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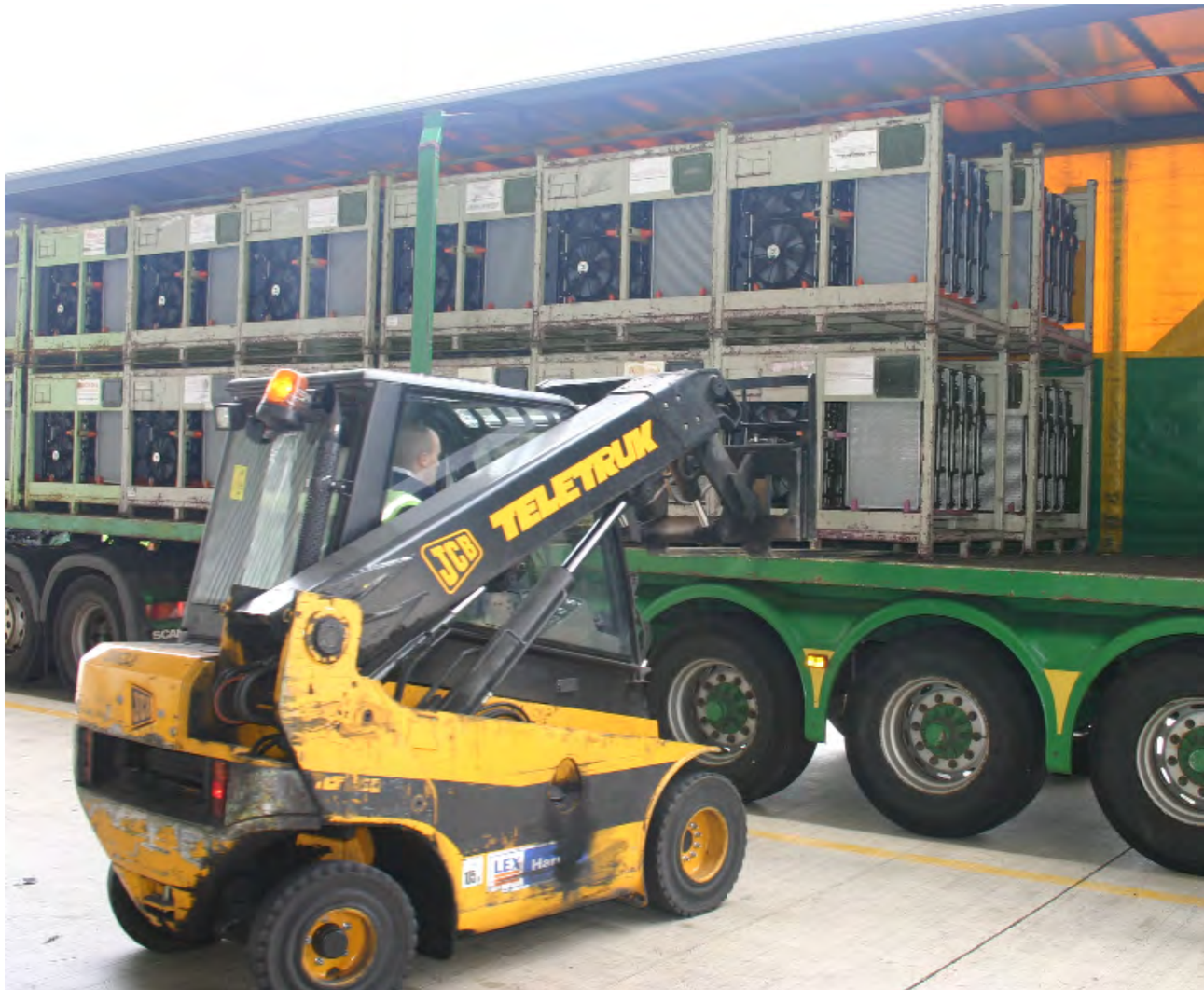
intellident

STOCK INTAKE SOLUTION



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What is the stock intake solution?

Any company that receives stock on a regular schedule can appreciate how important it is that the quality, quantity and origin of items are checked as soon as possible following delivery. In any instance the problems encountered by companies are likely to be similar, such as:

Wrong product, wrong time

Suppose you are sent a delivery of stock and it is not what you require at that moment in time. Dependent on which product has been wrongly delivered, you could end up with new stock and nowhere to store it. For many companies, where product date-life is an issue or seasonal items are retailed, a wrong delivery could have enormous impact on operations.

Right product, wrong quantity

It's not only receiving the correct product into depot, store or warehouse that can often be a problem for companies, but also ensuring the correct quantities of stock arrive. What if the correct product arrives, but in the wrong quantity? What happens if you cannot sell all this stock before it's shelf-life expires?

Right product, wrong location

When dealing with expensive and valuable goods, such as automotive equipment or jewellery, it is important that you receive such parts into the correct location. In many instances it is impossible to tell if the correct part has been received into the wrong location, often resulting in loss and mis placement of expensive goods.

If any of the above situations occurred would you be able to prove specifically where the problem arose and identify who should correct it? It would be ideal to have in place a system that could certify what stock is held at the depot and highlight exactly where, when and what vehicle the delivery in question has originated.

These scenarios are amongst some that potentially result in the receiving party not intaking what was expected. The stock intake solution aims to eliminate the possibility of these situations occurring, whilst providing increased visibility of exactly what is entering into the facility, and where it has originated.

Essentially, it is a skillful and highly effective combination of systems that allow for automated stock intake, supplying real-time reports and order verification. Using a variety of delivery-based criteria and the extential knowledge within Intellident, the solution ultimately ensures what a supplier requests is what they receive.

Who can benefit from the stock intake solution?

Any company that receives stock deliveries can benefit from the stock intake solution. It is implemented to identify and ensure that what enters the facility is exactly what is required.

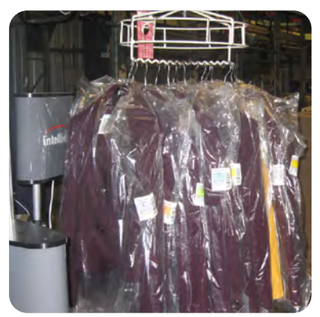
Who is using the stock intake solution today?

Intellident have hundreds of installations live around the UK today, providing evidence that stock intake is indeed one of the most important operations in any supply chain, and one that spans all industries.

Over 600 suppliers around the UK have taken advantage of the solution to increase intake accuracy and traceability. These range from fresh food suppliers to automotive part manufacturers and high-street manufacturers. In each case the benefits have been realised immediately and solution pay back has typically occurred in less than six months.

intake, verb
to take in a quantity of items

intake, noun
the quantity taken in



The benefits of using a stock intake solution

The stock intake solution has the ability to be adapted to suit all delivery eventualities. Intellident offer a range of functional benefits to meet all criteria, and some that are very specific to particular industries. Our intricate assessment process allows us to identify key areas which our customers will benefit from and what will add value to their business. This design philosophy allows for many key solution benefits, such as;

Reduction in intake time

Utilising automated systems is not only more accurate, but also significantly quicker, with customer examples that show over a 400 percent decrease in intake time compared to their previous process. This dramatic saving is typically through a combination of both accurate data collection and the removal of complicated paper-based, batch solutions.

Immediate access to information

Using the stock intake solution provides immediate information on what has arrived, at which facility, by whom it was signed by, at what time and even which dock door the items were received at. All of this information can be provided in real-time digital format, providing you with immediate visibility.

Improved stock traceability

If you are increasingly challenged with providing full traceability information to your customers, then the stock intake solution could provide valuable information. Archiving the data illustrated above allows you to quickly provide a detailed history of when items arrived and associate this with manufacturing batch information and even dispatch times - giving a complete life cycle of a product.

Ability to expedite inbound deliveries

If your business is desperately awaiting a particular part or batch of raw components to arrive, the stock intake solution can raise alerts and notifications once this item is detected. Alerts can provide information on current location, even down to which box on a pallet the items are contained - allowing the product to be quickly removed and forwarded to the correct location.

The benefits that can be derived are often very specific to the individual installation, however, a broad range of solution benefits are illustrated in the table to the right.

	Automotive OEM	Beauty & cosmetics	Books & peripherals	Clothing & Fashion	DIY & maintenance	Electrical & wholesale	Food & drink	Home & furnishing
Advanced Shipping Notification (ASN)	•	•	•	•	•	•	•	•
Automated reporting	•	•	•	•	•	•	•	•
Asset logging	•	•	•	•	•	•	•	•
Damage control and limitation	•	•	•	•	•	•	•	•
Dock-door control	•	•	•	•	•	•	•	•
EDI order check	•	•	•	•	•	•	•	•
Inbound date life check							•	
Product labelling	•	•	•	•	•	•	•	•
Operator verification	•	•	•	•	•	•	•	•
Quantity check	•	•	•	•	•	•	•	•
Supplier verification	•	•	•	•	•	•	•	•
Time and date (wave cycle)							•	
Traceability	•	•	•	•	•	•	•	•
Transaction monitoring and reporting	•	•	•	•	•	•	•	•
Vehicle unload check	•	•	•	•	•	•	•	•

Automated into store receipt

As the solution is completely automated, incredibly quick and accurate, into store deliveries can be processed in a fraction of the time. This allows in-store staff to spend the majority of their time on the shop floor with customers rather than unloading stock and completing paperwork in the back office. Additionally, more efficient intake of stock gives greater flexibility over ordering, potentially reducing or even eliminating the need to hold 'spare' stock in the back-of-store.

Displayed above are the benefits that can be realised upon implementation of the stock intake solution. For more information please visit www.intellident.co.uk/intake

Case study : Honda of the UK Manufacturing

Honda of the UK Manufacturing (HUM) is one of the largest car production plants in the country. Based in Swindon UK, the company is responsible for the manufacture of the Civic and CR-V product ranges. Car production at HUM started in 1992, since then the company has produced over 1.5 million cars and approximately 2 million engines.

The problem - With in-excess of 150 suppliers providing thousands of unique components for the Civic division alone, the logistical challenges surrounding the operation were significant. To ensure that the correct parts arrived at HUM, on time and without being damaged was part of the company's predicament, however, it was not the core problem.

Already in use was a system operating 500,000 metal and plastic crates - each of which was filled with uniquely packaged components by the suppliers and dispatched to HUM. With such large amounts of stock being delivered on a daily basis it was difficult to track stock movements throughout the supply chain. On reaching the depot many assets were often missing or in the incorrect crate, which, with the majority of crates being made from metal and at a stage so far down the supply chain, resulted in large stock costs.

The solution - Each of the 500,000 crates and encompassed components are uniquely labelled with a Radio Frequency IDentification (RFID) tag and associated with one and other, in a "parent/child" process. Additionally, dynamic RFID portals were installed at each dock-door, which are capable of reading the hundreds of RFID tagged crates (both metal and plastic) as they enter the facility. This read information is then retrieved from the portals and transferred to the HUM intake system, confirming that the correct items arrive, and notify of the date, time and gate through which they enter. For Honda the key benefits of the solution include:

Increased stock intake speed - the dock-door portal reads hundreds of RFID tagged crates as they enter the depot and transfers the information to the HUM intake system within seconds.

Vehicle unloading association - in addition to the association of individual assets, each delivery crate can be linked to the vehicle from which it has been unloaded, ensuring a macro-level view of what was contained on each delivery.

Stock visibility - using RFID allows for overall visibility of every single asset in their supply chain. Accurate information on turnaround time and stock location is easily accessible, allowing for real-time data analysis.

Intake accuracy - automated intake ensures the correct part has arrived, in the correct container and at the correct time.

Automated reporting - a full history report of each delivery is automatically sent to the HUM intake system, demonstrating location and movements of all stock.

The results - The application of RFID by Honda of the UK Manufacturing Ltd within its suppliers' logistics operation represents the only use of this technology within the global automotive industry. Significantly, the solution enables the use of RFID as a means of creating accurate delivery intake in an environment where metal crates are prevalent and often within close proximity to one and other. Previously such an environment has been problematic when working with RFID transmitted signals - but bespoke designs from Intellident overcame this.

Since implementing the stock intake solution HUM can now track all assets throughout the supply chain. The integration of RFID has resulted in increased assurance that stock deliveries from suppliers are verified, quickly and accurately. HUM can now be confident that if there is ever a discrepancy on intake of stock at the depot they can highlight exactly where, when and what vehicle the delivery in question has originated. This increased asset visibility has meant a saving of a six figure sum to-date - and will continue to increase savings for future operations.

Project summary	
Tagged Metal Crates	+300,000
Tagged Plastic Crates	+200,000
Length of project	2 years
Major benefits	Increased stock visibility
	Better asset utilisation

"Implementing the Intellident stock intake solution has resulted in fast and accurate delivery receipt...a smooth process allowing for increased visibility of stock, with excellent cost savings"

Honda of the UK Manufacturing

The Total Supply Chain

The stock intake solution is part of a suite of application systems available from Intellident that are designed to improve operations at various points within the supply chain. Each module has been developed individually to provide maximum benefits at each stage, however, many customers are also able to benefit from combining multiple 'point solutions' within their supply chain.

To help understand where each point solution is capable of delivering benefit, we have developed the model to the right, which illustrates at each point within the supply chain the range of solutions that can be applied to increase efficiency and ultimately improve bottom-line performance.

Production

The initial point in the supply chain where products and components are made, packed or assembled ready for direct sale or further processing down the line.

Transit

The movement of product from Production to Distribution Centre. Typically product will be shipped in large quantities and potentially over long distances at this point.

Distribution Centre

The initial receipt and consolidation of product from the supplier. At this point bulk product is usually broken-down into smaller units suitable for picking and delivery.

Delivery

The movement of product in smaller and more defined orders from the Distribution Centre to the primary customer. This is usually the last movement of goods and is typically over much shorter distances, certainly within the same geography.

Primary customer

The recipient of the finished product from the primary supply chain. With fresh food this will be the retail outlet, where product is distributed direct to shelf. For the automotive supply chain this will be the manufacturing line.

Importantly the solutions can be adopted in many areas across this supply chain, but deliver very different benefits. In this case, stock intake is utilised both at Distribution Centre and Primary Customer, however, the return of assets to the DC will likely be different at each stage.

Production	Transit	Distribution Centre	Delivery	Primary customer
Product labelling	Security	Stock Intake	Proof of delivery	Stock Intake
Stock management	Space management	Stock management	Order fulfilment	Stock management
Order fulfilment		Pick	Asset pick-up	On-shelf availability
Pick		Dispatch	Product handling	Return management
Dispatch		Product handling	Space management	Product selection
Product handling		Space management		Waste returns
Space management		Waste returns		

The point solutions provided by Intellident form part of the Total Supply Chain offered by LINPAC Allibert. The model above highlights those solutions provided by Intellident (in red and green) and those complimentary products that are available from within the group (gray).

Offering a different and unique approach to asset and item tracking...

Through offering a range of point solutions that accurately control the movement of objects at unique stages within the supply chain, we can therefore effectively monitor the movement of the items across the entire supply chain - but not in the traditional sense of asset tracking. For example, if we know what has accurately been produced and dispatched from a supplier and what has been received at DC intake, we can build up a powerful set of information relating to the movement of items.

The benefits of each point solution are discussed in detail in the individual solution brochures, which are available in hard copy or PDF from the Intellident website. For more information please visit www.intellident.co.uk

Utilising the latest technologies

Although the solution has been designed to interface with a range of technologies, the power of Radio Frequency IDentification (RFID) can provide dramatic differences in the speed and accuracy of information processed across the supply chain. Some of the significant benefits that RFID can provide include:

Wireless identification of objects

The real power and versatility of stock intake can be maximised when utilising the extensive capabilities that RFID offers. As the name suggests, RFID uses invisible radio waves to communicate with 'intelligent labels' applied to items in order to determine what the item is, where it has come from and where it is going. This wireless method of communication means that the label does not need to be seen to be read, therefore allowing complete pallet stacks of items to be detected and integrated.

Ultra-fast read speeds

Unlike barcodes, hundreds of RFID labels can be read simultaneously and within a fraction of a second, which can provide significant benefits in terms of volume of throughput and capacity of a supply chain. Companies using RFID have demonstrated up to 400 per cent improvements in dispatch and intake time compared to those using barcode technologies.

Secure, mobile content

Each label contains a unique identification number. In addition, information can also be stored directly on the label itself, which allows intelligent systems to query the information directly and without the need to interface to other systems in the supply chain. For example, using nothing more than a hand-held scanner, a box or tray can be read and the operator will know immediately the details relating to the content.

Accuracy of information

Information pertinent to the item or asset is stored on the RFID label in digital format at the point of attachment or filling. This information is then retrieved at various points across the supply chain, again in digital format, and fed directly to a range of systems. Importantly, at no point does any human intervention prevent this secure data from being mis read or mis represented in any way - providing the ultimate in supply chain accuracy.

Packaging the tag

The enormous benefits that RFID can offer are only tangible if the label is capable of being read. In its raw form a label can be designed of sufficient robustness to last a single trip (on cardboard for example). Alternatively, the label can be packaged to a much more durable degree and attached to a returnable asset for the life of the container. Being part of the LINPAC Allibert group of companies, and having deployed over 8 million RFID-enabled returnable assets, gives Intellident unparalleled experience in this area.

What technology choice to make?

If you need to ask yourself which technology to purchase then you are either in the business of buying technology or you are not working with the right solution provider. The intricacies of the technology and how it is configured is largely irrelevant to the application and the benefits that can be derived from it. The important questions to ask should therefore be "does the technology conform with global industry standards?" and "does it deliver benefit in areas where I currently have problems?".

Global adoption and support

RFID is now being adopted around the world in a range of industries and, not surprisingly, has warranted the development of international standards to ensure global compliancy and consistency of data. For many industries EPCglobal is the most convenient and logical numbering system, which is an extension of the widely adopted and utilised EAN barcode system.

EPCglobal is coordinated by the GS1 organisation, and provides member organisations with the confidence that RFID tags can not only be read, but also understood by supply chain partners regardless of geography.

As part of our commitment to standards and industry adoption, Intellident are long-serving members of both GS1-UK and EPCglobal, allowing us to deliver 100% EPC-compliant solutions to our customers.

About Intellident

Intellident are Europe's leading provider of control systems based on the use of Radio Frequency IDentification (RFID) and barcode-technologies, with experience that extends across multiple vertical markets and solutions.

We specialise in supplying complete systems, which provide our customers with immediate benefit and rapid pay-back on their investment.

Together with our supply chain solutions, Intellident also provide a specialised barcode print, apply and verification package; a sophisticated document management solution, and are the UKs leading provider of RFID-based self-service solutions to public, academic and private library sectors.

Our philosophy is to offer our customers a complete end-to-end service, which is why we have dedicated and qualified staff capable of assisting in every step, from pre-sales advice all the way through to project management and after-sales support.

In October 2003, the company joined the LINPAC Allibert group, a global organisation with core business interests in the provision of returnable plastic packaging and material handling equipment to the retail and automotive sectors - a perfect fit for Intellident. LINPAC Allibert has an annual turnover of over €1.7 billion, manufacturers in all five continents, has over 11,000 employees and sells products in almost every single country in the world.

www.intellident.co.uk/intake