, OPC-UA
Image processing software	NELA VisionCheck

NELA Indexing Inspection Systems

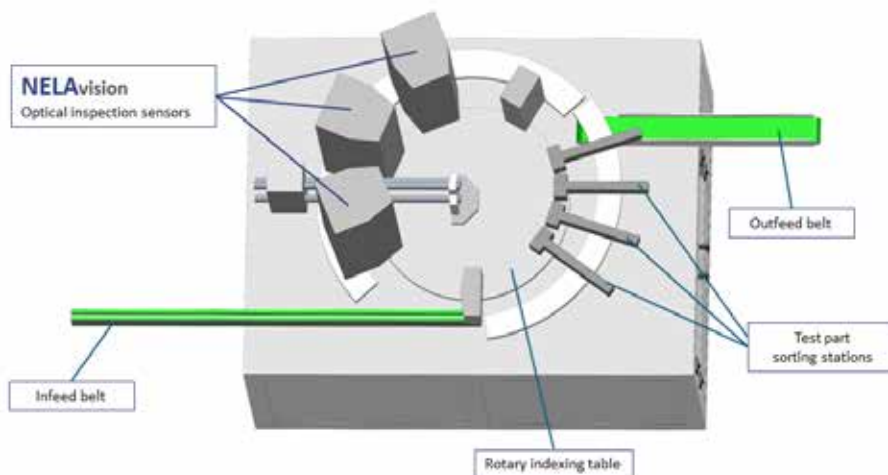
Method of operation:

- Use of rotary indexing tables or longitudinal transfer systems
- Additional pick & place robots when applicable
- Parts are picked up individually and transported under test sensors
- Gentle handling to avoid damage

Variations:

- Depending on part properties: rotary indexing tables or longitudinal transfer systems
- Possibility of stretching or squeezing for elastic parts
- Customised sorting via blow-out or paddles into containers
- Option for connection to customer systems, e.g. packaging systems

ROVI Sensor Configuration



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