Videojet helps improve operational efficiency through innovative coding solution at World’s leading drinks business

Diageo’s Baileys site at Nangor Road in Dublin, Republic of Ireland, has been in operation since 1982 following the rapid growth of Baileys in the late 1970’s. The significant growth came from a drive towards innovation that has since led to a number of additional new flavors being developed alongside Baileys Original, such as Orange Truffle, Biscotti and Hazelnut flavor.

Diageo is the World’s leading premium alcoholic drinks business with an outstanding collection of iconic beverage alcohol brands including Johnnie Walker, Smirnoff, Guinness, Captain Morgan Rum, Tanqueray and Baileys Irish Cream Liqueur.

Today, Diageo produces up to 7 million cases of Baileys each year, with projections for volume continuing to increase as the product range within the Baileys brand grows. As Baileys ranks in the top three of Diageo’s portfolio of thirteen premium brand spirits, Nangor Road is a priority site for leading innovation within the company.
Until recently, Baileys used old ink jet technology to print use by, batch number and traceability information onto their bottle labels and outer case boxes. The increased demand for zero defects on the production floor made it difficult for the ink jet printers to keep pace with the performance level that Diageo required. Chris Byrne, Engineering Maintenance Manager explained the problems:

“The old ink jet equipment tended to be messy, unreliable and the support was not to the standard Diageo required. We spent a lot of time maintaining the ink jet equipment which resulted in downtime on the lines.”

In 2010, Diageo Baileys initiated ‘Project Orange’, a multi-million Euro investment to redesign the Baileys product packaging. Project Orange provided Diageo Baileys with the opportunity to look at where they could improve operational efficiency across a number of areas, with coding and data entry on the bottling lines being one of the main focal points.

Chris Byrne told Videojet that coding and data entry challenges were faced on a daily basis on the bottling line, which continued to affect their operational performance and productivity. These challenges were in three key areas: reliability, quality and operator usability.

As a result of the on-going issues with the coding equipment, Videojet was given the opportunity to offer an alternative solution and recommended their market leading 30W CO2 Laser Marking System, the Videojet 3320. Diageo’s project tender scoring criteria focused heavily on innovation as it forms a crucial part of their growth strategy. Laser marking was a new technology to Nangor Road. Following an innovative proposal encompassing comprehensive trials to prove the operational reliability, superior print quality and ease of use, Videojet were chosen as the ideal partner to meet Diageo’s current and future coding requirements. Chris Byrne said:

“It was clear to see that Videojet was way ahead on the concept of how they could support us with an innovative solution, whereas other coding suppliers wanted to replace like for like. We were looking for a solution that was simpler, faster and more reliable and Videojet supported us in achieving those goals.”

Videojet’s 3320 laser coders gave Diageo Baileys the opportunity to increase productivity and maximize the uptime of their lines, while benefitting from excellent print quality to enhance their new packaging design.

“From an operator’s point of view, the Videojet lasers are far easier to work with. There is no real need for maintenance.”

Barry Murray, Operator
Diageo
When working with a globally recognized brand as significant as Baileys, it is crucial to seek approval from the brand managers at every step of the process. Consideration of brand integrity was vital, and through a close working relationship with the brand team, Videojet was able to deliver a code quality that worked in synergy with the packaging design.

“When you achieve a code that compliments the artwork, which is very much about brand image, you can clearly see there is a big difference when using laser. The Videojet laser quality on both the bottle label and the cases themselves is of a very high standard, to the point where I would say it complements the brand and appears as though it is part of the artwork,” said Byrne.

Consistent code quality was a great improvement for Diageo Baileys, however, the challenges they needed to overcome also included reliability and operator usability. Reducing maintenance was high up on the list of improvement areas as the engineering team was spending too much valuable time maintaining the old equipment, which meant the line was down and productivity was affected.

By replacing the old coding technology with Videojet 3320 lasers, Diageo has estimated annual saving of €90k on costs from downtime and maintenance and €20k on reduced quality issues as well as a site saving of 1% on Overall Equipment Effectiveness.

“Overall productivity has vastly improved. We experience less downtime, more equipment reliability and easier operation.” said Ross Phelan, Packaging Engineer for Diageo.

Diageo’s data entry challenges were met by utilizing one of Videojet’s Code Assurance solutions that included a bar code scanning system to eliminate the potential for incorrect data entry. Removing manual entry of information was a big win for the operators and gave them confidence that the right code was on the right product 100% of the time. Product recall and rework arising from coding errors are now becoming a thing of the past.

“Since the arrival of the Videojet lasers we have seen a lot less mistakes. The interface and
bar code scanners make inputting information for each job very simple. From an operator’s point of view, the Videojet lasers are far easier to work with. There is no real need for maintenance,” said Barry Murray, Operator for Diageo.

The Videojet 3320 lasers were installed onto Diageo’s new Krones Topmodule labeling systems which were also purchased as part of Project Orange. Videojet has a strong OEM strategic relationship with Krones globally and through a collaborative approach provided a streamlined installation for Diageo as well as excellent levels of customer service support.

“I didn’t have to worry about this installation at all. With our pre-delivery inspections, every single inspection was carried out seamlessly. The global partnership that Videojet can bring is something we haven’t experienced in the past…to have the installation completed in Germany with the actual OEM has provided a better all round, hassle-free solution.” said Byrne.

“Videojet has a good reputation for quality, reliable equipment, which gives us the confidence to install their equipment into our new, most advanced technological machinery. We always work as one team, making projects as easy for the customer as possible,” said Manfred Kuhn, Sales Project Manager, Key Accounts, Krones AG.

Now that Project Orange has come to an end, and the new Baileys bottle has been released to market, both Videojet and Diageo can look back and be proud of their achievements.

“Both from an installation and post installation point of view, Videojet’s availability to support is very, very good. I have to say that when I look at the actual code on the outer cases and the bottle labels, I am quite proud of what we have achieved. Of course I’m going to be happy…I think we have all done a great job,” said Byrne.