

## Improve Control and Secure Operations with WAVE ID® Reader Technologies

Manufacturing has become extraordinarily complex as regulatory and compliance pressures increase, inventory discrepancies create havoc, automated processes require greater training, and costs continue to rise.

### BENEFITS

- Faster employee logon/logoff
- Authorizes and validates
- Automatically secures workstations
- Tracks inventory dispensing
- Ties employees to SKU production
- Verifies training attendance
- Automates payroll and links data to ERP
- Increases document security of multi-function printers
- IP67 compliant for protection in harsh environments



The bottom line is that when your product ships out the door, it has to be flawless, profitable, cost effective and compliant. How do you meet these rising expectations while still maintaining an efficient manufacturing operation?

rf IDEAS®' complete line of WAVE ID card readers support nearly every proximity and contactless smart card in use worldwide. Through the use of proximity and contactless readers from rf IDEAS, manufacturers have the potential to improve, control and secure operations, while also gaining a competitive advantage. With all these features and benefits, secure proximity and contactless technologies have become a necessity for today's industrial and logistics applications.

Trust begins here.™

rf IDEAS' WAVE ID Plus readers are an integral part of a solution that enables manufacturers to leverage existing employee credential systems to improve workflow processes, safety and security, achieve compliance, and significantly reduce cost.

**The Challenge:****Operator Identification and Authorization**

Employee identification is critical in today's manufacturing environment. However, the authentication and access process often requires either the manual keystroke entry of credentials or the swipe of a magnetic stripe card. The process can take several minutes as employees re-enter incorrect codes, forget passwords, or use cards with magnetic stripes that can erode over time, requiring multiple swipes.

With a single tap, these tasks can be turned from problematic and error-prone to straightforward and trouble-free with the simple implementation of a proximity or contactless reader. Using ID credentials with WAVE ID readers save thousands of employee hours per year and improve workflow efficiency by eliminating the necessity of entering passwords on a keypad or performing multiple swipes with worn-out magnetic stripe cards. rf IDEAS readers allow users to leverage their employee ID cards or mobile credentials, or any 125 kHz or 13.56 MHz tags or labels, for other forms of secure authentication and identification throughout the workplace.

**The Challenge:****Unauthorized Equipment Access**

Getting the job done often requires an interface to operate today's sophisticated, automated process control systems that encompass everything from mixing paint to starting a welder. How can you ensure that only trained, certified, authorized employees have access to these processes?

An rf IDEAS reader enables a secure and rapid logon to a Human Machine Interface (HMI) and/or Programmable Logic Controller (PLC). The employee's ID credential information is extracted, then an encrypted password is generated and securely transmitted to the HMI/ PLC to identify the employee and validate if the employee is current on training and certifications. Only then will it unlock the HMI/PLC. The reader interfaces with the HMI/PLC by interpreting the embedded combination of commands, username, and password that complete a more sophisticated log-in sequence. The data is sent to the HMI/PLC, which receives the information, checks it against a database, and authorizes the qualified employee to complete his or her task.

**The Challenge:****Locked and Secured Workstations When User Is Away**

Employees leaving an unlocked or unsecured workstation, even for only a few moments, increase the potential for security risks, privacy concerns, and could encourage unauthorized tampering with equipment. In addition, it could potentially compromise regulatory compliance.

Offering an easy way to eliminate security risks and privacy concerns, rf IDEAS presence detection devices automatically lock the workstation when users physically step away, avoiding annoying time-out settings. Once the user returns, the devices detect the user's presence and open up the log-in window so that the user only has to tap his or her card or mobile credential to log back in. The plug-and-play WAVE ID® Sonar secures the workstation without requiring additional software or user action. To add an even higher level of security, adding a WAVE ID reader will detect the employee's credential, read the ID, and unlock the workstation only for the authorized user.

**PAINT MANUFACTURER**

A large paint manufacturer found that they were incurring an average of 12 bad batches a week. The cause was traced to unauthorized employees operating the machines and costing the company nearly \$2.5 million annually. After installing WAVE ID readers, which identified authorized employees before unlocking the mixer, the number of bad batches decreased to less than one per week.



**The Challenge:****Industrial Tool Management**

Helping the MRO team keep track of tools, indirect materials, and other mobile assets is an ongoing challenge. The problem often incurs additional capital outlay to purchase lost or misplaced replacement tools and results in unexpected stock outages, lack of usage data and compromised access to supplies. All of which dramatically increases cost and reduces workplace efficiency when the right tool is not at hand at the right time.

rf IDEAS readers identify and authorize employees to use specific equipment at the point of issue, the tool crib. Users simply tap their ID card to gain access to the tool crib and remove the tool. Third party inventory management software can also automatically assign supply costs to user-defined cost centers, manage the supply chain, and extract data from the built-in reporting system, helping manufacturers save as much as 30% on indirect materials in just the first year.

**The Challenge:****Integration of SKUs**

Manufacturing SKUs requires a closely monitored, well-oiled quality process to ensure that the SKU is built within certain tolerances. Employees are critical to the process. Are they trained and certified? How often and why do they need to leave the workstation to fix a problem? Accurate data enables the quality team to track those resources and provide opportunities for improved efficiency.

rf IDEAS readers let you set authorizations for multiple layers of operator privileges, and validate that the employee's training and certifications are up to date and they are authorized to work on specific SKUs. This action lays the foundation for reports that define who is working on what machine, what changes they made and whether they were authorized, all while helping the quality team take appropriate action.

**The Challenge:****Tracking Attendance**

Manual sign-in or attendance-taking at training events is often hit-or-miss and reconciling attendance with the employees' personnel file is an exercise in frustration. As the cost of training continues to grow to cover skill gaps, update employees on company directives, or comply with regulatory mandates, how do you monitor and validate your employees' attendance?

When employees wearing their RFID-enabled ID credential enter the room, WAVE ID readers capture attendance as employees simply wave or tap the credential to the reader. The data can then be sent to a central repository where the training event, attendee roster and attendance data is stored. The data can also be linked to the organization's ERP system for trending, production planning, proof of compliance and much more.

**AIRCRAFT MANUFACTURER**

Using magnetic stripe readers, the quality team compiled employee data to look for inefficiencies in SKU assembly. However, a percentage of employee numbers were routinely reported as "bad" data, resulting in a 15% error rate. After upgrading to rf IDEAS WAVE ID readers, the team observed that in the first three weeks after deployment there were no errors in the new data. The team had been working on the wrong issues. Today, the quality team has addressed their top three issues, resulting in cost reduction, quality improvement and improved workflow efficiency.



**The Challenge:**  
Reconciling Payroll

Whether it is a manual paper-based timesheet or time-tracking software that allows employees to enter their hours, the process is still time-consuming, error-prone, and requires the intervention of the payroll department to reconcile the data. The entire process can take an enormous number of hours each week and cost many thousands of dollars per year.

WAVE ID readers allow the employee's existing payroll ID number to be securely written to his or her credential, identifying and matching the employee to the payroll system. With a simple wave or tap of the credential, the process simplifies the task of submitting an electronic timesheet to payroll, automates time and attendance, and ensures that employees are paid properly, based on current employee records. Automating time and attendance reduces the time it takes payroll to reconcile records, greatly reduces the opportunity for errors, and helps to retain the integrity of the payroll system.

**The Challenge:**  
Increasing Effectiveness of Multi-Function Printers

Multi-function printers (MFP) provide a convenient business tool for employee faxing, copying, scanning and printing, but also leave an opening for possible security breaches. Any sensitive information printed can potentially be viewed by anyone.

An MFP equipped with an rf IDEAS card reader allows employees to authorize secure printing through credential identification only. Employees send their documents to a specific MFP on the company network, either locally or off-site. Although the document is in queue, it will not print, scan, or fax until the employee reaches the MFP location. This not only improves security and confidentiality, it also reduces cost from print jobs sent and forgotten, and requires fewer printers.



## rf IDEAS Readers

TAKE IDENTIFICATION AND AUTHORIZATION  
TO A WHOLE NEW LEVEL

It begins with simplifying the log-in process; progresses to enabling higher levels of security and accountability; and brings it all together by helping you link employee data throughout the manufacturing process.

rf IDEAS readers are used in numerous applications and OEM solutions including attendance management, secure print release, mobile, system access, manufacturing, dispensing, kiosks, point-of-sale and computer logon.

PRODUCTS	
WAVE ID® Solo	Read-only identification & enrollment reader for proximity or contactless smart cards
WAVE ID® Plus	Dual-frequency proximity & contactless card reader for identification and enrollment
WAVE ID® Writer	Desktop device that writes to contactless cards for enabling various applications
WAVE ID® Playback	Interfaces contactless cards to existing applications by reading user data from smart card memory
WAVE ID® Sonar	Plug-and-play, hands-free auto locking presence detector
Wiegand Converter	Integrates standard Wiegand based reader technologies into other applications
Universal Enroll SDK	Allows developers to provide a single application capable of working with nearly any proximity, contactless, or mag-stripe card

For more information on how rf IDEAS can help you keep costs down, productivity up and security strong, visit [www.rfIDEAS.com](http://www.rfIDEAS.com)

### PARTNERS

rf IDEAS products are an integral part of numerous industry-specific applications. Through our carefully vetted global network of rf IDEAS partners, we ensure that customers have convenient access to secure solutions of proven quality, performance and value. Our partners have the technologies, expertise and support they need to offer the industry's most advanced identification and authentication capabilities for practically any application.

To find a partner or to join the rf IDEAS ENGAGE® Partner Program and incorporate rf IDEAS technologies into your solutions, visit <https://www.rfIDEAS.com/partners>



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