

# System Report

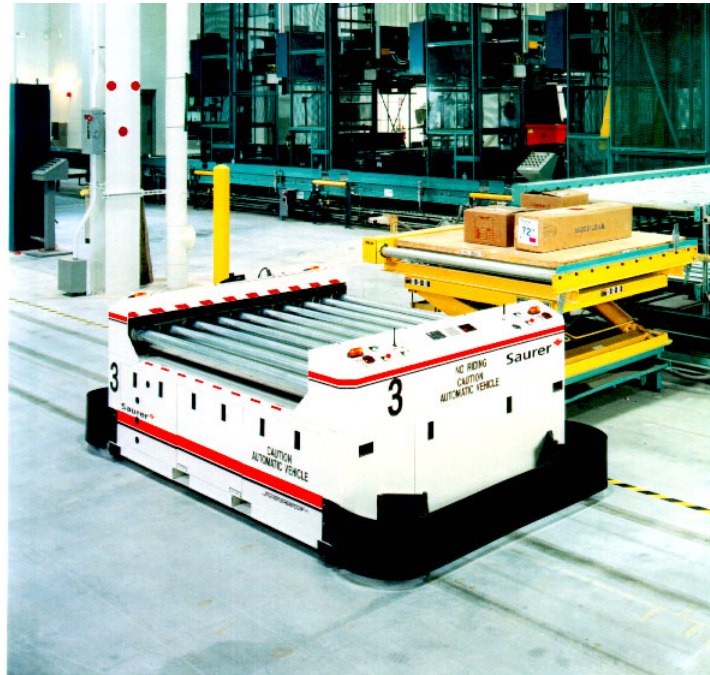
**Customer:** United Airlines  
**Location:** Indianapolis, IN  
**Equipment:** 3 Unitload AGVs

- 64" wide x 100" long
- 28" transfer height
- 4000 pound capacity

**Installed:** 1993  
**Guidance:** UltraFlex®, Optical  
**Battery:** 48 Volt, 104 AH

- NiCad
- Automatic charge

**Guidepath Length:** 1,000 Feet



## System Description

The Automated Guided Vehicle System for the United Airlines Maintenance Operation Center in Indianapolis, Indiana has three battery-powered Egemin Automation Model S603-C306 AGVs. Each vehicle has a powered roller mechanism that provides bidirectional transfers of slave pallets.

The automated pallet handling system provides the primary means for transporting slave pallets (full and empty) between Receiving, Bulk Distribution, the Unitload AS/RS and Shipping. The system is capable of moving loads of any size, up to 48" square by 72" high, and weighing up to 2,000 pounds. The loads will be transported on 56" x 56" slave pallets.

The system consists of three vehicles interfacing to 11 powered Pickup and Delivery (P&D) stations, in order to

transport the necessary material. The P&D stations have a unique over and under design with two layers of conveyors and a lift bed at each end. This allows the slave pallet to return to the AGV stand underneath subsequent product. Operation of the facility continues 24 hours a day, 365 days a year.

Vehicles receive job assignments from the External Control System (ECS) over a Radio Frequency (RF) link. Jobs are given to the ECS from the Storage and Supply (SAS) host computer over an Ethernet link.

The AGV is powered by a 104 Amp Hour, 48 volt, NiCad battery. An automatic charge system on board allows the AGV to automatically interface with the external battery charger when necessary.

## Special Features

- Host controlled
- Front and rear wheel braking
- 11 powered over/under P&D stations
- Local handshake at P&D stations

