Manufacturing in the 21st century has become extraordinarily complex as regulatory and compliance pressures increase, inventory discrepancies create havoc, automated processes require greater training, and costs continue to rise.

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 a profitable, smooth-running operation?

RF IDeas’ complete line of pcProx® 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 industry and logistics applications.
SECURE ACCESS, IMPROVED WORKFLOW AND ACCURATE REPORTING

RF IDeas’ pcProx Plus readers are an integral part of a solution that enables manufacturers to leverage existing employee badge systems in order to improve workflow processes, improve 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, often the authentication and access process 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 badges 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 badges with RF IDeas 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 badges, 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 even 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 badge to log back in. Both the plug-and-play pcProx® Sonar and the pressure sensitive pcProx® Mat secure the workstation without requiring additional software or user action. To add an even higher level of security, adding an RF IDeas badge reader will detect the employee’s badge, read the ID, and will only unlock the workstation for the authorized user.

The Challenge: Industrial Tool Management

Helping the MRO team keep track of tools, indirect materials, and other mobile assets is an ongoing challenge faced on a daily basis. The problem often incurs additional capital outlay to purchase lost or misplaced replacement tools, unexpected stock-outs, lack of usage data, and compromises

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 RF IDeas pcProx® readers, which identified authorized employees before unlocking the mixer, the number of bad batches decreased to less than one per week.
scenario are the employee resources tied to that SKU. 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, validate that the employee is up to date on training and certification, and whether the employee is 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, whether they were authorized, and helps 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 badges enter the room, pcProx readers capture attendance as employees simply wave or tap the badge 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.

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 badge 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 reduces the number of printers required.
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

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
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<tbody>
<tr>
<td>pcProx®</td>
<td>Read-only identification &amp; enrollment reader for proximity or contactless cards</td>
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<tr>
<td>pcProx® Plus</td>
<td>Dual-frequency proximity &amp; contactless card reader for identification and enrollment</td>
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<tr>
<td>pcProx® Writer</td>
<td>Desktop device that writes to contactless cards for enabling various applications</td>
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<tr>
<td>pcProx® Playback</td>
<td>Interfaces contactless cards to existing applications by reading user data from smart card memory</td>
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<tr>
<td>pcProx® Sonar</td>
<td>Plug-and-play, hands-free auto locking presence detector</td>
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<td>pcProx® Mat</td>
<td>Pressure sensitive presence detecting mat for automated secure logon/log off access</td>
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<tr>
<td>Wiegand Converter</td>
<td>Integrates standard Wiegand based reader technologies into other applications</td>
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<tr>
<td>Universal Enroll SDK</td>
<td>Allows developers to provide a single application capable of working with nearly any proximity, contactless, or mag-stripe card</td>
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<tr>
<td>pcProx® Contactless SDK</td>
<td>Gives developer's applications the ability to read or write to any iCLASS/MIFARE contactless card</td>
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For more information on how RF IDeas can help you keep costs down, productivity up and security strong, visit www.RFIDeas.com

PARTNERS

The unsurpassed technical and service expertise of RF IDeas' ecosystem of partners enables a wide range of identification and access needs. RF IDeas products are an integral part of numerous industry-specific applications. Our partners deliver innovative solutions that help customers streamline workflow operations, make informed decisions, improve time-to-market and increase ROI.

To find a partner, visit www.RFIDeas.com/partners