

Ishida AirScan

Leak-free packs assured, with
revolutionary speed and confidence





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Ishida AirScan In-line pack integrity tester

The unique Ishida AirScan tests the sealing of individual MAP (Modified Atmosphere Packaging) in-line. It detects holes as small as 0.25mm, at line speeds of up to 180 packs per minute.

AirScan works by lightly pressuring each pack while testing the air around it for traces of excess carbon dioxide (CO₂), using laser technology.

Deviation from the specified MAP gas mix, as caused by leakage, reduces the product's shelf-life and may damage the end-user's relationship with the brand. It can also greatly harm the reputation of manufacturer and packer, and lead to the harsh financial penalties involved in recalls and returns.

By contrast, the fast, thorough check carried out by AirScan builds confidence that every pack dispatched to retail will reach its consumer in top condition.

Examples of packaging suitable for inspection



Trays

Bags

Pouches



System features and benefits

Excellent results with a wide range of applications and pack types

AirScan can test a diverse range of products, from fresh meat and seafood to ready meals and salads. Packaging media include trays, bags and pouches.

Unmatched speed in pack seal testing

AirScan's unique laser technology detects traces of escaping CO₂, at speeds of up to 180ppm. For most lines its speed not only meets current needs, but also offers considerable future-proofing.

Detection can cover the whole pack, or just the areas at risk

The customer can specify which parts of the pack to monitor. Top-sensing comes as standard, while side and under-sensing options can be added.

Reduced waste, improved productivity and profitability:

AirScan quickly identifies and rejects individual leaking packs, saving on labelling and secondary packaging materials. What's more, this feedback instantly highlights sealing flaws, enabling immediate rectification and minimising losses in production and profitability.

The certainty provided by 'reject confirmation'

AirScan is a closed-loop inspection system. An alarm is raised if any leak detected is not successfully rejected, further increasing confidence in your output.

Data your organisation can store, interpret and profit from

AirScan records all results, presenting them in a simple shift report. The Ishida Sentinel reporting pack, which can be used in conjunction with AirScan, provides a range of analytical tools to further improve sealing performance.

Trouble-free integration into your existing line

An AirScan unit can readily be positioned over any available conveyor section, preferably just downstream of the sealer machine. Its speed ensures that it will never cause a production bottleneck.

How AirScan detects the slightest CO₂ leakage



1. Rollers apply pressure to pack

2. Pressure forces MAP gas to leak from any damaged pack

3. Escaped MAP gas containing CO₂ is inhaled through sensing head

4. Inhaled sample flows through pipes

5. Laser analyses inhaled sample and detects increased level of CO₂

6. Reject removes faulty pack from line

Sensing head and reject options



Side-sensing option



Underside-sensing option



Pack compression to expel MAP



Standard air reject



Pusher reject option



Pre-compression plate option

AirScan: more reliable by far than offline random testing

- ▲ Drastically reduces the risk of a faulty pack getting through by checking 100% of production
- ▲ The case for automatic leak detection grows stronger as increased implementation of automation shrinks the opportunities for human interaction to pick up errors
- ▲ The return on investment is more than justified by quantifiable risk reduction and production savings

AirScan: more flexible and economical than automated batch testing

- ▲ Avoids the high costs associated with gas sensor calibration and vacuum pump maintenance
- ▲ Smaller footprint, easy integration (fits over any length of existing conveyor)
- ▲ Immediate identification of sealing flaws: faults in sealing machine can be rapidly spotted and fixed
- ▲ Fast payback, calculated on savings in rework time and avoidance of production losses

AirScan: clear advantages over other in-line seal testers

- ▲ Marked speed advantage, with built in future-proofing as your line speed advances
- ▲ Comparable cost: no major investment saving in picking a system inferior to AirScan
- ▲ Backed by Ishida brand reputation for engineering excellence and widely based local support

Specifications		Ishida AirScan	
Sensitivity	0.25mm*		
Minimum CO ₂ MAP Level	≥10%		
Line Speed	Up to 180ppm		
Maximum Pack Dimensions (LxWxH)	325mm x 400mm** x 150mm		
Minimum Pack Dimensions (LxWxH)	70mm x 70mm x 10mm		
Response Time	20ms		
Environmental Conditions	Operating temperature - 5 to 45°C	Humidity - 0% to 80% RH, non condensing	
Power Supply	240V AC 50Hz		
Number of Presets	200		
Material	Stainless steel construction		
Control Panel	12.1" colour LCD touchscreen		

*Depending upon pack speed and content of product.

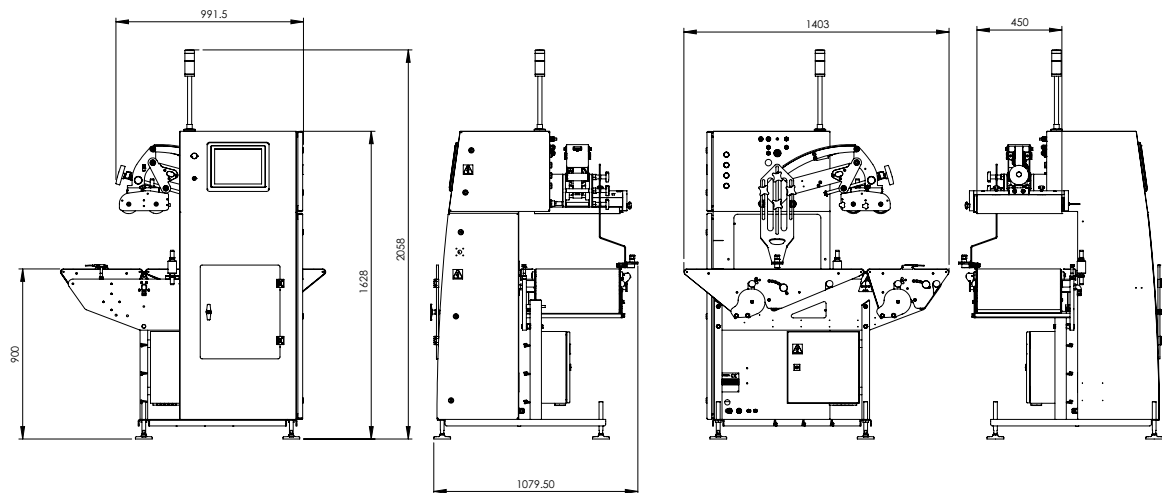
**Maximum pack length 325mm when using integrated reject bin.

All information supplied within is correct at time of publication.

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Some AirScan features and their application to MAP packs

Feature	Top-sensing	Side-sensing	Underside-sensing	Motorised head	Soft roller	Reject confirmation
Status	Standard	Option	Option	Option	Option	Option
Function	Detects leaks around top zone of pack.	Detects leaks around side zones of pack. Improves side seal inspection.	Detects leaks from base of pack. Supplied with integrated conveyor, split around bottom sensing head.	Automatically positions head for correct pressure. Quick changeover between presets.	Applies pressure over wider area with a large diameter flexible roller.	Confirms that each leak detection results in pack rejection.
Recommended for	All types of MAP packs containing CO ₂ .	Pack heights above 30mm. Packs with side seals.	Pillow bags. Flow-wrapped items. Block bottom bags that feature under seal.	Processing multiple pack heights on single line.	Irregular shapes. Fragile product.	Where extra confidence is required.



The AirScan product is provided as a fully integrated unit with the sensing head directly mounted to the machine main cabinet. The dimensions are included in the diagram above.

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