ASSET TRACKING

ENSURING THAT TRACKING AND TRACING IS MADE EASY

Welsh company Torchwood Technologies specialises in providing bespoke RFID, NFC and Barcode labels and tags for use in all healthcare environments

Torchwood Technologies supply ruggedised products using high impact adhesives and pride ourselves on providing labels where others fail. Our labels are in use for asset management in a wide range of vertical markets and applications with many 'blue chip' companies including a number of NHS trusts throughout the UK. In particular we can manufacture antibacterial resin coated virtually indestructible labels to GS1 standards in a variety of sizes bar coded and RFID enabled ideal for identifying medical devices.

There are many acronyms in general use these days, and many of them have differing meanings depending on the context in which they are used. One specific example is triple A. This can of course refer to the size of a battery, but we in Torchwood believe that it refers to good management practice which is 'All About Assets.'

Assets take many forms, and include people, fixed plant, moveable equipment; materials used or consumed; data or information particularly that stored on paper documents, and end products. The relative importance of these assets and their management varies across economic sectors, but there are three fundamental requirements to the management of assets. What are they? Where are they? Are they fit for purpose?

Systems must be in place to monitor the management of assets based on collecting the right data in the right place at the right time by the right method and processed in the right way. There are a variety of technologies than can be used, with barcodes, RFID and NFC being the most common.

FIXED PLANT AND EQUIPMENT

Fixed plant such as back-up generators must have individual identification which can be automatically read. Common technologies include linear bar code, 2D bar code, RFID, or NFC. The choice of identifier depends on the way in which data is integrated to the appropriate database. Many fixed assets have critical functions, for example a back—up generators in hospitals.

These must be part of a full Repair Maintenance and Overhaul (RMO) system to ensure that when required they work. These can be identified with the GS1 Global Individual Asset Identifier to guarantee world wide unique identity.

MOVEABLE PLANT AND EQUIPMENT

Much of the moveable equipment used in the health service is used in life threatening situations; therefore such equipment also needs to be uniquely identified. The GS1 system of Unique Device Identifier (UDI) provides such a code and is being adopted world wide. The rapid location of such equipment and the need to know that is fit for purpose is critical.

Whilst barcode systems may deal with such movements they require human intervention and in time critical situations this presents a problem. Most such equipment is therefore usually tracked by means of RFID. Passive RFID systems are economic to install and rely on reasonably priced RFID tags, and are often adequate when 'last known location' is sufficient.

Real time location can be achieved but depends on expensive active RFID tags, complex wireless networks and sophisticated architectural information systems. Fitness for purpose must be tracked via an RMO system specific to the individual asset.

PEOPLE

Whilst this can be a contentious area there are instances when people need to be identified, for instance often it is necessary to check individuals have the correct training to perform certain processes and to record which individual performed which process with which asset and/or drug. This can only be achieved automatically if all three elements are uniquely identified ideally using GS1 codes.

CONSUMABLES

Adequate identification is required to ensure that drugs are in date and readily available where required. Such tracking is based on GS1 standards which exist using 2D Matrix symbols for pharmaceuticals and as with UDI these are increasingly becoming mandatory throughout the world.

RECORDS

Paper records often need to be found in a hurry, a process that can by hugely aided by the attachment of an RFID tag. If documents are filed with RFID tags relating to patient identity then they can be located by scanning for the file required using a reader which emits an intermittent tone which increases in volume and rapidity with its proximity to the tag.

CONCLUSION

It is our firm belief that none of the above can be successfully achieved unless assets are properly identified with the right coding structure, using the right technology, on labels/tags which can survive in the often harsh conditions in which some assets exist. We have experience in many spheres of providing anything from complete solutions to the supply of labels/tags.

Our labels are in use for asset management in a wide range of vertical markets with many 'blue chip' companies including a number of NHS trusts. We work closely with customers to ensure any solution in which we are involved is totally fit for purpose.

FURTHER INFORMATION

www.torchwoodtech.com www.floor-tags.co.uk

