



Clearmark

/ Technology Insight

Beverage Secondary Packaging Guide

Understanding Secondary Packaging within the Beverage Industry and Future Trends.

A brief summary

The beverage industry is constantly evolving as it reacts to consumer trends and needs. The UK manufactured £10.9 billion worth of beer, whiskey and soft drinks in 2017, and it is an incredibly competitive landscape with 240 major soft drink manufacturers alone. Therefore, those within the industry are looking for any advantage or edge that they can find. One such advantage can be found within secondary packaging - if a manufacturer can reliably package their beverage products at high speeds, it stands them in good stead to minimise downtime and waste.

Beverage production lines are notoriously fast paced, with small margins and a vast quantity of product flowing through the production line. Therefore, any issues with the secondary packaging which could lead to a slowing down of the production line, downtime, mistakes in packaging, or waste could potentially damage the bottom line of a beverage producer.

We look at the unique challenges faced by beverage producers with their secondary packaging today, and look to future trends and the potential impact they could have on drinks manufacturers.

Looking for more?

Packaging waste initiatives, who's affected?	4-5
Common causes of packaging waste	6-7
Measuring downtime to increase profitability	8-11
The future of beverage secondary packaging	10-12
Summary	13
Choosing the right coding equipment	14-15
Get in touch	16

Packaging waste initiatives, who's affected?

Packaging waste within the industry

Any beverage producer that has a turnover of over £2 million and handles over 50 tonnes of packaging a year has a legal responsibility to record and reduce their waste annually. This combined with the current consumer attention on sustainability, magnified by David Attenborough's Blue Planet series, extinction rebellion, and Greta Thunberg's protest has made sustainability a key area for beverage producers.

Innovative solutions

There have already been a number of incredibly innovative solutions originating from drinks manufacturers such as Carlsberg gluing their cans together with a recyclable substance, Corona using a plant based alternative to plastic and Radnor Hills introducing recyclable shrink wrap for its bottled water products.



Businesses affected by waste initiatives



Handle over 50 tonnes of packaging year?

Turnover over £2 million?



Common causes of packaging waste

With industry 4.0 and the smart factory leading to vast efficiency gains in some factories, yet many factories are still stuck in a bygone era, employing people to hand pack their drinks. There are obvious issues associated with this outdated practice.

Lower migration

The political climate has reduced the number of EU migrant workers entering the country, which may make it harder to fill packaging roles.



Human error

60% of product recalls are caused by human error.



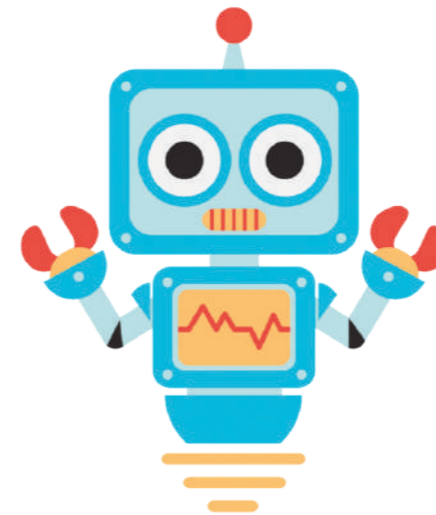
Salary expense

Simply put humans are expensive, with the recent rise in minimum wage likely to reduce company profits.



Reliability

Humans take sick days, lose motivation, and their accuracy / consistency cannot be relied upon compared to robotics .



While automation can be an expensive outlay in the short term, they can quickly pay for their price tag through increased speed, reliability, salary reduction and removing human errors and the associated waste.

Time is money

Many in the beverage industry will be familiar with the razor-thin profit margins that are common place across the industry, with the average profit margin below 6% for beverage manufacturers in 2015. When working with such fine margins it is important to maximise the uptime of all your production line and to review potentially unreliable secondary packaging machines.



Time is money when in a production plant and any lost time due to a machine being down or being changed over can be costly for a beverage business. That means end-of-line systems must be engineered to meet aggressive uptime requirements.

Rick Gessler, Vice President of Engineering and Marketing at Delkor Systems.

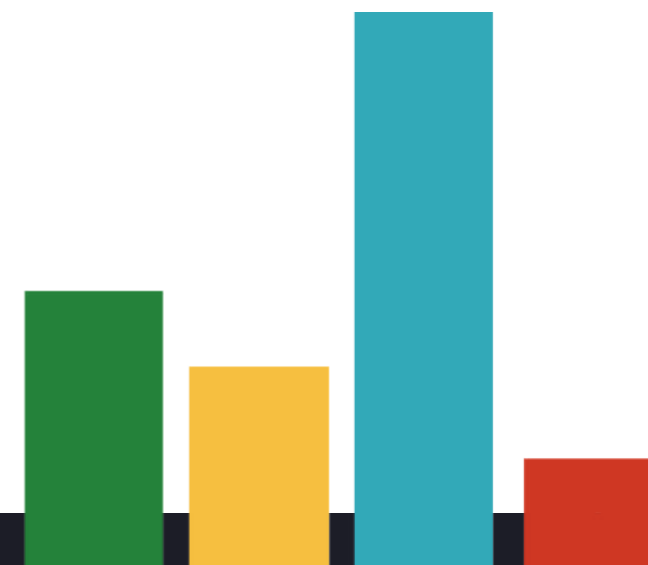


Harnessing OEE to maximise uptime

In order to measure and improve uptime, many factories use the Overall Equipment Effectiveness (OEE) method.

In order for this to be successful it requires accurate data and research has shown that as many as 80% of food and drink manufacturers could not reliably estimate the cost of their downtime. Compounding this issue is the sheer cost of unplanned downtime, with the Aberdeen Group estimating it can be up to £199,417 an hour.

The lack of accurate data within beverage production can make it impossible to pinpoint the problem areas causing the majority of downtime, whether it be in primary or secondary packaging. Making it difficult to improve the efficiency of your packaging line and ultimately increase the profitability of your factory.



BACK Emerging trends in beverage secondary packaging

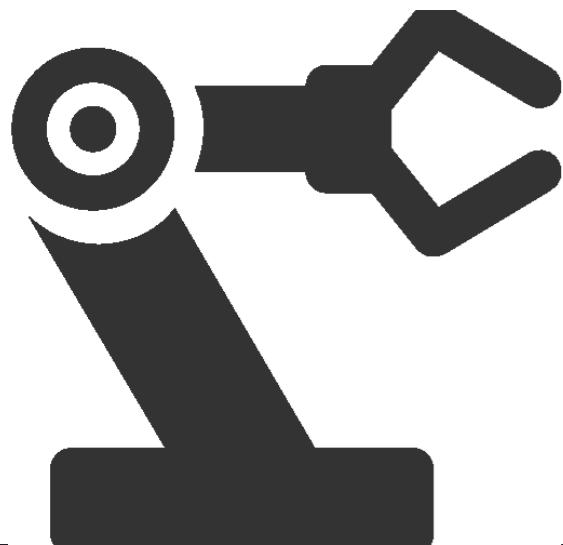
Emerging trends

While this guide has covered the key challenges that beverage production lines face today, the pressure of sustainability targets, changing consumer-demands and technological innovations means that beverage secondary packaging will continue to evolve.



Automation within the beverage industry

Automation looks set to continue to be a key driver within factories, with research by Lockton showing that 95% of food and beverage manufacturers have already introduced or are considering additional automation in the manufacturing process to meet pricing pressures.



Secondary packaging sustainability

Modern consumers are increasingly interested in the environmental credentials of companies and this is reflected in the goods that they buy. There is a growing emphasis on green packaging which is making secondary packaging made out of single use plastic increasingly hard to defend.

Therefore it is imperative that the beverage industry combats this issue if it is to continue to appeal to increasingly ethically-conscious consumers.



BACK Emerging trends in beverage secondary packaging

The rise of e-commerce and the last mile secondary packaging

E-commerce looks set to account for 20% of all food and beverage products sold in 2025, a colossal tenfold increase over 2016. This is likely to revolutionise secondary packaging, as it must evolve to be appropriate for the last mile delivery straight into consumers' homes. This packaging will likely differ to traditional secondary packaging used to transport goods to brick and mortar stores; as the secondary packaging will now come into contact with consumers and also be responsible for the safe delivery of the product.

Lighter secondary packaging

In keeping with the sustainability trend, bottle manufacturers are trying to reduce the weight of their primary packaging, to lessen the materials used as well as the emissions to deliver it. This means that secondary packaging will need to compensate by being stronger and more efficient to maintain pack integrity in the future.

Summary

Successful secondary packaging is key for all production lines, however there are a number of challenges intrinsically linked to the beverage industry such as high throughput and small profit margin that magnify its importance. This increases the importance of secondary packaging that is reliable, effective and economical.

While secondary packaging today is diverse, this looks to increase further in the future as the growing demand for green packaging, last mile secondary packaging and the rise in automation leads to a wider range of solutions. Beverage producers will need to stay atop of this secondary packaging innovation to continue to be successful within a competitive industry.



BACK

Choosing the right coding equipment

Best for beverages

Clearmark has a range of ICE coding and labelling solutions to meet the demanding beverage production environment. Printing best before dates, barcodes, manufacturing dates or traceability codes is an essential task for every beverage manufacturer. Selecting the right coding solution for your requirements is critical to improve throughput and reduce downtime.

Coding technologies that suit your packaging type:

	Zodiac	Scorpion	Viper	Vulcan	Torus
	TTO	TJ		LPA	LCM
Paperboard and cartons		✓			
Flexible pouches	✓				
Shrink wrap				✓	
Boxes and trays		✓		✓	✓

Paperboard and cartons



Flexible pouches



Shrink wrap



Boxes and trays

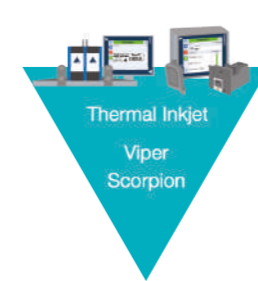


Coding technologies

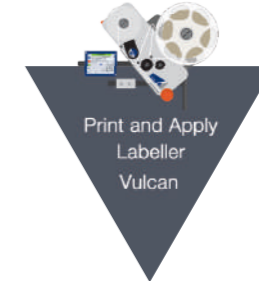
Whether working with large multi-site businesses, a start-up company or a family run firm, we understand that each project is different and brings with it a range of challenges, which are unique to the application type. Clearmark offer a range of coding and labelling solutions to help minimise downtime and operating error.



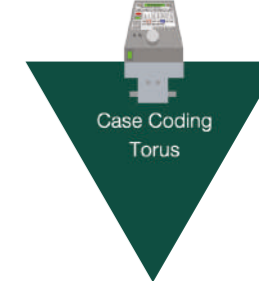
Perfect for your flexible packaging applications, this technology gives you high quality codes and images, from date, time and ingredients to allergy warnings and logos.



This technology is ideal if you print high quality text and barcodes on cartons, ensuring that even complex and detailed codes are clearly readable for your downstream partners and consumers.



When your customers demand labels or you are using darker corrugated cases, an LPA automatically applies labels to cases to ensure high accuracy across a range of substrates.



A case coder is a suitable solution if the substrate you wish to print on is porous, the substrate is white or if the barcode required is an ITF-14. Case coders are also known as large character marking printers.



Software and networking options

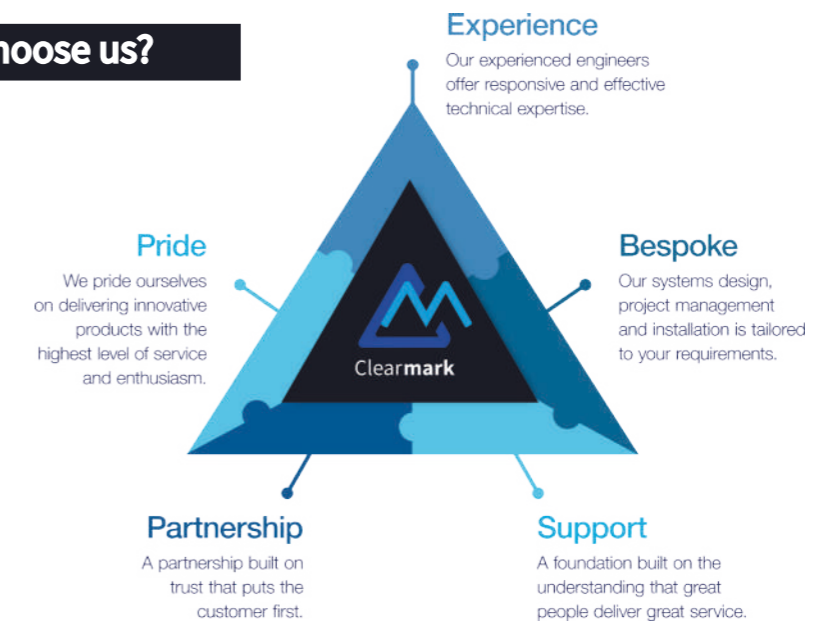
Clearmark provide a suite of label printing software products that work together for the purpose of designing, managing and distributing data to be printed by ICE printers.

CLARITY
Operator touchscreen

CLARISOFT
Label Design Software

CLARINET
Printer Networking Software

Why choose us?



Get in touch

About us

Established in 2001, Clearmark Solutions Ltd has become one of the UK's leading suppliers of digital coding solutions to a wide variety of end markets including; food and beverage, pharmaceutical, printing and DIY. Today, the company operates from two purpose-built head office buildings in Nottinghamshire.

Clearmark has a strong reputation for innovation in a variety of ICE coding and labelling technologies including; thermal transfer, thermal inkjet, large character marking, print and apply labelling.

Clearmark also custom design bespoke integration of all technologies providing the best possible Overall Equipment Effectiveness (OEE) to customers. This is all supported by comprehensive after-sales service and support. The company has a growing install base of over 2,000 customer sites.

Give us a call, we're here to help:

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