

Case Study

Sichuan Airlines Cuts Inventory Time 80 percent with Xerafy Automated Inventory Solution

Sichuan Airlines deploys Xerafy solution to track 60,000 assets in SAP

Overview

Xerafy has implemented its Automated Inventory Solution to help Sichuan Airlines track and manage more than 60,000 items for warehouse management and on board the aircrafts.

Sichuan Airlines is a full-service operator with a fleet of more than 100 aircraft and 10,000 employees. The Chengdu, Sichuan-based company maintains hubs in Hangzhou, Sanya, Beijing, Xi'an, and Harbin.

Automated Inventory Solution

The airline selected Xerafy to help implement an Automated Inventory Solution, including its Metal Skin labels, RFID readers, software and integration with SAP's ERP system. Xerafy Metal Skin labels have been deployed to track stock in/out operations, item movement, and stock transfers in via its Inspection and Warehouse/Inventory Management departments. Using a combination of handheld RFID readers and fixed-position readers positioned at dock doors and other strategic locations, Sichuan Airlines staff are able to automatically record the movement of goods in and out of facilities, as items are put away or removed from shelves, and during daily, monthly and yearly inventory checks. The information gathered through the solution can then be used for big data analysis to help make better purchasing and inventory decisions.

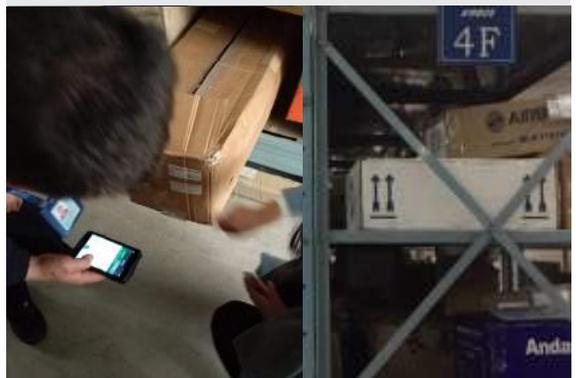
The Benefits

Since going live with the new system in November 2017, daily inventory counts, which used to take two employees up to eight hours to complete, now can be completed in only two to three hours by just one person. Fixed inventory counts took five to six employees as many as 80 days to complete. Now that process takes just two weeks.

The RFID system also makes it possible for Sichuan to identify the exact location of missing items. In addition, the solution has eliminated manual data entry associated with the inventory process, which has eliminated data entry errors and made the information accessible much more quickly.



Storage of high-value items at Sichuan Airlines Warehouse at Shuangliu International Airport © Xerafy



Daily inventory count using Xerafy Automated Inventory Solution © Xerafy

“The new RFID solution has made our inventory processes faster and more accurate,” said Mr. Duo, warehouse manager at Sichuan Airlines. “This solution has been quickly integrated with our ERP system, creating new levels of inventory visibility across our operations.”

Life Vests Tracking on Aircraft

The Automated Inventory Management solution is also being used for tracking life vests on Sichuan Airlines aircrafts. These critical safety items require regular inspection counts that often took up to four hours for a plane with 300 seats and life vests. Now, those inspections take just 10 minutes. Because of the time savings, Sichuan has been able to increase the number of inspections from one check every three months to a monthly inspection process that increases passenger safety.

In addition, the solution has helped reduce inventory costs by allowing the airline to replace the vests closer to their expiration date. In the past, Sichuan replaced the vests an average of three months prior to the expiration date. Now they can replace them within two weeks of the expiration date thanks to more frequent inspections.



“We expect to save 70 to 80 percent of inventory management time after the implementation,” said Mr. Duo, warehouse manager at Sichuan Airlines.



Compliance with SAE AS5678 Standard

Sichuan Airlines recognized that data collection on aircraft using RFID tags that comply with the SAE AS5678 standard could significantly reduce the time required to complete its inventory activities. Rugged RFID tags and labels can provide companies with a real-time view of inventory inside a warehouse, as well as traceability of items (including a complete electronic record of inventory use) as they are placed into service. Compliance with the AS5678 standard ensures the RFID tags can safely operate on an aircraft during flight, providing an accurate history of the location of each asset in service.

Real-time Data Capture

Maintenance, Repair and Operations (MRO) inventory management has become increasingly complex and time consuming in the airline industry. As MRO inventory volumes increase, manual tracking of equipment can lead to inaccuracies as well as consuming hours of costly labor. High-value items may be frequently lost or damaged, and a full inventory count can take up to three months. “Manual inventory management processes add enormous expense and time to airline operations,” said Dennis Khoo, CEO and founder of Xerafy. “Xerafy’s Automated Inventory Management solution has enabled Sichuan Airlines to track a wide variety of high-value assets across their facilities and aircrafts, generating real-time data that helps them reduce costs and make better inventory decisions.”