

Neural Network Visual Inspection System **μNET Inspector 1.6**



Self-learning neural network

- High scan speed: <10 seconds for a 1,6 GP picture
- Flexible vacuum table holds multiple objects: sheets, hard plates
- Fast change over: No lens changes for different object sizes
- Software: custom AI algorithm, easy to operate and fast
- Line scan cameras with 3,5 μm pixel size
- Top notch artificial intelligence platform with 90 TFlops
- Automation available for in-line application

Smart Microscopic Defect Detection

Defect Detection & Sorting System

μNET Inspector 1.6

Haiku Tech introduces a vision inspection machine with an outstanding performance/speed ratio. Self-learning AI software in combination with high quality components allows new microscopic scale full object inspections at speeds previously impossible.

The machine comes with a linear motor X-Y vacuum table that transports sheets or plates to the high magnification line-scan cameras. The inspection information is processed by an intelligent AI server within the 20 ms range per image. The machine can run automatically in-line with production equipment by addition of product handling robots. The state of the art AI software achieves sophisticated standards of reliability and repeatability at a high inspection speed. The machine's self-learning algorithm HiQtensor 1.6 achieves low inspection failure rates and teaches itself how to detect the defects of the future. A user interface displays the location of defects for corrective actions. A microscopic on-screen 2nd opinion check by operators or engineers is available in the software. The smart system allows to increase the yield and quality output of your factory.

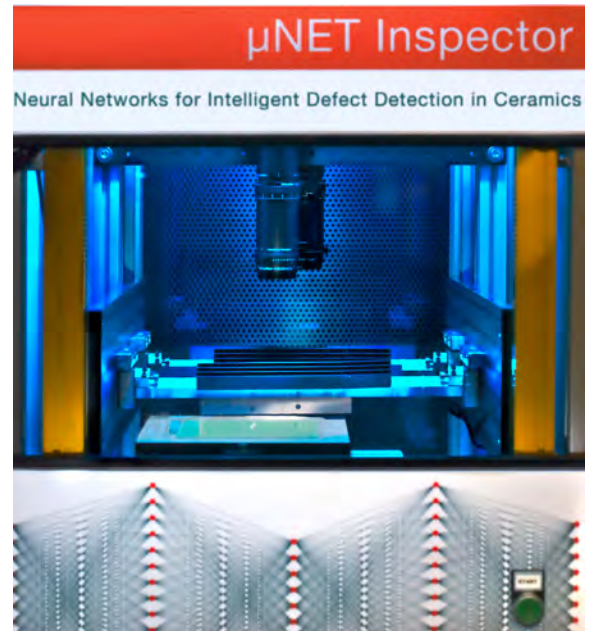
Main Inspection Features

- Ceramic Defects
- Chipping, Crack
- Blister
- Crater
- Burst
- Pin Hole
- Scratches
- Surface Contamination
- Discoloration
- Hairs

Inspection of SOFC, LTCC and other ceramic products

Specifications μNET Inspector1.6

Field of scanned view:	150 mm by 150 mm 200 mm by 200 mm
Cameras:	2x 8000 pixel line scan cameras
Image collection speed:	<8 s
Image size:	max 2 GPixel
Pixel size:	3,5 or 4,9 μm
Min. defect size	10 μm
Defect detection speed:	appr. 10 s
GUI:	touch panel and HMI screen with keyboard/touchpad
AI tensor performance:	>90 TFlops
Software:	HiQtensor 1.6
Safety:	CE
Electrical:	3 x 400 Vac with N, 50/60 Hz
Fuse; Power	32A; 8 kW
UPS:	30 minutes for server and AI
Air:	200 NL/min, 6 MPa
Dimensions:	W 74 cm, D 102 cm, H 178 cm
Weight:	350 kg



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Multilayer Ceramics

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