Vision inspection

Contents

Vision inspection

TABLET AND CAPSULE INSPECTION

VISITAB series

The VISITAB series consists of fully automatic, high-speed, customisable inspection machines. They are capable of high-volume inspection of tablets and capsules, and the accurate detection of even the smallest visual defects. These high-output inspection machines ensure 360° inspection of tablets and capsules, offering unparalleled inspection with no-compromise precision.

VISITAB 1-MH

VISITAB 1-MH offers the highest-quality tablet and capsule inspection in a single machine. It's a vision-based turnkey system designed in compliance with pharmaceutical industry requirements for quality control of tablets and capsules.

Applications
Inspection of tablets and capsules

Features	Benefits
10 new-generation colour cameras with diffuse lighting and inspection angles specially optimised for tablets	A multi-view system covering top, bottom, lateral and edge areas of tablets, guaranteeing 360° inspection of all cosmetic defects
Two 3D laser sensors for improved laser vision	Accurate tablet surface analysis, covering cracks, embossment, thickness defects, coating, and engraving integrity
10 new-generation colour cameras with reflection-free lighting and optimised inspection angles for capsules	A multi-view system covering the cylindrical parts and the domes of capsules Reflection-free lighting ensures the perfect environment for defect analysis
A dedicated conveyor system for tablets with an anti-jamming feeding system	Capable of inspecting a wide range of tablet shapes
A dedicated conveyor system for capsules with static-free tooling and a grooved conveyor belt	Inspects capsules ranging from size 0 to 5
All format parts included for tablet feeding	Plug-and-play tooling with minimal storage requirements
Intuitive configuration with template-based set-up and automatic learning system	Easy to use and can be set-up in 30 minutes
21 CFR part 11-compliant	Regulatory compliant and audit-friendly

Technical specifications

Tablet sizes that can be inspected (diameter/width)	5 to 13mm
Capsules sizes that can be inspected	00 to 5
Rated output	Up to 150,000 tablets/hr Up to 65,000 capsules/hr

VISITAB 3-M

VISITAB 3-M offers the highest-quality tablet inspection, with new-generation colour camera and Blu-ray laser technology. It's a vision-based turnkey system designed in compliance with pharmaceutical industry requirements for quality control of tablets.

Applications
Inspection of tablets

Features	Benefits
10-new generation colour cameras with diffuse lighting and inspection angles specially optimised for tablets	A multi-view system covering top, bottom, lateral, and edge areas of tablets, guaranteeing 360° inspection of all cosmetic defects
Two 3D high-resolution laser sensors per track for improved laser vision	Accurate tablet surface analysis covering cracks, embossment, thickness defects, coating, and engraving integrity
High-speed inspection	Sorts up to 600,000 tablets per hour
All format parts included for tablet feeding	Plug-and-play tooling with minimal storage requirements
Two high-speed vacuum tracks with anti-jamming feeding mechanism	Feeds complex-shaped tablets, including flat and semi-convex tablets ranging from 5mm to 13mm width/diameter
Intuitive configuration with template-based set-up and automatic learning system	Plug-and-play tooling with minimal torage requirements Easy to use, and can be set-up in only 30 minutes
21 CFR part 11-compliant	Regulatory compliant and audit-friendly

Technical specifications

Tablet sizes that can be inspected (diameter/width)	5 to 13mm
Rated output	Up to 600,000 tablets/hr

BLISTER INSPECTION AND PINHOLE DETECTION
BS series

QUALISHIELD BS series

Find this information on our website:
Machinery > Vision inspection > Blister and pinhole inspection >
QUALISHIELD BS series

The QUALISHIELD BS series includes our high-tech AI-powered blister inspection systems, which integrate seamlessly with various blister-packaging machines. It's designed to detect the full range of potential product defects in blister packs to ensure you meet stringent quality standards. The QUALISHIELD BS series also supports the integration of multiple cameras in a single controller, plus an additional camera for barcode, pharmacode or batch-detail inspection.

Applications
Inspects tablets, hard capsules and soft gelatine capsules in blister packs

Features	Benefits
Advanced AI/ML capabilities that support automatic pocket detection within the field of view (FOV) and threshold range detection	Significantly lower 'teaching' time
User-friendly GUI with multiple language support	Easy to access and user-friendly
Categorised representation of rejection quantities	Summarises large datasets in accessible visual formats
Configurable user rights and 21 CFR part 11-compliant	A regulatory-compliant, audit-friendly system
Plug-and-play installation	Quick and error-free installation

Technical specifications

	BS11	BS12	BS15	BS20	BS30	BS40	BS50
FOV (Field of view)	240mm x 150mm	240mm x 150mm	260mm x 200mm	300mm x 195mm	320mm x 300mm	240mm x 150mm	260mm x 150mm
Maximum speed	200 inspections/ min	200 inspections/ min	200 inspections/ min	200 inspections/ min	200 inspections/ min	200 inspections/ min	200 inspections/ min
Product types inspected	Single and multi-coloured tablets, single and multi-coloured capsules, multi-products, printed capsules (single and multi-coloured, printed tablets, soft gelatine capsules						
Base foil types inspected	Clear PVC, opaque PVC, coloured PVC, aluminium foils						
Defects detected	Crushed product, cracked product, orientation 'Only cap' 'Only body' Powdered product, visible product shade variations Deviation of size, form or shape						

BLISTER INSPECTION AND PINHOLE DETECTION
PH series

QUALISHIELD PH series

Find this information on our website:
Machinery > Vision inspection > Blister and pinhole inspection >
QUALISHIELD PH series

Our state-of-the-art scanning system is designed specifically to detect surface imperfections on aluminium foils. It detects pinholes or pores anywhere in the inspection window, inspects base aluminium foils after forming, and checks lidding foils before sealing. And you can tailor it to the full range of format sizes available on blister-packaging machines.

Applications
Inspection of metal strip and sheet, and almost any opaque material

Features	Benefits
Detects pinholes with diameters as small as 25µm Detection sensitivity is adjustable to user requirements	100% real-time inspection of pores, fissures and pinholes on lidding and base foils
Compatible with aluminium foils of different widths and lengths	Assured performance, irrespective of aluminium foil types and sizes
GMP-compliant	A compliant, audit-friendly system for full peace of mind
Can be set up for production and perform validation at the click of a button	User-friendly and compatible with a wide range of blister-packaging machines

Technical specifications

		PH10	PH20	PH21	PH30	PH31	PH40	PH41
Machine dimension (with standard mounting)	**Length**	32mm	370mm	370mm	420mm	403mm	460mm	490mm
	Width	63mm	63mm	63mm	63mm	63mm	63mm	63mm
	Height	323mm	323mm	323mm	323mm	323mm	323mm	323mm
Inspection area (FOV)		200mm	240mm	260mm	300mm	300mm	320mm	380mm
Type of packaging material inspected	Aluminium foil (non-transparent)							

CODE AND LABEL INSPECTION SYSTEM

CV series

The QUALISHIELD CV series is a high-speed, high-resolution, multi-colour, camera-based solution for inspection of a variety of data, including barcodes, pharmacodes, 2D codes, batch details, and much more – on inspection media such as cartons, labels, leaflets, foils, tubes, and many others. You can install it on any carton- or blister-packing machine, and it's retrofittable to a wide range of bottling, cartoning and manual packaging lines. The CV series can be integrated with various types of cameras, based on different needs.

QUALISHIELD CV10

QUALISHIELD CV10 is an online carton-conveying system with an integrated printer and camera system. It's an ideal solution for online carton code printing and inspection, and integrates seamlessly with any cartoning machine. You can also use it for manual carton feeding.

Applications
Carton print inspection and online rejection system

Features	Benefits
Speeds of up to 300 cartons per minute	Compatible with all cartoning machines
Encoder-based rejection system with lock-and-key rejection bin	Reduces the need to change speeds manually, as parameters are adjusted automatically to speed variations
Variable speed control	Set conveyor speeds manually according to output requirements
Compliant with 21 CFR Part 11 and CE certified	A regulatory-compliant, audit-friendly system for greater peace of mind

Technical specifications

Machine dimensions	Length	1210mm	
	Width	1000mm	
	Height	1672±65mm	
Speed	300 cartons/min		
Cameras	1		
Supported carton sizes	Minimum	Length	65mm
		Width	30mm
		Height	15mm
	Maximum	Length	200mm
		Width	200mm
		Height	150mm

QUALISHIELD CV20

Find this information on our website:
Machinery > Vision inspection > Code and label inspection system >
QUALISHIELD CV series

QUALISHIELD CV20 is an online carton conveying system with an integrated printer and camera system. It's ideal for online carton code printing and inspection, and can be integrated seamlessly with any carton-packaging machine or manual packaging line.

Applications
Carton print inspection and online rejection system

Features	Benefits
Speed of up to 300 cartons per minute	Compatible with all cartoning machines
Encoder-based rejection system with lock-and-key rejection bin	Reduces the need to change speeds manually, as parameters are adjusted automatically to speed variations
Variable speed control	Set conveyor speeds manually according to output requirements
Compliant with 21 CFR Part 11, and CE certified	A regulatory-compliant, audit-friendly system for greater peace of mind

Technical specifications

Machine dimensions	Length	600mm		
	Width	750mm		
	Height	1668±65mm		
Speed	300 cartons/min			
Cameras	1			
Supported carton sizes	Minimum	Length	65mm	
		Width	30mm	
		Height	15mm	
	Maximum	Length	180mm	
		Width	90mm	
		Height	90mm	

QUALISHIELD CV30

Find this information on our website:
Machinery > Vision inspection > Code and label inspection system >
QUALISHIELD CV series

QUALISHIELD CV30 is an offline carton conveying system with an integrated printer and camera system. It is an ideal solution for offline carton code printing and inspection where products are stacked in a feeder mechanism and passed one-by-one via conveyor belt for further printing and inspection.

Applications
Unfolded carton print inspection and online rejection system

Features	Benefits
Speeds of up to 200 cartons	Compatible with all cartoning machines
Encoder-based rejection system with lock-and-key rejection bin	Reduces the need to change speeds manually, as parameters are adjusted automatically to speed variations
Variable speed control	Set conveyor speeds manually according to output requirements
Compliant with 21 CFR Part 11, and CE certified	A regulatory-compliant, audit-friendly system for greater peace of mind

Technical specifications

Machine dimensions	Length		1568mm	
	Width		936mm	
	Height		1828±65mm	
Speed			200 cartons/min	
Cameras			1	
Supported carton sizes	Minimum	Length	60mm	
		Width	60mm	
	Maximum	Length	300mm	
		Width	200mm	

QUALISHIELD CV40

Find this information on our website:
Machinery > Vision inspection > Code and label inspection system >
QUALISHIELD CV series

QUALISHIELD CV40 is an offline leaflet and booklet conveying system with an integrated camera system. It's ideal for pharma code inspection where products are stacked in a feeder mechanism and passed one-by-one via conveyor belt for further inspection. CV40 also has separate bins for accepted and rejected products.

Applications
Leaflet and booklet pharmacode inspection and rejection

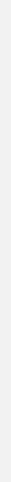| Features	Benefits
Operates with a speed of 120 products per minute	Compatible with all cartoning machines
Encoder-based rejection system with lock-and-key rejection bin	Reduces the need to change speeds manually, as parameters are adjusted automatically to speed variations
A sensor for stacking leaflets and booklets	Notifies the operator when leaflet feed is low, meaning fewer and shorter process interruptions
Compliant with 21 CFR Part 11	A regulatory-compliant, audit-friendly system for greater peace of mind

Technical specifications

Machine dimensions	Length	870mm	
	Width	755mm	
	Height	1922±65mm	
Speed		120 products/min	
Cameras		1	
Supported booklet size	Minimum	Length	40mm
		Width	25mm
		Height	1.5mm
	Maximum	Length	60mm
		Width	60mm
		Height	8mm
Supported leaflet sizes	Minimum	Length	80mm
		Width	25mm
	Maximum	Length	180mm
		Width	40mm

QUALISHIELD CV50

Find this information on our website:
Machinery > Vision inspection > Code and label inspection system >
QUALISHIELD CV series

QUALISHIELD CV50 is an online camera-based inspection system you can mount on any labelling, cartoning or blister-packaging machine. It accurately and reliably captures details such as batch and expiry, 1D barcodes, 2D datamatrix codes, pharma codes – on inspection media including cartons, labels, foils, leaflets, tubes, and many others.

Applications
Pharmacode, barcode and OCR/OCV inspection on carton, leaflet, and booklet

Features	Benefits
Inspects contents of cartons, labels, foils, leaflets and tubes using a modular software architecture	One hardware and software solution for multiple uses, in a single setup
Supports printing in continuous inkjet, thermal inkjet, hot-stamping and thermal transfer overprinters (TTOs)	Compatibility with a wide range of industrial printers
A plug-and-play installation that supports all types of PLC rejection mechanism protocols	Accurately and reliably captures details on labels such as batch and expiry, 1D barcodes, 2D datamatrix codes, and pharma codes
Fast and easy plug-and-play installation	Can be integrated with continuous or intermittent machines

Technical specifications

FOV (Field of view)	60mm x 40mm
Number of cameras	1
Products that can be inspected	Carton, leaflet, label, vial
Maximum speed[1]	400 products/min

[1] Speed can vary according to the number of camera configurations, image saves, camera configurations (one or more), and product size.

QUALISHIELD CV51

Find this information on our website:
Machinery > Vision inspection > Code and label inspection system >
QUALISHIELD CV series

QUALISHIELD CV51 is an online camera-based inspection system you can mount on any labelling, cartoning or blister-packaging machine. It accurately and reliably captures details such as batch and expiry, 1D barcodes, 2D datamatrix codes, pharma codes – on inspection media including cartons, labels, foils, leaflets, tubes, and many others.

Applications
Pharmacode, barcode and OCR/OCV inspection on carton, leaflet, and booklet

Features	Benefits
Inspects contents of cartons, labels, foils, leaflets and tubes using a modular software architecture	One hardware and software solution for multiple uses, in a single setup
Supports printing in continuous inkjet, thermal inkjet, hot-stamping and thermal transfer overprinters (TTOs)	Compatibility with a wide range of industrial printers
A plug-and-play installation that supports all types of PLC rejection mechanism protocols	Accurately and reliably captures details on labels such as batch and expiry, 1D barcodes, 2D datamatrix codes, and pharma codes
Fast and easy plug-and-play installation	Can be integrated with continuous or intermittent machines

Technical specifications

FOV (Field of view)	60mm x 40mm
Number of cameras	2
Products that can be inspected	Carton, leaflet, label, vial
Maximum speed[1]	300 products/min

[1] Speed can vary according to the number of camera configurations, image saves, camera configurations (one or more), and product size.

QUALISHIELD CV52

Find this information on our website:
Machinery > Vision inspection > Code and label inspection system >
QUALISHIELD CV series

QUALISHIELD CV52 is an online camera-based inspection system you can mount on any labelling, cartoning or blister-packaging machine. It accurately and reliably captures details such as batch and expiry, 1D barcodes, 2D datamatrix codes, pharma codes – on inspection media including cartons, labels, foils, leaflets, tubes, and many others.

Applications
Pharmacode, barcode and OCR/OCV inspection on carton, leaflet, and booklet

Features	Benefits
Inspects contents of cartons, labels, foils, leaflets and tubes using a modular software architecture	One hardware and software solution for multiple uses, in a single setup
Supports printing in continuous inkjet, thermal inkjet, hot-stamping and thermal transfer overprinters (TTOs)	Compatibility with a wide range of industrial printers
A plug-and-play installation that supports all types of PLC rejection mechanism protocols	Accurately and reliably captures details on labels such as batch and expiry, 1D barcodes, 2D datamatrix codes, and pharma codes
Fast and easy plug-and-play installation	Can be integrated with continuous or intermittent machines

Technical specifications

FOV (Field of view)	60mm x 40mm
Number of cameras	3
Products that can be inspected	Carton, leaflet, label, vial
Maximum speed[1]	300 products/min

[1] Speed can vary according to the number of camera configurations, image saves, camera configurations (one or more), and product size.

QUALISHIELD CV53

Find this information on our website:
Machinery > Vision inspection > Code and label inspection system >
QUALISHIELD CV series

QUALISHIELD CV53 is an online camera-based inspection system you can mount on any labelling, cartoning or blister-packaging machine. It accurately and reliably captures details such as batch and expiry, 1D barcodes, 2D datamatrix codes, pharma codes – on inspection media including cartons, labels, foils, leaflets, tubes, and many others.

Applications
Pharmacode, barcode and OCR/OCV inspection on carton, leaflet, and booklet

Features	Benefits
Inspects contents of cartons, labels, foils, leaflets and tubes using a modular software architecture	One hardware and software solution for multiple uses, in a single setup
Supports printing in continuous inkjet, thermal inkjet, hot-stamping and thermal transfer overprinters (TTOs)	Compatibility with a wide range of industrial printers
A plug-and-play installation that supports all types of PLC rejection mechanism protocols	Accurately and reliably captures details on labels such as batch and expiry, 1D barcodes, 2D datamatrix codes, and pharma codes
Fast and easy plug-and-play installation	Can be integrated with continuous or intermittent machines

Technical specifications

FOV (Field of view)	60mm x 40mm
Number of cameras	4
Products that can be inspected	Carton, leaflet, label, vial
Maximum speed[1]	200 products/min

[1] Speed can vary according to the number of camera configurations, image saves, camera configurations (one or more), and product size.

ACG Inspection
127, Kandivali Industrial Estate,
Charkop, Kandivali (West),
Mumbai 400 067, India

+91 22 5012 0700
sales.inspection@acg-world.com

www.acg-world.com