Mabema AAI 3.0

Automated Ammunition Inspection

Mabema AAI 3.0 is an inline inspection machine developed for quality inspection and measurement of small arms cases, cartridges and bullets. It provides a cost effective and reliable quality inspection as well as increases process control and profitability to ammunition producers.

The inspection executes while the parts travel through the machine. The AAI 3.0 is equipped with three area scan cameras and two line scan cameras for a full part inspection. Defect products are automatically sorted out to four different fractions depending on the defect.

Inspection examples

- · Split cases
- Scratches
- · Dents incl. soft dents
- · Wrinkles
- · Flange diameter, thickness and shape
- · Wrong or missing stamp
- · Primer inspection
- · Defect or missing extractor groove
- Bullet control



The user interface provides easy access to inspection results, settings and statistics. Real time statistics can be stored into a customer specific text file for data export. An update to the AAI 3.0 user interface is the possibility to simply configure new product characteristics.



Technical Data

Foot print (W, D, H)	1500 x 800 x 1800 mm / 59 x 31.4 x 70.8 in
Weight	550 kg / 1213 lb
Noise level	Max. 70 dB
Part diameter	6-16 mm / 0.2-0.6 in
Part lenght	15-100 mm / 0.6-3.9 in
Throughput	120 parts per minute
Cameras	3 x area scan (5 megapixel) 2 x line scan (1 x 2000)
Resolution	0,01 - 0,1 mm/pixel
Communication	Ethernet (TCP/IP)
Power requirements	390-490VAC, 3 phase 50-60Hz
Air pressure	6 bar / 87 psi