



## AIR FRANCE CARGO AT CHARLES DE GAULLE AIRPORT

**Airport:** Charles de Gaulle (CDG) | **Project Place:** Paris | **Project Country:** France | **System Description:** ULD Handling System | **Start Date:** 2018, December | **Commissioning Date:** 2020, February

SACO has supplied two TOPs to Air France Cargo (AFC). A TOP is a ULD handling system used to handle both inbound and outbound cargo pallets. The pallets can be placed or removed from the system using trucks, trolleys or Automated Guided Vehicles (AGV).

Operating in 4 different modes (Fully Automatic, Semi-Automatic, Manual and Maintenance Mode). Each TOP is able to communicate with the Warehouse Management System (WMS), Warehouse Control System (WCS), the AGV management system and AGV's to push or pull the required information in order to identify the ULD/pallets and their destinations. The trolley drivers are able to interrupt the system at any time to place their pallets on the system manually using control panels installed along the TOP's.

Moreover, the TOP's are equipped with a contour check system that detects overhang and can differentiate between acceptable and non-acceptable pallet formats and overhang indicating to the operator whether a pallet is accepted or rejected. The SCADA is displayed on a 19" screen making the system very straight forward and user friendly.



### The two TOPs consists of the following equipment:

- 2x Truck Dock 20ft, hydraulic scissor lift (2x) with power pack, powered roller deck 10ft NEP (2x) with ULD stops, side Shift
- 16x Motor Powered Right Angle Deck
- 2x Motor Powered Right Angle Deck with integrated weighing system
- 34x Motor powered Roller Deck
- 18x Motor powered Roller Deck, interface decks
- Walkway between "cantons"
- 2x Control room
- Heavy duty protection barriers with rollers
- Handrails, fencing, stairs,
- Electrical Control System (PLC based) including:MCC and operator desk, operator panels.