HID®

HID Global's RFID Technology Provides Effective Solutions for International Waste Management Company, AMCS Group

The AMCS Group is one of the world's leading providers of solutions for the waste management and environmental industries. AMCS systems are used to manage approximately four million municipal, commercial and industrial waste units internationally for recycling, waste collector and facility operators. Since its foundation in Ireland in 2003, the group has grown quickly to become a world leading supplier of software solutions to the waste and recycling industry; it currently has operations in the UK, Norway, Sweden, France and the United States. The group spends 15 to 20 percent of annual revenue on research and development to maintain its leadership in international markets.

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Jimmy Martin
Chief Executive Officer
AMCS

Products/technologies:

- Standard Bin Tag 125 kHz Unique

- Plug Tag 125 kHz Unique

- Custom Bin Tag 125 kHz Unique

- OEM Reader Modules

Challenges

Delivering the most technologically advanced, integrated solutions to its thousands of customers is an ongoing goal for AMCS that requires first-class project management, product development and customer support.

AMCS' municipality customers are often faced with the challenge of how to reduce wasted trips and increase route and fleet efficiencies. Some potentially underperforming trucks could be redeployed to more burdened areas or routes. Municipalities also need accountability for services provided and quick resolution for bin loss and damage.

In the commercial and industrial sectors, managing high-value assets is a high priority. Management needs to know the location of its assets at all times. Also, management needs to be able to track what containers are on what truck and what containers are with which customer in order to be more efficient. From skip hire, through roll-on-roll-off to commercial rounds, gate receipts and material sales, all require careful management.

In order to deliver the most up-to-date solutions, AMCS identified a need for reliable and durable RFID technology to enable its customers to successfully meet the challenge to improve efficiency, reduce costs, enhance customer service and retention, and increase the bottom line. Given the sophistication of AMCS' integrated management solutions, they were interested in a long-term relationship with an RFID solutions provider they could rely on with proven support.

Solutions

As AMCS' Chief Executive Officer, Jimmy Martin was one of the first in the industry to spot the game-changing role RFID technology would play in waste management. "We ran a trial for about a year with three or four potential suppliers from Germany to the Middle East and Asia, but we found HID Global to be far above all of them," said Martin. "We are now almost exclusively HID. Our three criteria were: durability, quality and responsiveness-HID came to the top of this list in all of them."

HID Global's comprehensive range of solutions for AMCS include the Standard Bin Tag 125 kHz Unique, the Plug Tag 125 kHz Unique for "specials", a custom-designed push in bin tag for steel containers and OEM reader modules, providing a high level of read range, performance and a wider variety of tag options.

HID Global's RFID technology brings operational advantages to the waste management process. "We embed the tag into the wheelie bin, a reader on the truck takes the weight on the way up and down and the GPS coordinates of the tag, and the information is relayed to the back office to enable decisions on route efficiency and fleet optimization," said Martin. "We have a number of municipal customers who also use our RFID technology for recording exceptions such as "missed bin", "access blocked" and "bin contaminated".

Variation in weight of waste from one unit or dwelling to another is a principle driver for the use of RFID solutions. Waste can vary from 500 kilos to 2000 kilos (1,100 to 4,400 pounds) per year from one house to the next. RFID technology encourages recycling as it enables a system with charges based on usage, rather than a flat charge for every customer. "In the United States, a bonus is sometimes paid for recycling–this is a trend around the world," said Martin.

Considerations with the high-volume commercial and industrial sectors are slightly different. "For example, if a truck collects about 140 containers a day, weight, time and location are critical management consideration," said Martin. "How often do you put out your container and how much is in the container? RFID technology supplies the data which can be analyzed at regular intervals to suit management reporting schedules.

In the building industry there are huge roll-on, roll-off containers of high value. These containers are important assets that must be managed and tracked efficiently. RFID technology relays the information to the back office, enabling decisions on route efficiency and optimization.

"RFID enables the weight usage of every customer and the profit margins to be identified," said Martin. "An organization can also use RFID for credit control. If a customer hasn't paid their bill, the waste management company can use RFID to stop the bin from being lifted."

Results

"There has been a huge shift in how the waste management industry manages its business since the introduction of RFID technology," said Martin. "Whether it's managing weighbridges, fleet optimization, or analyzing individual customer profit and loss, RFID is now an indispensible part of AMCS' solutions and our future development."

In an era in which all organizations have budget constraints, HID Global has worked with AMCS to provide a win-win situation in waste management that reduces fleet operational costs while providing a more comprehensive service to the customers.

"We've been working with HID Global for around five years," said Martin. "Cost was a factor of course, but to be honest it was more about their partnership offer, ability to respond to our needs and develop the product with us that were the key drivers for our choice. We view HID more as a partner than a supplier."

"A number of our customers who have implemented AMCS solutions have also seen call queries within their call center drop significantly as a result of having vital collection data at the fingertips of the call center staff," said Martin.

HID Global

HID Global RFID tags help municipalities and waste removal service organizations optimize data collection speed and integrity, enabling pay-as-you-throw and recycling incentive programs.

Bin and container manufacturers can choose from a broad spectrum of LF, HF and UHF passive contactless transponders that provide various levels of resistance to water, chemicals, shock, and temperature variation. For field-deployed assets, Bin Tag and Plug Tag transponders install easily into standard nests, including metal bins and DIN 30745 plastic bins. Additional designs provide the flexibility and versatility to tag bins and containers of any size, shape or composition.