



Traceability is a key requirement in many areas of retail, but complying with regulations without compromising the efficiency of logistics and fulfilment can be a challenge.

Marden Edwards is a world-leading specialist in building packaging machines that allow its customers to do just this, designing bespoke, automated lines with traceability solutions built in.

The company was asked by a customer to build a new packaging system that would allow it to comply with a new set of traceability regulations in its sector. The system needed to apply a unique code to each individual pack so that their origins could be accurately tracked across the supply chain.

This meant integrating label printers which would be able to operate automatically and with minimum intervention once the packaging line was up and running, so the reliability of the unit needed to be absolute.

After comparing a range of options, the company selected Brother TJ-4121TN industrial label printers for the build, purchasing four of the units for the testing and development process.

#### A dependable component

Jerry Marden, managing director at Marden Edwards, led the team that developed the bespoke solution. He said: "The critical requirement for this project was that the printers would continue to operate with complete reliability long after we had built the system and delivered it to the customer – so we were looking for a product with the highest possible build quality.

In terms of integrating the printers into the wider packaging setup, it was important that it always behaved exactly as expected, as even a very low rate of malfunctioning could significantly compromise the effectiveness of the traceability system.

We found that the Brother printers performed extremely well in both of these areas, and that was a great help in terms of allowing us to build and supply a system that we're confident will be fit for purpose for many years to come"



MARDEN EDWARDS

# Overview

## The challenge

- Integrate label printers into a turnkey packaging system to allow full product traceability
- Achieve 100% reliability in operation to avoid costly downtime once the system is in operation

## The solution

- Brother TJ-4121TN industrial label printers, along with automatic label cutters, PA-CU-004
- An innovative, bespoke installation to allow 100% automated operation

#### The results

- Outstanding reliability and legibility of packaging labelling
- Excellent performance in testing and positive end-user feedback



## **Brilliant simplicity**

The traceability requirements of the automated packaging system were relatively sophisticated, with unique labels needing to be applied at three different levels – the individual packs, boxes containing multiple packs and larger cases containing multiple boxes.

Each label also needed to include a mixture of unique human and machine-readable information.

"While the operation of the printers is relatively simple, it is part of a fairly complex traceability system which required us to build a custom application setup. This runs off a series of labels before applying them to the packs as a separate action.

We found the Brother printers easy to work with when developing and testing this system thanks to its simple, high-quality design.

To find out more about Brother's labelling solutions for heavy-duty applications visit www.brother.co.uk/business-solutions/transportation-and-logistics-solutions

The fact that it operates quite quickly was also a significant benefit, as it means the system is able to create six labels per second, helping to ensure high levels of productivity are maintained."

Jerry Marden Managing director, Marden Edwards

The system performed excellently in testing and is now installed at the customer's site.



# **Product focus**

# The TJ-4121TN industrial label printer

- 4" industrial thermal label printer with touch panel display
- 300dpi print resolution and print width up to 105.7mm
- Built for heavy-duty applications in the most rugged industrial environments
- High capacity 450m thermal transfer ribbon means fewer consumable changes
- Able to connect via USB, USB Host, Serial, Ethernet and Wi-Fi (optional)
- 178mm per second print speed