

Application Case Study

Customer: Parcel Carrier
 Location: Newark, UK
 Application: Loading Bay



Overview

The particular parcel carrier suffered a fatality on a site in Brierley Hill, West Midlands in 2017, where an operative was crushed between the loading bay and incumbent vehicle. As a result of this, a safety team was set up to identify a system which catered for their varying fleet of vehicles.

Castell surveyed several sites, after which proposals were submitted for two pilot sites. Both Coventry & Newark were selected for the trial as one uses doors and the other has guard chains on their dock bays. 7 bays were installed at Coventry (doors) and 25 at Newark (chains).

On both sites the same solutions were offered; Susie locks, or Swap Body Locks or handing in driver keys. The keys from the Susie lock, Swap Body Lock or driver keys are then attached to the key on the exchange box, and a door/chain barrier key is released allowing the opening of the relevant bay. Process is then reversed to ensure the bay is available for the next vehicle.

Rigid Vehicle

In the case of rigid vehicles (7.5t and vans), the driver hands their ignition key over to the clerk, supervisor

Articulated Trailer

- The vehicle/ trailer reverses onto the allocated loading bay on green traffic light
- The driver removes the emergency airline and fits Susie lock over the airline, which in turn releases the trapped key



Swap Body Box Vehicle

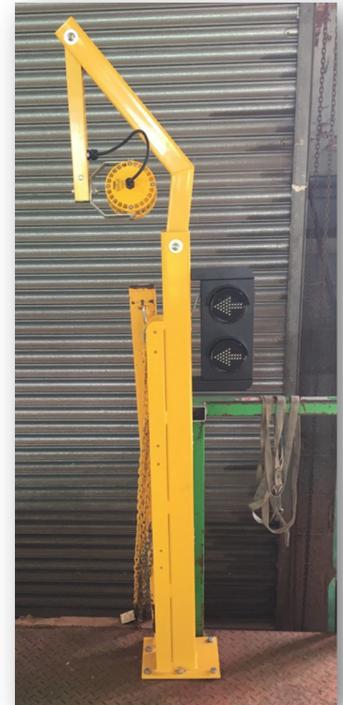
- The Swap Body Lock is attached to the demount/ swap body box on the coupling point
- The round handle is turned to engage the lock and the key is removed to lock it in place



The Process

When the relevant lock (Susie or Swap Body Lock) has been attached to the vehicle by the shunter/driver, the trapped key (yellow) is released and handed over to the traffic clerk, supervisor or manager.

- The yellow key (or driver key) is affixed to a wire loop which is permanently attached to the red key in the key exchange box
- When the red key is operated, it will release the blue key which can then be used to open the corresponding bay
- The blue key will be inserted into the Castell lock on door or gate to release chain, enabling the door or chain barrier to be opened.
- When the key is used to open the corresponding door/barrier the traffic lights will change from green to red (externally) and from red to green (internally).
- The vehicle can now be loaded/offloaded



- The power to the dock loading light is also initiated
- The dock/bay lighting is activated once the key is entered and turned in the Castell lock - there is an on/off switch should the light not be required (daylight hours)
- When loading or unloading is complete, the door can be closed and locked
- The entire process is reversed to return all keys to original positions allowing the safe departure of the vehicle/ swap body box.