

Application Case Study

Customer: Leading Retail Distributor
 Location: Coventry, UK
 Application: Loading Bay



Overview

The particular leading retail distributor chose the Salvo Smart Key Manager option to deal with Third Party Drivers. In the past, they would take the drivers' keys and hook them on to a local key board. This, however, was subject to abuse, with keys not being located on the right bays, or keys handed back before completion of loading.

The particular system allows the company to trap the drivers' keys using the wire loop attached to the Smart Key. More importantly, every operation is monitored by the SKM allowing to see who made each transaction.

The Salvo Smart Key Manager comprises of:

- A lock that controls the movement of articulated coupled or uncoupled trailers - Salvo Susie or SGL
- An interface to control third party driver keys - Smart Key Manager (SKM)
- A lock that controls the opening of the loading bay door via the Salvo Susie or SKM - Salvo Control Panel (SCP)
- Data Analysis is also collated from the door operation

Scenario 1 - Company driver/shunter (Artic Vehicle)

- The driver/shunter parks at the correct loading bay
- He then removes Susie Lock from SCP, which is typically located by the side of the bay
- The driver removes the emergency airline and fits Susie lock over the airline, which in turn releases the trapped key



- Afterwards, the driver traps this key in SCP, and the internal amber light illuminates signifying that it is safe to load/offload

- The loader opens the door and loads/offloads the vehicle
- When loading is finished, the door is closed allowing the key to be removed from SCP by pushing and holding the release button and turning the key
- The driver then traps the key in Susie lock and releases the emergency brake line by removing Susie lock and re-attaching the brake line
- Susie lock is taken back to the SCP and the driver can now leave the site



Scenario 2 - Third Party Drivers (Artic & Rigid Vehicles)

- Third party drivers park on the correct loading bay, directed by Gatehouse staff
- The driver then walks to the drivers reception, hands ignition keys over to SKM Warehouse Clerk and communicates the bay number where he has parked on.
- The SKM Warehouse Clerk presents personal RFID (Radio Frequency Identification Swipe Card) in front of central unit scanner
- He then types the bay number that the driver has parked on and an "available" slot is unlocked
- The SKM Warehouse Clerk releases key & loop holder from "available" slot and attaches the drivers keys
- The key holder is then presented in front of central unit scanner to illuminate correct key position
- The SKM Warehouse Clerk once again presents their personal RFID in front of central unit scanner to acknowledge that the drivers keys have been added

- The key can then be inserted and turned in the "Loading" slot position
- The SKM notifies SCP that key & loop holder is trapped in "loading" slot, the beacon illuminates and the door can be opened
- When the door is opened, LED illuminates on SKM
- The loader opens the door, and as a result SCP notifies SKM that the key holder cannot be released from "loading" slot
- The loading/unloading can now take place
- When loading/unloading is over, the loader closes the door, and SCP notifies SKM that the key holder can be released from 'loading' slot
- The SKM Warehouse Clerk presents their personal RFID in front of central unit scanner and enters the bay number unlocking the "loading slot"
- The key holder can now be released
- SKM notifies SCP and door controls that the key holder is released from loading slot, and thus the door cannot be opened
- The SKM Warehouse Clerk detaches ignition key from key holder and hands ignition key over to third party driver who can then leave the loading bay
- The SKM Warehouse Clerk then presents key and loop holder in front of central unit scanner
- The SKM Warehouse Clerk presents their personal RFID in front of central unit scanner unlocking "available" slot
- The SKM Warehouse Clerk traps key & loop holder in "available" slot ready for the next vehicle

