

MACHINERY

Supply chain traceability



Contents

AGGREGATION SYSTEM

VERISHIELD CA series

- 4 VERISHIELD CA31
- 5 VERISHIELD CA32
- 6 VERISHIELD CA41

360° BOTTLE REFERENCING SYSTEM

VERISHIELD BA series

- 8 VERISHIELD BA21
- 9 VERISHIELD BA31

CARTON SERIALISATION SYSTEM

VERISHIELD CS series

- 11 VERISHIELD CS11
- 13 VERISHIELD CS12
- 14 VERISHIELD CS14
- 16 VERISHIELD CS16
- 17 VERISHIELD CS17
- 19 VERISHIELD CS19

LABEL SERIALISATION SYSTEM

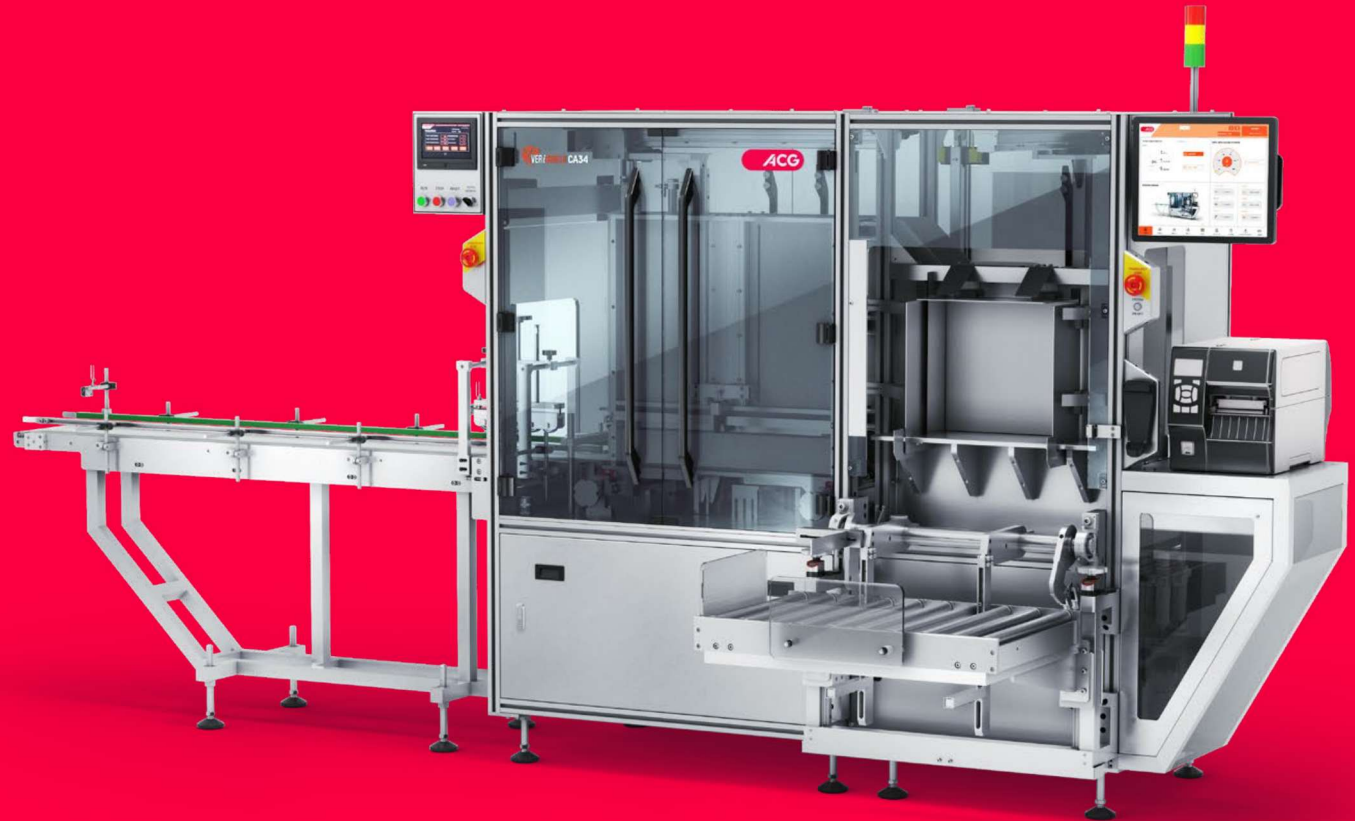
VERISHIELD LS series

- 22 VERISHIELD LS11
- 23 VERISHIELD LS12

AGGREGATION SYSTEM

VERISHIELD CA series

Embodying a world-class cGMP industrial design, the VERISHIELD CA series makes your carton and bottle aggregation process a whole lot faster and easier.



AGGREGATION SYSTEM / VERISHIELD CA SERIES

VERISHIELD CA31

VERISHIELD CA31 is an intermediate aggregation system equipped with a label printer. It has an automated camera and scanning system with a label printer that performs aggregation, inspection, batch coding, and verification.

Applications
Aggregation, inspection, batch coding and verification of bottles and cartons



Find this information on our website:
Machinery > Supply chain traceability > Aggregation system > VERISHIELD CA series

Features	Benefits
Aggregation of unit products (cartons) to cases/shippers / outer cartons by decoding 2D barcodes on one carton or multiple cartons	Aggregation process is in accordance with packaging operation Compliant with Pack & Scan, Scan & Pack processes
Detection of non-GS1 datamatrix, incorrect batch details, excess and less unit product quantity in case and shipper boxes	Reliable and accurate identification and verification of child codes and verification of printed barcodes
Autofocus for different bottle / carton / shipper sizes through distance invariant imaging technology (DIIT)	Makes automatic multilayer adjustments specific to the packaging operation process
EU Annex 11 and FDA 21 CFR Part 11 compliant with CE certification	A regulatory-compliant, audit-friendly system

Technical specifications		
Machine dimensions	Length	1250 mm
	Width	1280 mm
	Height	2093 mm
FOV		600 mm × 400 mm
Shipper dimensions		400 mm (for all sizes of carton) 450 mm (minimum first layer height 65 mm)
Maximum speed		8 labels / min

AGGREGATION SYSTEM / VERISHIELD CA SERIES

VERISHIELD CA32

VERISHIELD CA32 is an intermediate aggregation system. Equipped with an automated camera and scanning system along with label printer, VERISHIELD CA32 performs aggregation, inspection, batch coding, and verification. It automatically prints and places stickers on the shipper box and also generates production reports under various classifications like printed, commissioned, or damaged specimens.

Applications
Aggregation, inspection, batch coding and verification of bottles and cartons



Find this information on our website:
Machinery > Supply chain traceability > Aggregation system > VERISHIELD CA series

Features	Benefits
Decodes barcodes (GS1 datamatrix or GS1 128 barcode), data verification in printed barcode	Capable of decoding multiple 2D codes
Supports track and trace regulations of multiple countries	A single machine that fulfils diverse requirements pertaining to different regulations
Autofocus for different bottle/carton/shipper sizes through distance invariant imaging technology (DIIT)	Makes automatic multilayer adjustments specific to the packaging operation process
EU Annex 11 and FDA 21 CFR Part 11 compliant with CE certification	A regulatory-compliant, audit-friendly system

Technical specifications

Machine dimensions	Length	3400 mm
	Width	1850 mm
	Height	2100 mm
Maximum shipper height		300 mm
Maximum throughput		4 – 5 labels / min
Rejection mechanism		Online pneumatic rejection

AGGREGATION SYSTEM / VERISHIELD CA SERIES

VERISHIELD CA41

VERISHIELD CA41 is an intermediate aggregation system equipped with a label printer and handheld scanner. It performs aggregation, inspection and batch coding of serialised products. This system also serves aggregation requirements where manual processes might be required.

Applications
Aggregation, inspection, batch coding and verification of bottles and cartons



Find this information on our website:
Machinery > Supply chain traceability > Aggregation system > VERISHIELD CA series

Features	Benefits
Decodes GS1-128 linear barcode or GS1 datamatrix and verifies as per batch details and serial numbers	Reliably and accurately verifies child barcodes and printed parent barcode during the aggregation process Samples printed labels
Multiple language printing for a static data field	Label can be printed for respective markets as per local language requirements
Compact design with operator-friendly label/ribbon changeover process	Operator-friendly machine design
EU Annex 11 and FDA 21 CFR Part 11 compliant with CE certification	A regulatory-compliant, audit-friendly system

Technical specifications		
Machine dimensions	Length	640 mm
	Width	580 mm
	Height	1625 ± 25 mm
Software (functional) specifications		Back-up and restore of data supported Production and audit report
User / role management		Centralised VERISHIELD server authentication

360° BOTTLE REFERENCING SYSTEM

VERISHIELD BA series

VERISHIELD BA series enables the seamless tracking of products from production to distribution. It has been designed to efficiently manage and track the movement of individual bottles within larger packaging units by creating a hierarchical relationship between individual bottles and their respective packaging units.



360° BOTTLE REFERENCING SYSTEM / VERISHIELD BA SERIES

VERISHIELD BA21

VERISHIELD BA21 is an intermediate helper code referencing unit with top-sert helper code referencing functionality for aggregating bottles. Equipped with side and top cameras, it performs label printing for aggregated units, and verifies printed barcodes using a handheld scanner with an operator-friendly interface.

It is compatible with shrink wrap bundles of plastic or PET bottles with the bottom reference code. Additionally, this system is also suitable for shrink-wrapped carton bundles.

Applications
Aggregation and verification of bottles



Find this information on our website:
Machinery > Supply chain traceability > Bottle 360° referencing system > VERISHIELD BA series

Features	Benefits
Performs side and top barcode scanning	High-speed referencing unit to cope up with production requirements
Operator-friendly interface	Easy to operate and maintain
Compact multifunctional modular design with plug-and-play capability	cGMP design and easy to integrate with packaging line conveyor
EU Annex 11 and FDA 21 CFR Part 11 compliant	A regulatory-compliant, audit-friendly system

Technical specifications

Machine dimensions	Length	660 mm
	Width	1350 mm
	Height	2000 mm
Maximum throughput		120 products / min
Rejection system		Encoder based rejection system with pneumatic cylinder and rejection bin
Interlock support		Rejection verification and rejection bin

360° BOTTLE REFERENCING SYSTEM / VERISHIELD BA SERIES

VERISHIELD BA31

VERISHIELD BA31 is an intermediate packaging aggregation unit with bottom collation functionality for aggregating bottles or cartons equipped with a camera-based aggregation functionality.

It performs label printing for aggregated units and verifies printed barcodes using a handheld scanner with an operator-friendly interface. It is also suitable for shrink wrap bundles of plastic or PET bottles with the bottom reference code and shrink wrapped carton bundles.

Applications
Batch coding, verification and aggregation of bottles



Find this information on our website:
Machinery > Supply chain traceability > Bottle 360° referencing system > VERISHIELD BA series

Features	Benefits
Multiple 2D barcode decoding for aggregating bundle / case / shipper box	Easy aggregation process for bundle packaging Suitable for shrink-wrapped bundles as well
Operator-friendly interface	Easy to operate and maintain
Compact multifunctional modular design with plug-and-play capability	cGMP design and easy to integrate with current packaging line systems
EU Annex 11 and FDA 21 CFR Part 11 compliant	A regulatory-compliant, audit-friendly system

Technical specifications		
Machine dimensions	Length	910 mm
	Width	913 mm
	Height	1669 mm
Maximum speed		8 labels / min (with two operators)
FOV supported		400mm × 300mm
User/role management		Centralised VERISHIELD server authentication

CARTON SERIALISATION SYSTEM / VERISHIELD CA SERIES

VERISHIELD CS series

The CS series consists of a range of accurate and reliable carton serialisation systems. Easy to use, they can serialise cartons of various sizes, from small blister packs to large shipping containers. They comply with regulatory requirements all over the world and are suitable for providing a high level of security and traceability of pharmaceutical products.



CARTON SERIALISATION SYSTEM / VERISHIELD CA SERIES

VERISHIELD CS11

VERISHIELD CS11 is our carton serialisation system for online printing, inspection, and rejection of cartons with defective print.

Applications
Batch coding, serialisation and verification of cartons



Find this information on our website:
Machinery > Supply chain traceability > Carton serialisation system > VERISHIELD CS series

Features	Benefits
Adjustable for different carton dimensions	Allows quick changeover between multi-carton sizes
Equipped with variable speed control	Flexibility to adjust speed as per online output requirements
Supports track & trace regulations of multiple countries	A single machine that fulfils diverse requirements of different regulations
Capable of printing datamatrix code as per regulations	
EU Annex 11 and FDA 21 CFR Part 11 compliant with CE certification	A regulatory-compliant, audit-friendly system
Plug-and-play mode	The system can connect seamlessly with cartoner / checkweigher
Works on serialised and non-serialised modes of operation	Option to print details on carton based on printing format requirements

Technical specifications

Machine dimensions	Length		1350 mm
	Width		1060 mm
	Height		1990 ± 60 mm
Maximum throughput			200 cartons / min (for minimum carton size)
Carton size range	Minimum	Length	65 mm
		Width	30 mm
		Height	15 mm
	Maximum	Length	200 mm
		Width	200 mm
		Height	150 mm
Maximum carton weight			500 g
Printing and verification (serialisation)			2D Datamatrix and up to 5 lines of human readable fields
Rejection system			Encoder based rejection system with lock and key rejection bin
Interlock and safety			Emergency stop
			Interlock for low and high pneumatic air pressure
			Door interlock
Report types			Batch-wise report
			Audit reports

CARTON SERIALISATION SYSTEM / VERISHIELD CA SERIES

VERISHIELD CS12

VERISHIELD CS12 allows you to serialise your cartons offline. The machine also prints, inspects, and rejects cartons ensuring only the correctly printed and serialised cartons reach the market.

Applications
Batch coding, serialisation and verification of cartons



Find this information on our website:
 Machinery > Supply chain traceability > Carton serialisation system > VERISHIELD CS series

Features	Benefits
Adjustable for different carton dimensions	Allows quick changeover between multi-carton sizes
Equipped with variable speed control	Flexibility to adjust speed as per online output requirements
Supports track & trace regulations of multiple countries	A single machine that fulfils diverse requirements of different regulations
EU Annex 11 and FDA 21 CFR Part 11 compliant with CE certification	A regulatory-compliant, audit-friendly system
Works on serialised and non-serialised modes of operation	Option to print details on carton based on printing format requirements

Technical specifications			
Machine dimensions	Length		1750 mm
	Width		1050 mm
	Height		1840 ± 65 mm
Maximum throughput			200 cartons / min (for minimum carton size)
Carton size range	Minimum	Length	65 mm
		Width	60 mm
	Maximum	Length	300 mm
		Width	200 mm
Rejection system			Encoder based rejection system with lock and key rejection bin
Interlock and safety			Emergency stop
			Interlock for low and high pneumatic air pressure
Report types			Batch-wise report
			Audit reports

CARTON SERIALISATION SYSTEM / VERISHIELD CA SERIES

VERISHIELD CS14

VERISHIELD CS14 is a carton serialisation machine equipped with a check weigher. The machine is adjustable to cartons of different dimensions and can be easily integrated with various carton packaging machines. Further, you can quickly change over between multi-carton sizes and, in the end, get a consolidated production report.

Applications
Batch coding, serialisation, verification and checkweighing of cartons



Find this information on our website:
Machinery > Supply chain traceability > Carton serialisation system > VERISHIELD CS series

Features	Benefits
Compactly designed check-weighing solution with an accuracy of +0.5 g	Occupies much lesser floor space as compared to separate checkweigher, print and inspection unit
Online serialisation, barcode printing, data printing (GTIN, expiry, batch number and unique serial number as per GS1 guidelines)	Printing and inspection as per specific regulatory requirements
Supports both serialised and non-serialised batches	A single machine that meets diverse requirements of different regulations Provision to print and inspect products for regulated and non-regulated markets
EU Annex 11 and FDA 21 CFR Part 11 compliant with CE certification	A regulatory-compliant, audit-friendly system

Technical specifications

Machine dimensions	Length		1750 mm
	Width		1060 mm
	Height		1950 ±60mm
Maximum throughput			150 cartons / min (for minimum carton size)
Carton size range	Minimum	Length	80 mm
		Width	30mm
		Height	15 mm
	Maximum	Length	180 mm
		Width	90 mm
		Height	90 mm
Carton weight	Minimum		10 mm
	Maximum		500 g
Field of view			50mm × 25mm
Interlock and safety			Emergency stop
			Label low / carton closing / backdoor interlock
			Pneumatic pressure interlock
			Front door interlock
			Acrylic guard interlock
Report types			Batch-wise report
			Audit reports

CARTON SERIALISATION SYSTEM / VERISHIELD CA SERIES

VERISHIELD CS16

VERISHIELD CS16 is different from our other carton serialisation systems in that it also performs tamper-evident labelling. In addition, it also prints and inspects cartons, and rejects those that are serialised incorrectly or do not have tamper-evident labels. Its plug-and-play mode allows it to work with any cartoning line.

Applications
Batch coding, serialisation, and verification of cartons and tamper-evident labelling



Find this information on our website:
Machinery > Supply chain traceability > Carton serialisation system > VERISHIELD CS series

Features	Benefits
High-speed machine with a compact design	Minimal space required for integrating in line
Online rejection based on serialisation and inspection of tamper evident label (through sensor-based input)	Printing, inspection, label application verification and rejection using a single machine
EU FMD regulation compliant	Ideal for products manufactured in or exported to Europe
EU Annex 11 and FDA 21 CFR Part 11 compliant with CE certification	A regulatory-compliant, audit-friendly system

Technical specifications

Machine dimensions	Length		1400 mm
	Width		1660 mm
	Height		1800 ± 65 mm
Maximum throughput			300 cartons / min (for minimum carton size)
Carton size range	Minimum	Length	65 mm
		Width	30 mm
		Height	15 mm
	Maximum	Length	200 mm
		Width	150 mm
		Height	90 mm
Interlock and safety			Emergency stop button
			Low air pressure alarm
			Door opening
Report types			Batch-wise report
			Audit reports

CARTON SERIALISATION SYSTEM / VERISHIELD CA SERIES

VERISHIELD CS17

VERISHIELD CS17 is a carton printing, inspection, and rejection system with tamper evident labelling capability that complies with global regulations. The system is equipped with serialisation printing, advanced vision inspection technology and tamper evident label application capabilities with an operator-friendly interface.

Applications
Batch coding, serialisation, and verification of cartons and tamper-evident labelling



Find this information on our website:
Machinery > Supply chain traceability > Carton serialisation system > VERISHIELD CS series

Features	Benefits
High-speed machine with a compact design	Requires minimal floor space and time
Ergonomic, aesthetic design with operator-friendly interface	Easy to operate and maintain the system
EU FMD compliant	Ideal for products manufactured in or exported to European countries
EU Annex 11 and FDA 21 CFR Part 11 compliant with CE certification	A regulatory-compliant, audit-friendly system

Technical specifications

Machine dimensions	Length		1400 mm
	Width		1660 mm
	Height		1800 ± 65 mm
Maximum throughput			200 cartons / min (for minimum carton size)
Carton size range	Minimum	Length	65 mm
		Width	30 mm
		Height	15 mm
	Maximum	Length	200 mm
		Width	150 mm
		Height	90 mm
Rejection system			Combined rejection bin with rejection verification functionality
Interlock and safety			Emergency stop button
			Low air pressure alarm
			Labeller-low interlock
			Interlock for low and high pneumatic air pressure
			Acrylic door interlock

CARTON SERIALISATION SYSTEM / VERISHIELD CA SERIES

VERISHIELD CS19

VERISHIELD CS19 carton printing, inspection and rejection system for complying with global regulations. The system is equipped with serialisation printing equipment, advanced vision inspection technology and tamper evident label application capabilities with an operator-friendly interface.

Applications
Batch coding, serialisation and verification of cartons



Find this information on our website:
Machinery > Supply chain traceability > Carton serialisation system > VERISHIELD CS series

Features	Benefits
High-speed machine with a compact design	Requires minimal floor space and time
Ergonomic, aesthetic design with operator-friendly interface evident label (through sensor-based input)	Easy to operate and maintain the system
EU FMD regulation compliant	Ideal for products manufactured in or exported to European countries
EU Annex 11 and FDA 21 CFR Part 11 compliant with CE certification	A regulatory-compliant, audit-friendly system

Technical specifications

Machine dimensions	Length		1564 mm
	Width		890 mm
	Height		2026 mm
Maximum throughput			400 cartons / min
Carton size range	Minimum	Length	65 mm
		Width	30 mm
		Height	15 mm
	Maximum	Length	200 mm
		Width	200 mm
		Height	150 mm
Carton weight			50 g to 1 kg
Rejection system			Time / encoder-based rejection system with pneumatic cylinder and rejection bin
Interlock and safety			Machine ready interlock
			Consecutive reject
			Electrical control panel door interlock
			Machine stop on rejection verification
			Machine stop on rejection bin full
			Emergency stop
			Pneumatic (air pressure) interlock

LABEL SERIALISATION SYSTEM

VERISHIELD LS series

The VERISHIELD LS series is designed to uniquely identify and serialise labels, providing a comprehensive solution for product authentication, traceability, and supply chain security.



LABEL SERIALISATION SYSTEM / VERISHIELD LS SERIES

VERISHIELD LS11

VERISHIELD LS11 is our label serialisation system for online printing and inspection of labels.

Applications
Batch coding, serialisation and verification of labels



Find this information on our website:
Supply chain traceability > Label serialisation system > VERISHIELD LS series

Features	Benefits
In-line label printing and inspection functionality	Can be seamlessly integrated with existing bottling line for serialisation
High-speed machine with a compact design	Requires minimal time floor space and time
Supports track and trace regulations of multiple countries	A single machine that fulfils diverse requirements of different regulations
Plug and play compatibility with bottling line	User-friendly interface for operation and maintenance activities Can be integrated on existing bottling line equipment for serialisation functionality

Technical specifications	
Maximum throughput	120 products / min
Field of view (FOV)	50 mm × 25 mm
Rejection system	Encoder-based rejection system with pneumatic cylinder and rejection bin

LABEL SERIALISATION SYSTEM / VERISHIELD LS SERIES

VERISHIELD LS12

LS12 is a stand-alone carton serialisation system for inspection, and rejection of labels with defective print.

Applications
Batch coding, serialisation and verification of labels



Find this information on our website:
Supply chain traceability > Label serialisation system > VERISHIELD LS series

Features	Benefits
Stand-alone label printing, inspection and rejection functionality	Suitable for low volume production facilities
High-speed machine with a compact design	Requires minimal time floor space and time
Supports track and trace regulations of multiple countries	A single machine that fulfils diverse requirements of different regulations
EU Annex 11 and FDA 21 CFR Part 11 compliant	A regulatory-compliant, audit-friendly system

Technical specifications	
Maximum throughput	12 labels / min
Rejection system	Machine stop

Aftermarket. Not afterthought.

At ACG, we understand that when you get a new piece of factory equipment, you're buying far more than a machine; you're also investing in a relationship that will last its lifetime.

That's why we take our aftermarket service so seriously.

Whether you need advice or training, are preparing to make your factories 'smarter', or simply need a machine fixed fast, know that ACG will always go above and beyond to offer excellent service and value. As far as we're concerned, we're in this together – for life.



Let's talk.

Get in touch to find out more about our range of products and services. If you have specific equipment needs, we can even collaborate on delivering a purpose-made solution. We look forward to chatting.

Email us
sales.engineering@acg-world.com

North America

Canada
United States

Central and South America

Bolivia
Brazil
Colombia
Cuba
Dominican Republic
El Salvador
Guatemala
Paraguay
Peru
Venezuela

Europe

Bulgaria
Croatia
Czech Republic
Denmark
Germany
Greece
Italy
Latvia
Lithuania
Macedonia
Poland
Russia
San Marino
Serbia
Spain
Switzerland
Ukraine
United Kingdom

Africa

Algeria
Egypt
Ethiopia
Kenya
Morocco
South Africa
Tunisia

Middle East

Iran
Iraq
Israel
Jordan
Saudi Arabia
Syria
United Arab Emirates

Asia Pacific

Australia
Bangladesh
China
India
Indonesia
Malaysia
New Zealand
Philippines
South Korea
Sri Lanka
Taiwan
Thailand
Vietnam



Make it better.

ACG Engineering headquarters
127 Kandivali Industrial Estate,
Kandivali West, Mumbai 400 067,
India

+91 22 3078 0701 / 02

www.acg-world.com