

AMCS automates waste management in Ireland

Many routine and time-consuming tasks can be carried out more efficiently by using the latest RFID (Radio Frequency Identification) technology. A case in hand involves AMCS (Advanced Manufacturing Control Systems Limited), which has been developing a complete waste management system based around the Gotive H4I. This is a versatile Wireless Enterprise Communicator supplied by AMCS's partner, Spirit Data Capture Limited.



AMCS is based in Limerick, Ireland, and is a leading provider of RFID solutions that are designed to enhance an organisation's control over its asset and fleet management systems. AMCS is the largest provider of pay-by-weight and volume solutions within Ireland's waste industry.

Waste collectors use the AMCS system to monitor and charge their customers based on the volume or weight of the waste collected. AMCS's solution is unique, as it combines RFID, GPS, GSM, mobile computing and load-cell technology to provide a complete waste management solution for waste collectors.



Case Study

The company's latest development involves the integration of the Gotive H41 into its waste management solutions, to provide a complete SKIP Management System.

Whilst using the Internet to investigate possible technologies, AMCS came across Spirit Data Capture, which owns the UK and Ireland distribution rights for the Gotive range. The Gotive H41 is a rugged handheld computer, which is ideal for any mobile application involving the collection, processing and communication of information. AMCS was impressed by the unit, and was subsequently appointed as one of Spirit's key resellers.

The Gotive H41 has a large, 1/2 VGA colour touch-screen and a range of integrated features. These include Bluetooth® technology; a GSM/GPRS Wireless Wide Area Network; a GPS navigation system; RFID; and a barcode scanner. The unit uses a Windows® CE.NET operating system.

Jimmy Martin, AMCS's Technical Director, says: "We liked the Gotives because they are rugged with a good screen size and are competitively priced. They also have the advantage of using the Windows® CE operating environment. This allows us to develop all of our software on a standard .Net platform."

Since becoming a Gotive reseller, AMCS has been developing a comprehensive waste management solution which make the most of the unit's GPRS, GPS, barcode scanning and RFID capabilities. The company plans to offer the solution to waste disposal organisations. Jimmy continues: "Our system is of interest to both public and private companies, as it will boost their efficiency and their ability to keep track of their waste operations."

The Gotives will be use in various ways. Firstly, they form an integral part of a route planning operation, replacing a manual system. A list of pick-ups can be sent to the hand held unit each morning, and this can be modified during the day as calls are received.



Secondly, the Gotive can be used to collate valuable information relating to each pick-up. This includes data such as bin identification (each bin carries its own RFID tag); the waste type; and volume or weights of waste in the bin (measured by load cells on the lorry chassis). The unit can also be used to capture signatures.

The data captured by the Gotive is transmitted in real time to the back office. Jimmy Martin says: "This gives the office an up-to-date view of what is happening on each route. This new system replaces manual dockets, greatly reducing the administration time and increasing the efficiency of the waste disposal operation."

He adds: "The Gotive is ideal for this type of application, as it incorporates such a wide range of features. Having developed the waste management system, we now plan to start targeting delivery and utility companies with this very versatile device."