



A typical view inside the cab.

Four generations of systems from ITS

The International Terminal Systems' (ITS) team have over 15 years experience in crane to load/ vehicle alignment systems. From the early days installing basic Trailer Positioning Systems ITS have developed and implemented 4 generations of system from the ATPS for multi-trailer operation, to STRAPS for straddle and truck operations, and STRAPS II with an on board vehicle display. Now ITS have developed what we believe to be the most cost effective flexible

solution in straddle carrier and truck alignment systems, LoadVIEW.

The ITS LoadVIEW system allows the driver of a truck, trailer train or Straddle Carrier to view the vehicle in relation to the stopping position. In basic terms it is a computer augmented birds eye view. Unlike most systems, with LoadView the driver gets a real time view of the container or vehicle in relation to the stopping position. Most existing systems use a light or series of lights to show the driver the stopping point making it difficult to judge the exact position. LoadVIEW system allows the driver to adjust his speed to suit as he is able to see the exact distance to the stopping point. With LoadVIEW he doesn't have to look sideways to the crane, he can look forward with obvious safety benefits

LoadVIEW is rapid to implement and very cost effective, it does not require an external operator, and can be configured to load and unload any combination of containers, 20', 40', 45', twin 20s. The system can even align 2 empty or loaded chassis side by side simultaneously for a Tandem lift. The system can also position empty chassis with twistlocks. The LoadVIEW system also does this without additional hardware or an operator or complex, expensive software.

The system works by positioning cameras on the crane pointed at the loading area both under the crane and in the back reach. Target markers are overlaid on the image and the composite image transmitted to the vehicle driver. The driver has a wireless display and selector enabling him to display the images from the appropriate crane. With the versatility of this new system, not surprisingly ITS have protected it by filing a

patent application.

One question often asked about these type of systems is what is the accuracy. With the ITS LoadVIEW system the answer is literally – it is as accurate as the accuracy to which the driver can stop his vehicle.

In the load and discharge operation of a vessel it is most efficient to have an empty chassis waiting to receive a container or a container ready to be lifted on the vessel. To achieve this systems are used to place the container or vehicle directly in line with the spreader removing the need for crane gantry motion or vehicle shuffling as the crane waits. A terminal that can save 10 seconds per move on ship load or discharge could move from 30 moves per hour to nearly 33 moves per hour and could save over 8% in equipment running time and consequent fuel, labour, and maintenance savings. The new LoadVIEW system from ITS can help achieve this.

pem

Port Engineering Management

Volume 23 Issue 3

Summer 2005