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Customer success story [Automotive industry]

Gitterbox Tagging

A story of true collaboration, intelligent design and tenacious problem solving

Background

Gitterboxes are highly specialised, Industrial Returnable Transport Items (RTI's).

They are used predominantly in the Automotive industry but also in other sectors for transporting semi finished products and components within the manufacturing supply chain.

Estimates show that there are up to 40m of these Gitterboxes across Europe and they are a real success story which means their size and format has become highly standardized as the go-to method of transportation adopted by most manufacturers in a given industry (particularly big automotive companies in Germany like BMW, Audi and VW etc).



Tagging and monitoring – what are the issues?

There are many reasons why accurate tracking of Gitterboxes is essential:

- The products inside are often very valuable and it is important to ensure that they don't go missing.
- The Gitterboxes themselves have a reasonable value and the owners don't want them taken out of the supply chain.
- In some cases Gitterboxes from different owners end up in the same place (shared component makers etc) and there is a need to confirm ownership.
- If Gitterboxes end up stockpiled in one place this can hold up lead times so tracking to maintain the process and goods flow is essential.

The main issues with applying a tag to the Gitterboxes:

- Strong attachment is required as the cages can get heavily knocked but in the past this has led to obtrusive fittings on the inside of the cages that can damage the contents or the people handling them.
- Even with a strong fitting a heavy knock in transit or when the cages are being stacked for storage can easily dislodge or damage a protruding tag.
- A complicated fitting procedure involving tools is costly in terms of man hours (this can be considerably more than the cost of the tag itself).
- The Gitterboxes are made of metal which can negatively impact on RF performance so a specialist, proven on-metal tag is needed.

True collaboration – how 3 partners came together to provide a great solution

Tag design specialist 'Logistics Arts' have come up with a beautifully simple yet highly effective tag design that can be easily, seamlessly and securely attached to a Gitterbox with no tools in a few seconds.

Omni-ID have used their industry leading knowledge of on-metal tags to ensure the innovative tag enclosure is armed with robust RFID capabilities providing consistent read performance.

Solutions provider Mieloo & Alexander have created a powerful management information tool that can provide transparency of the process flow of the Gitterboxes in circulation within the supply chain so that stocks can be monitored, surplus build-ups minimized and 'just in time' processes put in place providing ultimate scheduling, visibility and control.

“Strong attachment is required as the cages can get heavily knocked but in the past this has led to obtrusive fittings on the inside of the cages that can damage the contents or the people handling them”

Easy attachment – no tools required

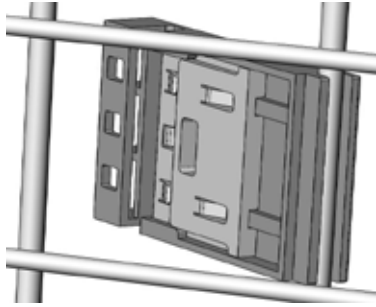
The attachment process is easy and requires no additional tools, fittings or ties.

It takes a few seconds using the tag's built-in hinge mechanism to perfectly fit between the metal bars of the Gitterbox leaving no 'protrusions' that can be dislodged.

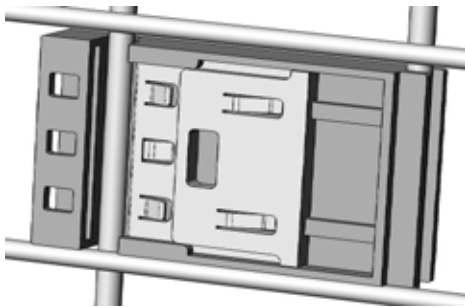
The tag is available in two options – one that is permanent and cannot be removed once fitted and one that is removable.

The initial tags are opaque but there are plans to introduce an option with a clear case so that a human readable label or barcode can also be contained within it.

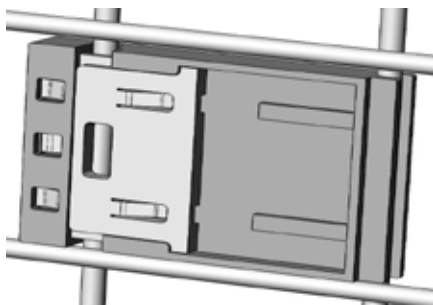
Stage 1



Stage 2



Stage 3



Comments from the team behind this solution

The team of experts from the 3 companies are naturally excited to have collectively solved an issue that will have a tangible impact on one of Europe's biggest supply chain process flows:

Jürgen Glasneck from Logistics Arts commented:

"This has been a very satisfying project to work on knowing what a big issue we are solving for the hugely important automotive and other industry supply chains. The end result looks simple but much work has gone into this and it has been a true team effort between us as a leading tag encasement designer, Omni-ID as a leader in RFID technology and Mieloo & Alexander who can make the data come to life in a user friendly system – brilliant."

David Read from Omni-ID said:-

"I love projects like this where creativity, technological know-how and big picture thinking come together for a perfect end result."

Eiko Gramlich from Mieloo & Alexander added:-

"This is true collaboration – each company has skills that the others do not and we all have a desire to solve problems for the end customer using the latest RFID and related data gathering systems. The result is excellent and gives me and my team a real buzz."

For more information speak to your usual representative at Logistics Arts, Omni-ID or Mieloo & Alexander or e-mail sales@omni-id.com and we will be in touch.

Omni-ID is the leading supplier of passive, low-profile UHF RFID solutions. Through our patented technology, Omni-ID "cracked the code" to overcome the problems traditionally associated with RFID, enabling a broad range of new applications that improve accuracy and efficiency in asset tracking, supply chain management and work-in-process. Our family of versatile RFID tags works reliably in the harshest environments, including on, off, and near metal and liquids and excels in solving tracking and identification challenges with unprecedented accuracy. With offices in the USA, UK, Asia and India backed up by a purpose-built manufacturing facility in China, our mission is to drive the widespread adoption of RFID and wider IoT technologies as the optimal tracking and identification devices.