



Remote Test System For Freefall Metal Detectors

Designed for Food & Packaging Industries

The new Remote Test System is designed to simplify routine performance testing on high-speed, vertical and gravity-fed metal detection systems. Developed for Loma® Waferthin and Vertical Fall metal detectors, it allows operators to initiate a controlled, consistent test cycle remotely, reducing the need to manually introduce test samples into free-falling product.

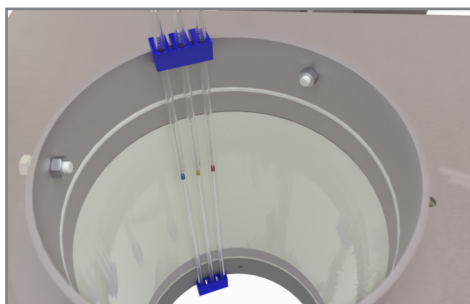
Product Highlights

- Reduces downtime - as no test pieces enter the product flow, there is no need to stop production for PVS testing.
- Remote test cycle can be completed in under 30 seconds.
- Minimises labour cost associated with performance validation - allows a single Operator to complete a full PVS test from the Remote Control Enclosure location,
- Reduces the need for operators to manually introduce test samples into free-falling product.
- Supports repeatable, controlled testing to improve consistency for stronger audit performance, ensuring reliable validation with fewer false assurances.
- Helps minimise safety risks where detectors are installed at height or in hard-to-access locations.
- Control unit can be installed up to 15 metres (cable length) from the pneumatic control module, alongside the IQ4 Remote Control Enclosure for flexible positioning.
- Compatible with Waferthin and Vertical Fall systems, with retrofit options available subject to site conditions.



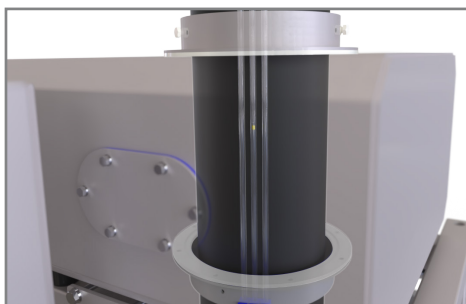
Flexible Control Enclosure Location

The remote control enclosure allows operators to initiate production tests immediately from when required. It can be installed up to 15 metres (cable length) from the pneumatic control module, making it easier to position controls where operators can access them safely and conveniently.



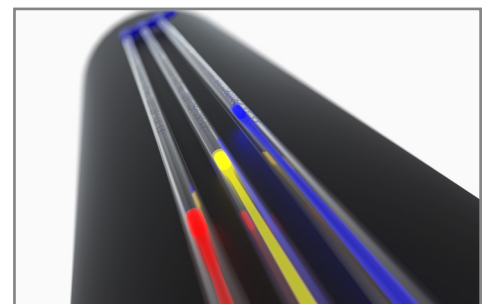
Reduced Operator Time

Remote testing reduces manual intervention, helping customers save time, reduce labour effort and return more time to production.



Safer Routine Testing

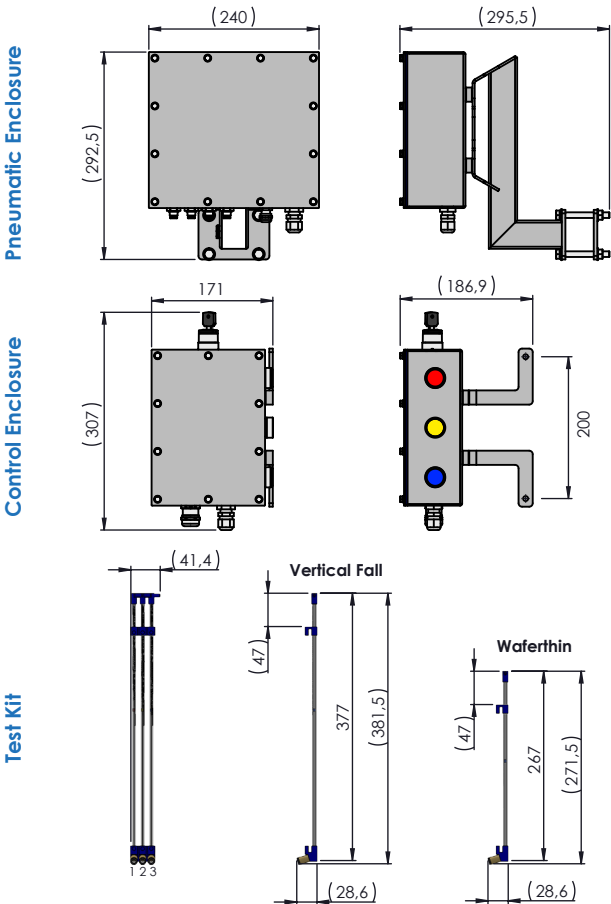
The **Remote Test System** reduces the need for operators to physically access elevated or hard-to-reach metal detectors during routine performance testing, helping to minimise working-at-height and awkward-access risks.



Repeatable Performance Checks

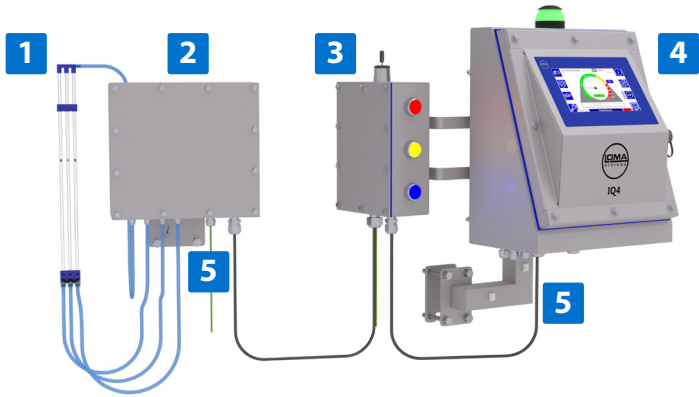
A calibrated contaminant test piece is introduced into the detection zone through a controlled pneumatic process, helping to improve consistency and repeatability compared with manual testing. The **Remote Test System** supports stronger documentation for food safety and quality audits.

Technical Specification



Material of Construction	Enclosures 304 Brushed Stainless Test Kits Plexiglass®
Dimensions (mm)	See diagram for component dimensions
Compatible Systems	All Loma® IQ4 and newer Waferthin and Vertical Fall Metal Detectors
Electrical Supply	24 V DC, 0.6 A, taken from Remote UI Panel
Pneumatic Supply	Self generated, closed loop Pneumatic enclosure must be mounted within 1.5m of test kit
Temperature Range	WT -5 to + 40 °C (23 to 104 °F) VF 0 to + 40 °C (32 to 104 °F)
Humidity	0 to 95 % Relative Humidity (Non-condensing)
Cleaning	Wipe down only
Test Type	Push-button triggered
Complete Test Time	< 30 seconds
Security	Key switch prevents unauthorised usage

System Components



1	Test Kit	3 Plexiglass® tubes, mounted between the outer edge of the aperture and the product tube encapsulate contaminant test pieces used for performance validation
2	Pneumatic Enclosure	Houses the pneumatic components for the Remote Test System
3	Remote Test System Control Enclosure	Houses controls for the Remote Test System Mounts onto the IQ4 Remote Control Enclosure
4	IQ4 Remote Control Enclosure	IQ4 Metal Detector control enclosure
5	Universal Mounting Brackets	Allow mounting of Remote Control Enclosure and Pneumatic Enclosure Clamping on box section up to 40 mm, or direct mounting onto a suitable surface

Test Piece Options

- The standard test kit consists of Ø1.2 mm Ferrous, Ø1.5 mm Non-Ferrous (Brass) and Ø1.8 mm Stainless Steel (grade 316).
- Additional Test Kits can be added from the table below to suit specific performance validation needs.
- Aluminium can be exchanged for any of the other test pieces at the point of installation.

	Size (mm)		Size (mm)		Size (mm)		Size (mm)
Ferrous (Fe)	0.3	Non-Ferrous (NFe)	0.4	Stainless Steel 316 (SS 316)	0.5	Aluminium (Al)	
	0.4		0.5		0.6		
	0.5		0.6		0.7		
	0.6		0.7		0.8		0.8
	0.7		0.8		0.9		0.9
	0.8		0.9		1.0		1.0
	0.9		1.0		1.1		1.1
	1.0		1.2		1.2		
	1.2		1.3		1.3		
	1.3		1.5		1.5		1.5
	1.5		1.6		1.6		1.6
	1.6		1.8		1.8		1.8
	1.8		2.0		2.0		1.9
	2.0						2.0



An ITW Company

www.loma.com
Tel: +44(0)1252 893300 (UK) | +1-800-872-5662 (North America)
Metal Detection | Checkweighing | X-Ray Inspection

Loma Systems is a registered trademark of Illinois Tool Works Inc. (ITW). Other names, logos, icons and marks identifying our products and services referenced herein are trademarks of ITW and may not be used without the prior written permission of ITW. Other product and company names listed are trademarks or trade names of their respective companies. Copyright © 2026 Illinois Tool Works Inc. All rights reserved. All of the specifications shown in this document are subject to change without notice.

RTSDSENV1202608