



Ravenwood Packaging

Label verification and pack inspection systems



About Ravenwood

Ravenwood was founded in 2004

We are leaders in linerless label technology and experts in the field of pack inspection. We build, manufacture and supply Nobac linerless applicators, linerless converting equipment and the VXR vision pack inspection system. We also supply conventional self-adhesive labelling products and coding equipment. Our HQ is in Bury St Edmunds, Suffolk with satellite offices located in the USA and Australia, supporting our dedicated global network of machinery distributors and printer partners.

VXR | Engineered for Accuracy

In today's food and packaging industries, the margin for error is razor-thin. Retailers demand precise labelling, zero tolerance for contaminants and complete traceability from start to finish. To meet these demands, Ravenwood's VXR system - available with Vision, X-ray and Seal Inspection - delivers a fully integrated, highly automated inspection solution.

Designed for reliability and performance, the VXR reduces recall risk, eliminates human error and increases production efficiency. Key features include reject confirmation with bin full detection, a fast and intuitive user interface and open-protocol data communication and storage for pack images and quality records.



VXR INSPECTION SYSTEM

From Compact Vision inspection to advanced VXR systems, this modular range delivers scalable pack inspection for a wide range of production environments.

With options including top and base cameras, reject bins, confirmation, image storage and lockable rejects, manufacturers can configure a system to meet their quality and compliance needs.

MODULE	TOP CAMERA	BASE CAMERA	REJECT BIN	REJECT CONFIRMATION	IMAGE STORE	LOCKABLE BIN
Compact Vision	✓	✗	✗	✗	✓	✗
VR - No Reject Bin	✓	✓	✗	✗	✓	✗
VR - Top Camera	✓	✗	✓	✓	✓	✓
VR - Top & Base Camera	✓	✓	✓	✓	✓	✓
VXR Top Camera	✓	✗	✓	✓	✓	✓
VXR Top & Base Camera	✓	✓	✓	✓	✓	✓

VXR

- ✓ Vision label inspection
- ✓ X-ray contamination
- ✓ X-ray seal inspection



XR

- ✓ X-ray contamination
- ✓ X-ray seal inspection
- ✓ Vision upgradeable



VXR X-RAY INSPECTION SYSTEM

VXR delivers complete pack inspection in one system, combining vision, X-ray, and seal inspection to detect faults, protect quality, ensure safety and safeguard brand reputation.

VXR – VISION, X-RAY & SEAL INSPECTION

Complete pack inspection in one system

The ultimate all-in-one solution combining vision label verification, X-ray contamination detection and seal inspection. VXR automatically detects and rejects faulty packs, protecting product quality, food safety and brand reputation.

XR – X-Ray Inspection

Advanced contamination detection

High-performance X-ray technology detects foreign bodies and identifies product trapped in the seal area, helping safeguard consumers and maintain the highest food safety standards.



VISION, X-RAY AND SEAL DETECTION
WITH 'SAPPHIRE' TECHNOLOGY

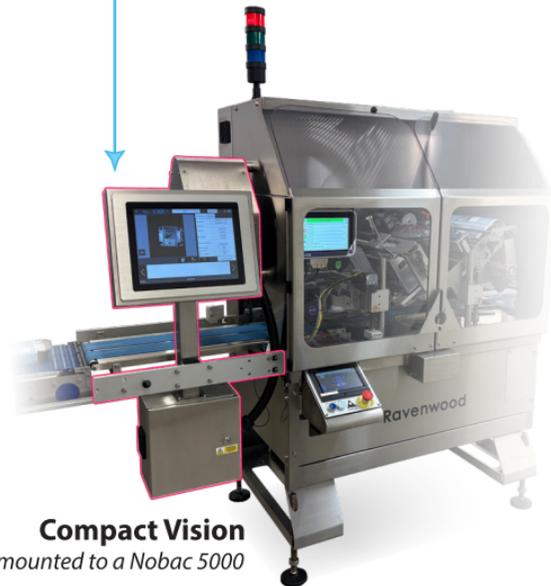
Vision System

✓ Label inspection



VC Compact Vision

✓ Label inspection



Compact Vision
mounted to a Nobac 5000

VXR X-RAY INSPECTION SYSTEM

Advanced vision systems for precise, reliable label inspection, verifying presence, print quality, barcodes, dates and traceability in every pack, with compact or full-featured options to suit your line.

Vision (VR) - Label Inspection

Precision label verification

Smart vision technology checks label presence, position, while verifying barcodes, dates and traceability data to ensure every pack leaving the line is correct.

VC Compact Vision – High-Performance Label Inspection

Compact, accurate, reliable

Advanced label inspection in a space-saving design. Checks label presence, barcodes and dates to ensure every pack meets compliance.



VISION, X-RAY AND SEAL DETECTION
WITH 'SAPPHIRE' TECHNOLOGY

- ✓ Contaminants
- ✓ Seal inspection

- ✓ Label position
- ✓ Date code
- ✓ Fully customisable



X-RAY & SEAL INSPECTION

VISION INSPECTION SYSTEM

VISION REJECTS

X-RAY & SEAL REJECTS

CHECK WEIGHER



VXR Total Pack Inspection with Dual Reject & Integrated Checkweigher

The Ravenwood VXR Vision Pack Inspection System delivers total inline inspection - combining x-ray contamination detection, seal inspection, vision label checks with dynamic checkweighing and dual reject bins. Fully integrated with **QUOR Quality Management System**, it provides real-time data, traceability and complete end-of-line quality control.

INTELLIGENT INLINE VERIFICATION

Deep Learning

Character recognition software



VXR INSPECTION SYSTEM

Inline vision verification

Vision Label Inspection

- Detects faulty labels
- Verifies label position, orientation and presence on every pack
- Checks barcodes, use-by dates and traceability information
- Ensures consistent label accuracy to protect brand integrity
- Enables automated end-of-line inspection with minimal operator input

Deep Learning

- Advanced OCR module using industrial Deep Learning technology
- Reads and verifies characters without manual font teaching
- Pre-learned character sets enable rapid decoding of variable data
- Improves recognition of complex fonts including inkjet printing
- Simplifies setup and increases inspection reliability



VISION, X-RAY AND SEAL DETECTION
WITH 'SAPPHIRE' TECHNOLOGY

With Anti-Reflection software



Without Anti-Reflection software



VISION, X-RAY AND SEAL DETECTION
WITH 'SAPPHIRE' TECHNOLOGY

VXR INSPECTION SYSTEM

Antireflective technology for highly reflective films

Anti-Reflection

- Minimises glare and reflections on flow-wrap packaging
- Enhanced illumination improves inspection accuracy
- Maintains reliable label and pack inspection in challenging lighting
- Available as an optional upgrade or retrofit for Vision systems



Image of Seal Reject



VXR X-RAY INSPECTION SYSTEM

X-ray and seal inspection with 'Sapphire' technology

X-Ray Seal Inspection

- Detects contamination within the seal area of food packs
- Identifies product trapped in seals or foreign objects
- Ensures secure pack sealing for improved food safety
- Operates automatically at high production speeds



VISION, X-RAY AND SEAL DETECTION
WITH 'SAPPHIRE' TECHNOLOGY





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QUOR

Quality Management System

QUOR - QUALITY MANAGEMENT SYSTEM

Imagine having your KPI report available in real time – anytime and anywhere?

Well, the QUOR system does exactly that. It interfaces with VR Vision for setup and line recording, providing 100% product label verification.

- QUOR allows for product selection and storage of quality data
- Products are selected for checking on the QUOR interface
- Line quality data is uploaded, captured, stored and reported for analysis and traceability
- Images of all packs produced including rejected packs are recorded and can be retrieved
- KPI reports for retailers are generated instantly with one click
- Data is managed securely both on and offsite, via PC based software or QUOR quality management app

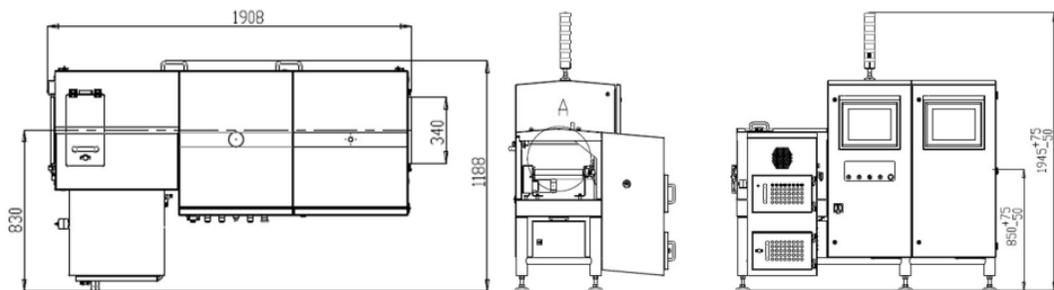
QUOR - Q-LITE

Q-Lite is a simplified 'report only' version of the full QUOR. This streamlined option delivers instant, real-time reports on critical information, requiring minimal IT setup or intervention.

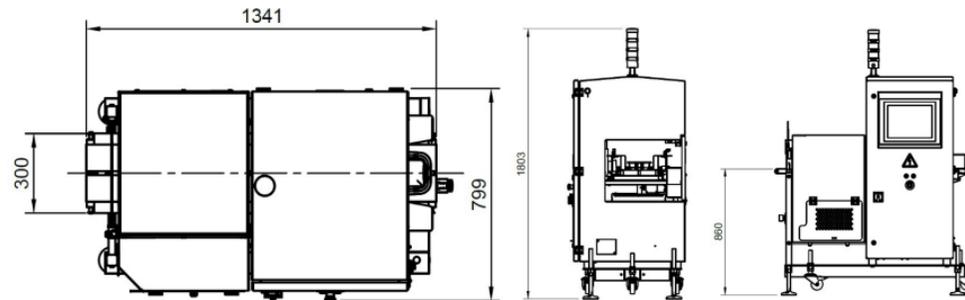


VISION, X-RAY AND SEAL DETECTION
WITH 'SAPPHIRE' TECHNOLOGY

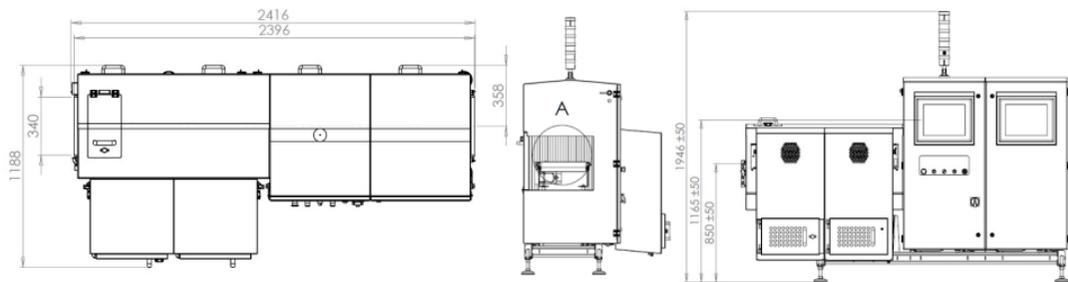
VXR with Stacked Reject Bin



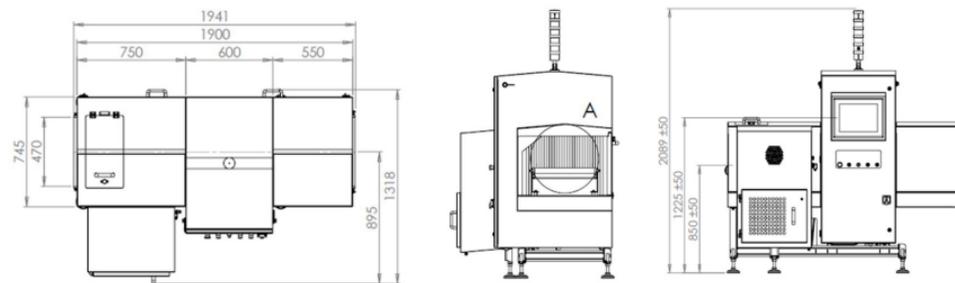
VR with Reject Bin



VXR with Dual Side by Side Reject Bin



XR with Reject Bin



BUILD THE INSPECTION SYSTEM YOU NEED

Choose individual elements or combine VXR, XR, Vision and checkweighing to create a fully tailored solution.

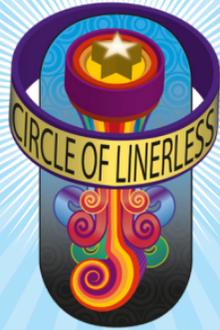
TOTAL QUALITY, TOTAL CONFIDENCE

Every combination delivers precise inspection, seamless integration, and real-time data for full end-of-line control.

OUR SALES CONTACTS ARE FEATURED TO THE INSIDE BACK COVER OF THIS BOOKLET



Nobac 40
Promo Flash Labeller



Nobac 40B
Bottle Labeller



Nobac 5000V
Vertical Labeller



Nobac 5000
Flagship Labeller
(diverse range of variants)



Nobac 1500
Top & Base Labeller

LET'S TALK LINERLESS

VXR is just part of the story...

Ravenwood is a global leader in linerless labelling technology, delivering efficient, sustainable labelling solutions for food and packaging lines worldwide.

Our Nobac range of linerless applicators offers flexible options for trays, bottles and specialist pack formats, from compact units to high-speed systems for demanding production environments. Designed for precision and reliability, linerless labelling eliminates backing paper while improving efficiency and reducing costs. Whether you need high-throughput automation or a compact solution for tight spaces, Ravenwood's linerless technology integrates seamlessly into modern packaging lines.

Ravenwood's **Circle of Linerless** is a complete ecosystem for zero-waste labels. From material sourcing and production to machinery and support, it helps businesses reduce waste, improve efficiency and maintain consistent quality.

GET IN TOUCH

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ASIA PACIFIC SALES

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PRELOVED PROGRAMME

A Ravenwood machine is for life: Please contact your local sales representative.

SERVICE

Service Bookings: Rob Knight +44 (0)1284 749144 | +44 (0)7884 667518

OUT OF HOURS EMERGENCY CALL OUTS: +44 (0)7866 512758

PARTS & CONSUMABLES

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