

SUCCESS STORIES

NHS TAYSIDE CDU ACHIEVES TRACEABILITY AND COMPLIANCE WITH DATALOGIC LASER MARKING

Overview

Based in Dundee, Scotland, NHS Tayside Central Decontamination Unit (CDU) is the primary site for processing reusable surgical instruments. The CDU provides decontamination services to 52 surgical theatres and Dundee Dental Hospital, processing eight million instruments in compliance with ISO standards and medical device directives. Working with Sciamed, NHS Tayside Central Decontamination Unit has improved traceability of reusable medical devices with Datalogic's Ulyxe laser marking system.



The Challenge

Decontamination services are a vital support function within NHS trusts and enable the proper cleaning and sterilisation of reusable surgical instruments. Keen to ensure full traceability of devices and in readiness for the new unique device identification (UDI) regulatory requirements being introduced by the EU in 2020, NHS Tayside CDU began investigating solutions to mark surgical instruments so that each item could be accurately tracked through the decontamination process including washing, disinfection, packing and sterilisation.

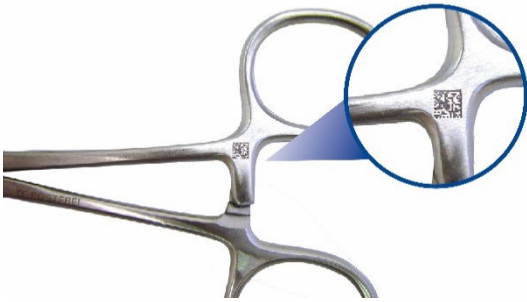
By being able to uniquely identify, track and trace individual medical devices through the supply chain and, importantly, into a patient pathway the UDI regulation is designed to fundamentally improve patient safety and could allow medical facilities to remove an unsafe product from harm's way before it reaches a patient.



Following an initial meeting with NHS Tayside to understand the trusts specific requirements, it was clear the solution needed to allow for a unique GS1 GTIN barcode to be marked onto each instrument. It was important that the barcode would not affect or be affected by the decontamination process and the same process needed to be used on a range of instruments of different sizes made from a variety of different materials.

The Solution

To meet NHS Tayside's requirements, Sciamed recommended the Datalogic Ulyxe laser marking system which it delivered in partnership with specialist laser marking provider Laser Lines Ltd. Together Sciamed and Laser Lines carried out an onsite demonstration of the product, enabling NHS Tayside to see first-hand the quality and accuracy of the marks on various materials including stainless steel, anodised aluminium, titanium and plastic.



The laser marking system proved to be significantly more cost effective than a label-based identification system, which would require labels to be replaced every two years. In contrast, the Ulyxe laser marking system had no on-going requirement for consumables and the equipment itself requires minimal housekeeping. There are a number of different laser marking technologies available on the market, including CO2 and Fibre based laser systems, however Laser Lines and Sciamed recommended Datalogic's DPSS (diode-pumped solid state) Ulyxe product as it delivers shorter

bursts of energy which result in a much neater mark, tested and approved by independent laboratories. In addition to marking barcodes, the system can also be used to mark alphanumeric characters and even logos if required. And unlike other methods that change the surface of the kit, the laser also does not affect the protective passive layer, so there is no added cleaning risk with this system.

In addition to supplying the laser marker itself, Laser Lines also provided an appropriately sized workstation to NHS Tayside that would enable them to mark a range of different sized instruments while providing the required levels of safety for operators when the machine is in use. Training was also delivered to allow NHS Tayside's decontamination technicians to get up and running as soon as possible.

The Results

Following the successful implementation of the Datalogic laser marking system, Alan Simpson, Quality and Technical Manager at NHS Tayside commented, "The use of the laser marking equipment integrated seamlessly with our tracking and traceability system and has been an essential asset in ensuring the prevention of high-risk instrument migration. We are grateful to Sciamed who have supported us throughout this project and ensured that the laser marking equipment was incorporated into our demanding throughput requirements without incident."

Patrick Robinson, UK & Ireland Sales Manager, Healthcare at Datalogic concludes, "Reusable surgical instruments and medical devices present a unique challenge to hospitals when it comes to ensuring complete traceability across the supply chain. Unlike medication and disposable packaged items, it is very difficult to use traditional label-based systems on these items to reduce risk and improve patient safety. Laser marking is perfectly suited to the variety of reusable devices that will need to be marked under the EU unique device identification regulation and we are delighted that NHS Tayside is leading the way with a Datalogic solution."

Datalogic Group

Datalogic is a global leader in the automatic data capture and process automation markets, specialized in the designing and production of bar code readers, mobile computers, sensors for detection, measurement and safety, RFID vision and laser marking systems. Datalogic solutions help to increase the efficiency and quality of processes in the Retail, Manufacturing, Transportation & Logistics and Healthcare industries, along the entire value chain. The world's leading players in the four reference industries use Datalogic products, certain of the attention to the customer and of the quality of the products that the Group has been offering for 45 years.

Today Datalogic Group, headquartered in Bologna (Italy), employs approximately 3,100 staff worldwide, distributed in 30 countries, with manufacturing and repair facilities in the USA, Brazil, Italy, Slovakia, Hungary and Vietnam. In 2017 Datalogic had a turnover of 606 million Euro and invested over 55 million Euros in Research & Development, with an asset of more than 1,200 patents in multiple jurisdictions.

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NHS Tayside

Tayside Health Board was established in April 1974 and is responsible for commissioning health care services for the residents in the geographical local government areas of Angus, Dundee and Perth and Kinross. NHS Tayside's governance includes 3 major and a number of community hospitals, including the University of Dundee's Medical School attached to the regions flagship institute, Ninewells Hospital in Dundee. For more information visit www.nhstayside.scot.nhs.uk

Sciamed

Since 1994, Sciamed has worked hard to create long-term relationships with customers, ensuring they understand their needs and exceed their expectations. Sciamed aim to be the leading supplier of barcode, labelling and mobile computing solutions to the NHS. With over 20 years' experience delivering these applications across many departments in the NHS, the company has built an enviable reputation for excellence and outstanding customer service. For more information visit www.sciamed.co.uk

Laser Lines

Laser Lines was founded in 1975 and has grown to become one of the UK's leading suppliers of lasers and accessories, 3D printers, rapid prototyping systems and vacuum casting systems. Now representing 26 suppliers of proven technology, our experienced and enthusiastic support team offers an end-to-end service which includes training, installation, maintenance and repair services for all of our products. Our customers come from sectors as diverse as university research, automotive production, tooling manufacturing and jewellery design. For more information visit www.laserlines.co.uk