

Synervention - solid state trailer curtain

curtain sided trailer curtain replaced with a solid state system fixed, top and bottom, to the trailer at all times.

the challenge

Opening of curtain sided trailers come with inherent risk for the haulier from slips and strains pulling the curtain to the difficulties experienced in high winds when the curtain, with the tensioning pole attached to the end, can become a sail with many metal components along its length. Added to this the ease of corruption this is a challenge that needs to be resolved.

Although it is difficult to assess the quantity of injuries incurred from operating the current system it is, from anecdotal evidence gathered, a major issue for the health and safety of drivers in the haulage industry. From a security point of view, which adds stress to the driver when thinking about where to park etc. NaVCIS have published figures where year on year theft from curtain sided trailers presents the single biggest risk with overall thefts from haulage vehicles being nearly £200m per annum in the UK alone.

Our patented OMNILOK system means that the curtain is replaced with a solid state system that would be fixed, top and bottom, to the trailer at all times. For the driver the risk of the curtain billowing in high winds is removed. The system will be opened by one single pushing motion, not many tugs, and will be secured using one single locking point not many latches applied currently.

This will be further enhanced in the future with an automated system operated from the cab further protecting the driver when loading and unloading by remaining in the cab.

the innovation

Our Patented OMNILOK system is a set of interlocking vertical 'fins' that will create the trailer side. As these 'fins' will be seen as solid they will create a trailer that has all the accessibility and flexibility of a curtain sided trailer but with the security of a rigid trailer.

The interlock and fin system together means that when closed the whole system is completely encased and cannot be slashed or prised open as is currently the situation that occurs with curtain sided trailers.

When unlocked the OMNILOK system offers a one push opening mechanism with all the fins working in an interlocked fashion to all pivot and stack against one another on opening.

The fin system is designed to run as a cassette meaning that should damage occur on one or more of the fins these can be taken out and quickly replaced. In terms of load accessibility on opening, the system meets or exceeds that currently in place with the curtain side.

how it was implemented

At this time we are still at the prototyping stage but the innovation has been granted an European unitary patent covering 19 countries in all.

We have full engineering design of the system in-line with the patent granted and the design will ensure that full trailer fit out and testing will comply with EN12642-XL standards.

Although still an innovation, the positive feedback from many quarters received to date has been great and proven that when we get to market implementing the system will not be difficult.

We have hauliers, fleet managers and trailer manufacturers all interested in working with us on taking this product to market and with further endorsements received from the insurance markets and underwriters we have spoken to to date we do believe we have a truly gamechanging innovation for haulage. This is both from a health & safety and load security viewpoint which can also be a major cause of stress on the driver which can impact and impair their ability to work safely in a number of ways.

Further down the line, we will be implementing the system on shipping containers given the conversations we have had with drivers and fleet owners around the difficulties working safely on these load vessels. We do believe this will be relatively straightforward to implement following the same design strategy

Result

We are still at the point of prototype build but we have all the engineering appraisals, feasibility studies and drawings in place to know that when the prototype build happens it will be minor alterations that will have to be made as we fully prove out the concept and design build.

conclusion

This patented OMNIOK system will truly change the haulage of goods using curtain sides, a system that has remained largely unchanged for 50 years or more.

There appears to have been a status quo for over 50 years where the drivers have to operate the curtain sides despite the risks and dangers involved as there has been no viable alternatives available until now and their employers have had to take into account the risks to both person and load when using the curtains side trailers. This can change with OMNIOK system.

LINK: pete@ddriggs.com