

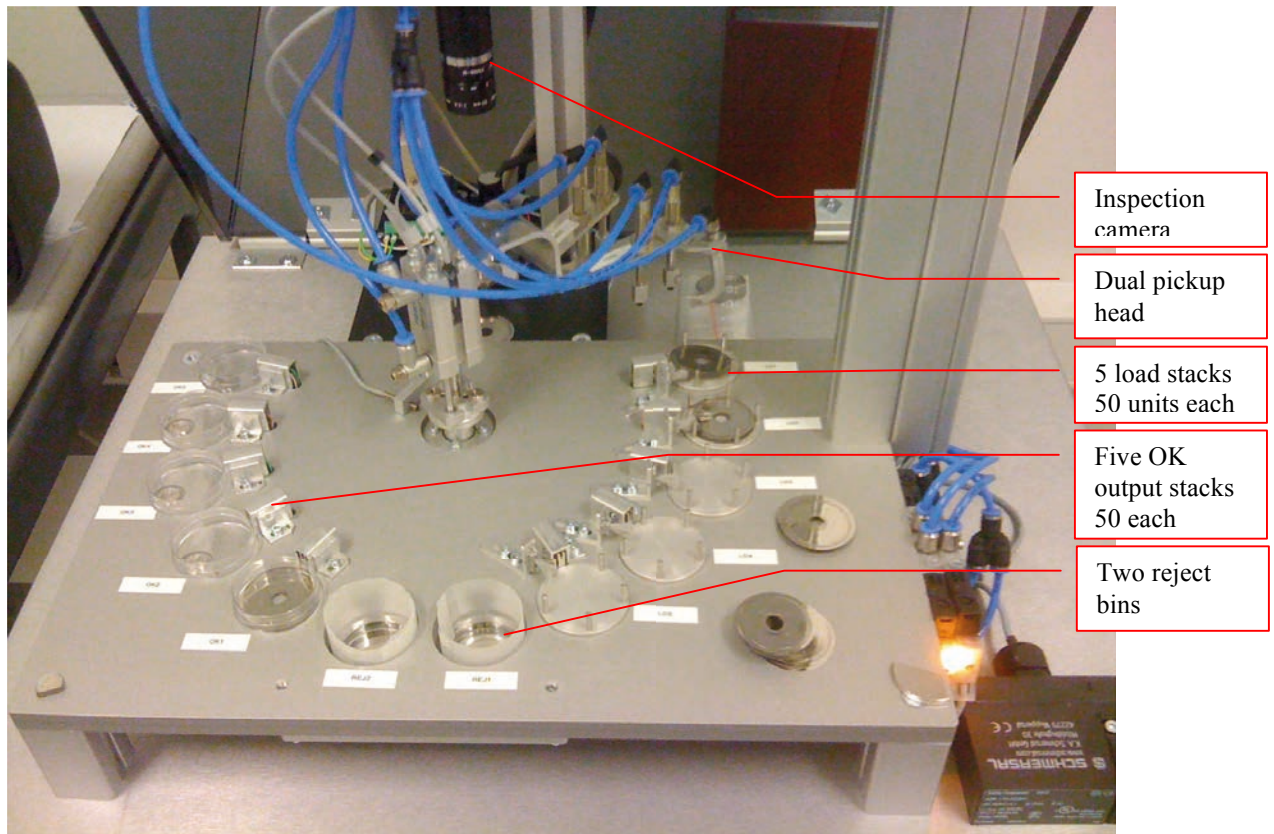
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Encoder Disc Inspection System with Automatic Handling (ENCHDL2) May 2016 STVision



Inspection camera

Dual pickup head

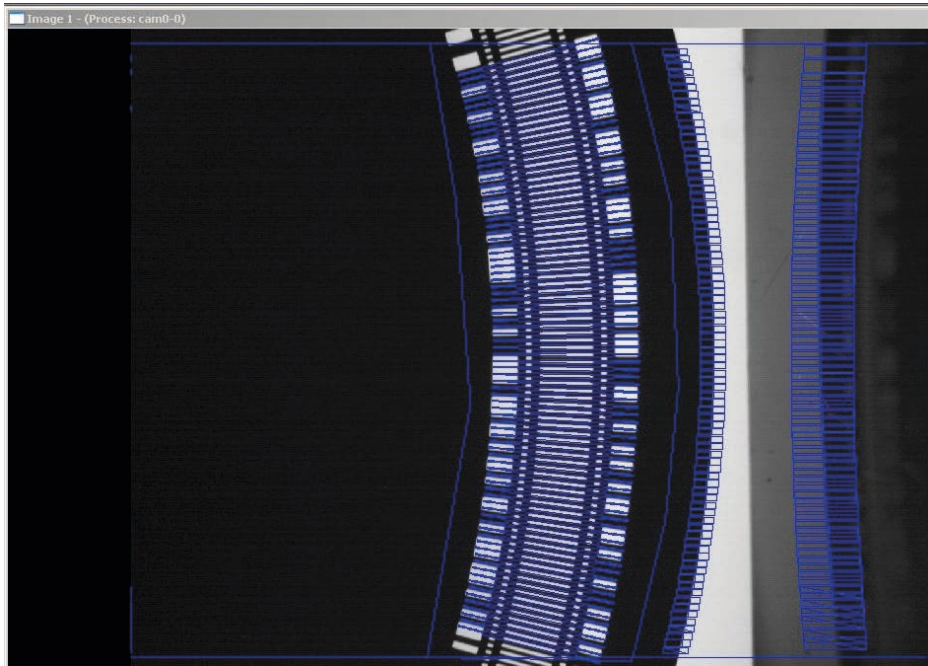
5 load stacks
50 units each

Five OK
output stacks
50 each

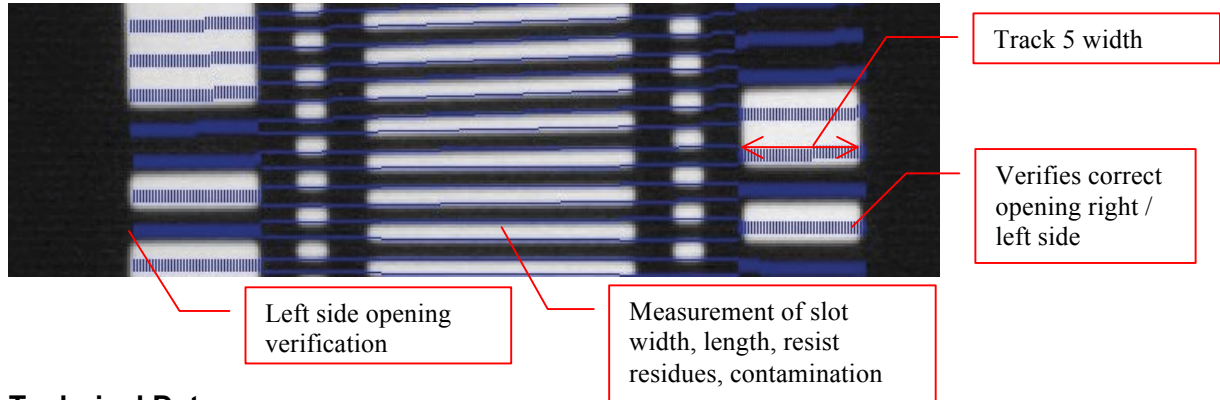
Two reject
bins

- Supports all encoder types
- Electroformed, etched, glass
- High speed pickup from load stack to camera position
- High speed pick to OK / REJECT tray after inspection
- High resolution high speed camera, 25 images per disc
- Strobe LED, sharp images
- Changeable magazines load & unload, various size discs
- Total capacity 250 units
- 4 sec per disc total cycle time inspection including handling
- Programmable types of inspection for various discs
- Tools for bar width, pits, cuts, local defects, process variations, Fotoresist residue detection
- Missing bar or missing gap detection
- Absolute coding measurement
- General shape analysis
- 3D Coplanarity, disc height
- Disc surface inspection, bar surface
- Metal defects
- Complete 100% process
- Glass cracks

The discs are loaded on inspection rotary table one at a time. The camera grabs 25 images while the disc is rotating. The whole disc is digitized in 25 sections, 14.4 degree per section.



Im Detail sehen diese Strukturen wie folgt aus



Technical Data

Camera	standard	Medium	Hi-res	dimension
Resolution	1300 x 1040	1900x1200	2500x2000	Pixel
Image format	10 x 8	10x6.3	10x8	Mm
Pixel size	8	6	4	Micron
Measurement bar width	+/- 4	+/- 3	+/- 2	Micron
Local defects, nodules	<= 8	<=6	<= 4	Micron
Fotoresist residues contrast	>= 10	<=10	>= 10	gv
Exposure time	20	20	20	microsec
Camera speed	<= 15	50	25	Fps
Inspection time	2	2	2	Sec
Handling	2	2	2	Sec
Cycle time	4	4	4	Sec
Total capacity	250	250	250	Discs
Time between loads	3	3	3	min
Operating system	Win10-64			