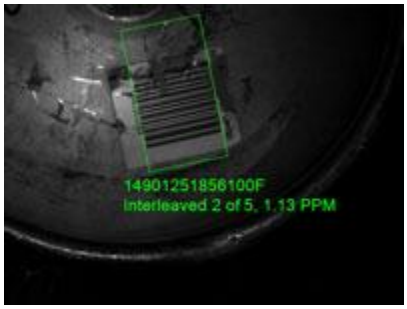
MAJ Enterprises Presents from Cognex

DataMan 500 high read rates ensure weights & measures compliance

In the UK, Trading Standards enforce stringent regulations under the Weights and Measures Act 1985 to ensure consumers have the right quantity information to make informed purchasing decisions. This Act provides a framework for the regulation of quantity which includes: the type and manner of information provided, quantities which may be sold and the units of measure.

Everards Brewery is a long established brewery founded in 1849 and based in the Midlands, UK. They brew their own beers as well as distribute other manufacturers' brands of ales and lagers throughout the UK. Everards, where possible, uses leading edge technology throughout their 12.5 acre site in Leicestershire.

Everards experienced barcode scanner problems during their 'kegging process' where reusable metal kegs are filled with beer. Empty kegs have 1-D barcode labels applied and are weighed to establish the 'tare weight', which varies slightly for each keg. The keg is scanned and the tare weight of the new keg is recorded in a database. Once filled, the keg is transported down a line to a weighing station. The keg's label is scanned to identify the keg from a database and then weighed in order to calculate the exact weight of beer in each keg.



The process of kegging brings significant challenges for capturing and recording this information. As kegs are reused regularly, the barcodes can become significantly damaged while being transported and when in use in pub cellars.
Previously, Everards used a laser scanner to read the barcodes. However, due to the amount of damage to the barcode labels, the scanner was only achieving a 60-65% success rate of barcodes being read correctly. This meant that a significant amount of information was not being captured as accurately as possible for Trading Standards auditing. Due to the inefficiency of the laser scanner Everards looked to find an alternative, more reliable solution.

Fairfield Labels, a Cognex ASP (Automation Solutions Provider), was chosen by Everards to develop a new system to identify and weigh the kegs during production. Fairfield designed a system based on Procon software to interface with the Keg Weigher using the DataMan® 500 industrial ID reader from Cognex. The system now scans each filled keg's barcode as it passes on a conveyor to identify its tare weight. The keg is

then weighed and the information is communicated to the software to calculate the exact filled weight of the keg.
Without a making change to the labelling process, the DataMan 500 was able to achieve 63% increase in read rates–a huge increase over its laser predecessor. Everards Brewery is delighted with the results. “The DataMan 500 provides fantastic read accuracy. It reads codes that we did not expect any reader would be able to read. The amount of data we now collect enables us to continue to comply with the Weights and Measures Act much more comprehensively,” explains Graham Armston, Engineering Team Leader at Everards Brewery. “Installation and commissioning was carried out around our production schedule to ensure minimal disruption. Overall we are delighted with the DataMan 500 and already anticipate other areas of production where it can provide benefit,” concludes Armston.

“The key advantage to the DataMan 500 is that it has no moving parts which mean less chance of downtime due to mechanical faults. The advanced algorithm that enables poor quality and damaged codes to be read is fundamental to the success of this application. The DataMan 500 is also easy to use and set up which means operators can adjust or alter the system themselves without the need for technical assistance,” explains Lee Wragg, Business Development Director of Fairfield Labels.

Due to the success of the project, Everards Brewery will be happy to share the application details with other Breweries in the UK.