

Security seal or Plastic Waste?

By Donald Miller of Unisto

The end-to-end management of plastic and metal seals is becoming more and more important as the pressure on firms to reduce plastic waste in the environment continues. Whilst the incidence of theft from loaded vehicles shows no signs of abating and road transport companies must take security measures to protect the goods they are carrying, they must also be mindful that the seals used are often fully traceable back to them, so a discarded used security seal could cost money in fines and bad PR for littering.

As part of our ISO17712 responsibilities quality security seal manufacturers must be able to provide information to HMR&C or other law enforcement agencies to which company a seal has been supplied, so it is more important than ever drivers and security and transport managers take responsibility for disposing of spent seals in a responsible manner. Apart from anything else this good environmental housekeeping is also good security discipline, preventing a used seal becoming a test bed for future tampering. Unisto has always advised customers to dispose of removed seals securely and now emphasising the environmental benefit too.

So which seals are the most environmentally friendly to use?

Unisto offers a reusable seal solution in C2K and Manta, that are fit and forget solutions that provide up to 35,000 sealing events per unit and are simple to administer, removing the need to regularly replenish single use seals and securely store, distribute and control them internally.

At London Heathrow Airport there has been a drive to reduce seal litter and C2K and Manta electronic reusable seals are now commonly found on most vehicles regularly going airside. The seal's LED lit display has also helped to be able to read the digital display in all light conditions in this 24/7 365 environment.

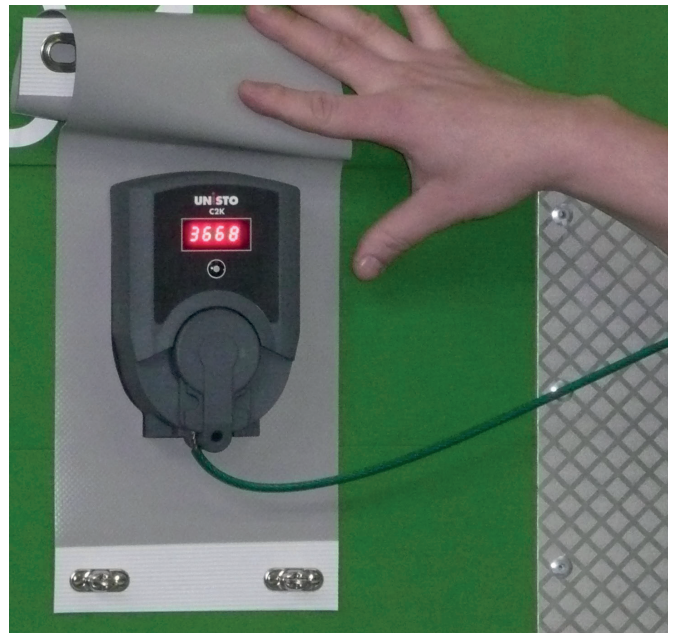
For single use seals a one-piece type truck seals such as Integer or Unilock both manufactured in polypropylene can be easily recycled together with other waste plastics. Metal strip seals can also be recycled with metal waste items.

Higher security tamper evident seals are normally manufactured from a variety of material with different melting points or including locking mechanisms of steel, these compound products are generally more challenging to recycle however the trade-off is greater security and often, ease or flexibility of use.

To seal or not to seal

So could one avoid the use of a security seal altogether? What is the value of implementing draconian security measures if the journey is a single delivery from depot to delivery point without stopping? Not fitting a seal could give the impression that the vehicle is empty or carrying low value goods. However if your vehicle is branded and if the route takes your driver through high risk areas you could be exposed to the risk of opportunist villains opening trailer or van doors and removing items that can be easily carried-off when the vehicle is stationary at traffic lights or in slow moving traffic. In this situation, you should at the very least secure the doors with a key padlock or barrier seal, a plastic seal alone can be easily broken off.

As we know padlocks on vehicles bring their own issues, the first of which is key control. If drivers carry the keys, then padlocks should be controlled with tamper evident plastic seals which provide



C2K seal



Unisto Integer Seal

a clear indication if there has been any attempt to open the trailer doors.

Barrier seals and devices:

Bolt and cable seals are the most common varieties of barrier seal.

Cable seals are most often manufactured with bodies in aluminium or plastic, with cable and internal locks of steel. If steel and aluminium combined are used, waste product can be recycled with your metals recycling. A plastic body is not so simple to recycle as the plastic will burn-off well before the metal melts but the products of burning plastics can be noxious. Plastic coated bolt seals are in this category and generally should not be put in your metals recycling.

Although steel cables may be coated with plastic, it is accepted that uncoated cables provide the best tamper evidence, they splay when cut making it impossible to rethread them into the mechanism, so the

most environmentally friendly is also the most secure.

Seal Management

It is not enough to simply fit seals and hope for the best. Security seals are only as good as the protocols used to manage them and the most robust security seals poorly managed do little but give a false sense of security. When something goes wrong most of the blame is laid on the seal rather than the poor management processes that caused it to fail.

Organisations should develop and maintain procedures for a wide range of processes including procurement, secure storage, distribution to users, correct application, inspection, record keeping and seal removal, as well as the management and final environmentally friendly disposal of used "dead" seals. The importance of correct training in all these stages cannot be overstated.

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