Increase cargo loading efficiency with RFID

RFID (Radio Frequency Identification) is a tiny electro-magnetic tag attached to items such as books and cargo. When RFID tag passes through High Frequency (HF) or Ultra High Frequency (UHF), the movement of the items can be kept tracked automatically.

A local airfreight operator is facing the problem of under utilization of their cargo loading bay. Truck drivers have to wait for long time before the cargo can be pulled out to the loading bay for collection. Frequent conflict and confusion arises over the limited parking slot during peak hours. NEC helps these problems with the innovative use of RFID technology.

Workflow

- All the regular incoming trucks have RFID tag attached to their windshield. Their truck plate number, company and driver information have already pre-registered in the airfreight terminal computer system.
- When the truck driver is arriving at the airfreight terminal, he dials into the IVRS (Interactive Voice Response System) to report his arrival, truck number and bill of loading number.
- In the mean time, the corresponding cargo will be pull out from the warehouse
- When the driver arrives at the entrance, he will be informed by a large LED display of the number of parking slot assigned to him.
- The pallet of cargo is ready for collection when the driver arrives at the assigned parking slot.
- A large UHF antenna at the entrance and loading bay will confirm and make sure the right truck park at the correct parking slot.
The airfreight terminal enjoys the following benefits

- Fully utilized the loading bay area and limited parking slots
- Smooth logistic flow of cargo loading and pick up between the warehouse and the loading bay
- NO more long queue of track at the entrance and inside the loading bay area
- NO more conflict, confusion and argue for parking slots amongst drivers during peak hours
- Quick turnaround time means increase capacity for more business

Similar RFID application can be used for warehouse management, cargo truck fleet control, self-services parking …..