VIZINEX RFID
the way you imagined

RFID for Rental Asset Management:
Identifying a Partner

Introduction

More and more progressive rental firms are integrating RFID technology into their operations. From streamlined check-in/check-out processes to more accurate and timely inventory data and enhanced usage insights, RFID leads to significant benefits for equipment rental companies and their customers.

While you may be eager to get an RFID rental asset management system up and running, nothing can be put into place without the requisite software and hardware assets. The software must be designed to support your operations and to integrate with your existing infrastructure. This platform, however, is part of a greater whole. While software allows for RFID data to be normalized and visualized, RFID tags actually enable that data to be created. They're the front line in the fight for better management of and visibility into your rental operations, making them a linchpin of your success.

When it comes to a technology as sophisticated as RFID, cutting corners or bending quality standards in any one area could result in system-wide consequences that impact efficiency, effectiveness, and ultimately, ROI. These complications can be avoided with the help of an experienced RFID solution consultant. Once your high-level requirements have been established and your goals have been defined, it is time to begin looking for a partner that can help you successfully integrate RFID into your rental business in a careful and cost-effective manner.

What to Look For in an RFID Partner

Implementing an RFID system to improve your operations and enhance the integrity of your data is a complex task. There are a lot of factors that affect the performance of the system, and experience with RFID systems is critical to ensure that each of the performance elements are optimized for your unique circumstances. Rental asset management is a specific use case that is best suited to an experienced solution consultant, a specialized software platform and RFID tags designed with the equipment rental industry in mind.

In order to implement RFID with minimal risk and prevent complications down the line, assess potential RFID partners for the following key areas of expertise before entering into any engagement.

RFID Software & Technical Expertise

How you manage the data coming from your RFID tags and readers will largely depend upon the readiness of your IT infrastructure and the utility of the RFID software you select. Your RFID partner should be equipped to advise on how to optimally manage RFID data storage and flow. It is a fact that data moving from your RFID tags/readers to your database will consume network bandwidth. Your RFID service provider should assess how much capacity the network needs to handle the new RFID activity and whether or not your existing systems can support the load. If the RFID system is expected to tax the network, your partner can work with you to boost capacity or find new data paths. As for where that data resides, you may want data to be stored on your own server, or perhaps you would rather a cloud-based solution hosted by the software provider. Whatever your preference, make sure your RFID partner can deliver exactly what you need.

An experienced RFID partner will also help you configure your software in a way that works best for your application and organization. If there is value in handing off your RFID data to an existing ERP or order management system, be sure your RFID partner has the technical know-how to manage that integration. If there is no integration planned, then the RFID software package must have presentation and analysis capabilities, so that the gathered data can be put to good use. This software will have a set of standard screens for data visualization and editing, but you may want different ways of viewing the data. Be sure your software provider can facilitate your desired customization, either by doing it themselves or offering built-in features that enable you to create your own screens and reports.

RFID Tags, Equipment, and Setup

Integrating RFID into a rental asset management system is not as simple as affixing an off-the-shelf tag and installing a software platform. The technology must be configured to exacting specifications – physical dimensions, environmental tolerances, material properties, read ranges, use cases, etc. It is important that you work with a partner who offers the expertise and flexibility needed – both in service and equipment – to meet your exact requirements.

You can choose to purchase your RFID tags independently or through your RFID solution consultant. Either way, be sure to work with an RFID partner who can provide expert guidance in selecting the appropriate tag for your assets, environment and industry. Here are some points of consideration when selecting RFID tags and tagging your assets:

- The material of which assets are made affects the performance of the RFID tags mounted on them. Therefore, it is important to choose the right tag for each asset. A partner familiar with assets similar to yours will be able effectively match appropriate tags with your existing assets.

- Where the tag is mounted on the object will also affect how well it performs in the system. Tags that are mounted to receive the maximum amount of energy from the readers will perform best.

- Other factors in the environment affect RFID performance. RF signals can be affected by metal objects in the environment and can cause the system to perform in unexpected ways.

- How the assets are presented to the reader and how the reader is moved over the asset(s) affect the effectiveness of the data-gathering process. Operators need to be trained and disciplines must be enforced to ensure that data is gathered consistently and speedily.

In order to optimize your RFID system, your partner should engage with trusted suppliers to ensure that each RFID system component meets the same standards of excellence. Vizinex RFID has developed a growing portfolio of tags and attachment methods, which, when paired with a knowledgeable staff of RFID specialists, ensures your application is matched with the perfect solution. For example, **Vizinex RFID's Sentry Cable RFID tag** and cable tag holders have been a valuable asset to clients in the entertainment industry. With an integrated rope holder feature, cables of all shapes and sizes are able to be tagged quickly and easily. And with the cable tag holder's unique window feature, operators can see the asset's serial number and barcode allowing cables to be identified even when no RFID scanner is on hand.

Industry Experience

To be successful, your business processes must work hand-in-hand with your RFID system. Most software providers assume certain process flows within their products, but how closely they align with your existing workflows – and how flexible the software is in adapting to your needs – can vary greatly from software to software.

By teaming up with an RFID partner who has experience in rental applications, you gain the benefits of adopting a software that has been designed for compatibility with your current processes and/or best practices within your industry.

Vizinex RFID has worked closely with system integrators and end users in the rental assets market to develop tags and attachment methods that are focused on the needs of customers in this marketplace. Vizinex RFID has concentrated R&D efforts on developing tags that are specifically design to withstand rough handling, harsh environmental conditions and difficult RF environments, with metal and other materials in close range. On top of this, the tags are designed to remain attached – and last the life of the rental asset.

It is not uncommon for an RFID solution consultant to have a rental firm or two on their client list. Look for an RFID partner that has a long history of successful RFID integrations for rental asset management. The experience that comes with it may prove to shorten your own implementation timeline.

Summary

If you're looking to implement an RFID system, you probably know the benefits you have to gain in the process – as well as what's at stake. It's best to trust a proven, reliable RFID solution consultant with designing and deploying your RFID system. They'll know the in's and out's of the process, and how to help you generate maximum supply chain visibility (and ROI). Also, be thoughtful when selecting the RFID tags you'll be using. There are many RFID tags on the market, but they're not all the same. You need a tag that can withstand the test of time and consistently perform optimally within the bounds of your system. By selecting an experienced RFID solution consultant and service-focused tag supplier at the outset, you can ensure the reliability and longevity of your investment for years to come.

About Vizinex RFID

Vizinex RFID, headquartered in Allentown, PA, designs and manufactures RFID tags for diverse asset tracking applications from rugged environments in the oil industry, to medical devices requiring repeated sterilization, to long-range vehicle tracking. With prototyping and manufacturing located in the U.S., our time from concept to delivery is unmatched. Vizinex RFID maintains a tradition of innovation, superior functionality and outstanding customer support, allowing us to deliver RFID ... the way you imagined.

For more information about Vizinex RFID, contact us at sales@vizinexRFID.com or 215.529.9440.

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