

Case Study



Delta Air Lines Atlanta, Georgia

The automated warehouse system is located at Delta Airlines largest hub at the Hartsfield-Jackson Atlanta International Airport, in Atlanta Georgia. The ASRS System supports Technical Operations (TechOps) Group and is a vital part of Maintenance Repair Operations (MRO) spare part support.



Systems Overview

The system stores aircraft spare parts and services all hangers within the Airport complex, as well as supporting inventory systems at other Delta Hubs allowing them to streamline their parts inventory.

Furthermore the system provides parts for MRO support on all active aircraft within the Hartsfield-Jackson airport complex, and other Delta Destinations. Thus, the ASRS system performance assists the TechOps group with minimizing delays due to unscheduled maintenance issues and maintaining a fleet wide Technical dispatch rate (TDR) of 98%.

The system was originally configured as a 6-Aisle MiniLoad ASRS system with a custom designed operator workstation, including a conveyor to transport the picked parts to a dispatch area. The operator stations were designed address operator ergonomics, and to reduce fatigue. Workstation operators store and retrieve parts from the miniload ASRS.

Retrieved parts are manually placed on a conveyor and are routed to a dispatch area, where the wait to be brought to their destination, by forklift or tugger vehicle.

The Miniload Storage and Retrieval Machine (SRM) movements are controlled by SRM Controller software with a SAP interface, which was custom developed by Dematic Shipping notices are downloaded from the SAP system host computer and forwarded to the controller software, which converts the orders to movement commands that are forwarded to the respective Miniload SRM.

The system has under gone many modifications since its original 1980 configuration. In 1989 four 750 lb. Mini Load aisles were added to the system, to increase storage and system capacity. The new ASRS configuration provided The 23,500 pan locations. Each pan has multiple compartments with adjustable dividers and a 500 lb. storage capacity.



In 2002 Dematic replaced the original six Mini-Load SRMs with six new 750 lb. SRMs. The crane replacement project was performed by the Dematic Modernizations Group. The upgrade was performed with minimal impact to the operation schedule, and without disruptions to the flight operations.

Summary

This mission-critical facility continues to operate 365 days per year, 24 hours per day and is covered by a skilled staff of Delta technicians supported by Dematic's engineering team.