



Vision is our Mission

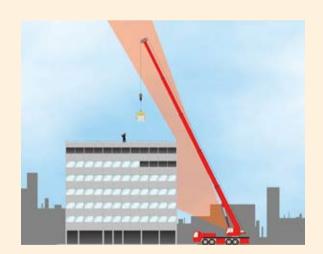




High eyes on Mobile hydraulic telescopic cranes

The modern telescopic crane is a familiar sight on many building and industrial sites. It is able to lift loads ranging from a light concrete pouring bucket to complete prefabricated sections of bridges, weighing up to 1500 tons. The crane operator in the cabin does not always have optimal visibility on the crane's hook and or the load, especially in situations where he has to lift the load over large buildings, machines

or installations. Fortunately Orlaco is offering a solution and some relief to the operator with their eyes in the sky. The load view camera fitted to the tip of the telescopic boom, is looking straight downwards on top of the hook. On the colour monitor in the crane cab, the operator has at all times, a crystal clear image of the position of the hook. If necessary he can zoom in on the hook for a more detailed image. It is all possible!





Research confirms the benefits

Tests done on a construction site have proven that cranes performing "blind" lifting operations with the use of an Orlaco camera system, work 21% faster than cranes operating without the system. Field experience also shows that when a camera system is used, the load can be positioned much more accurately.

Visibility of the winch

On the larger types of mobile telescopic cranes with super lift counter weights or double hooks, direct vision on all the winches from the cabin is mostly limited. The monitor used for load view purposes can therefore simultaneously be used for observing the winch. The operator is able to switch easily from camera to camera by just pressing a button on the monitor. With the use of the winch view camera, the operator is able to see if the wire rope is spooling correctly and neatly over the cable drum and that the wire rope is not being damaged in any way. When the operator sees that the cable drum is rotating, he knows immediately that a load is moving. The costs saved in preventing a single un-repairable, damage to the wire rope is often enough to cover the initial investment made on the complete camera-monitor system.





Total safety

The camera not only enables the crane operator to work easier and more efficiently, it also contributes to the jobsite safety. Can you imagine trying to drive a car where the windows have been covered up and you cannot see anything while you receive instructions on how to drive from another person through a Porto phone? With the use of an Orlaco camera system, the crane operator is not only dependent

on instructions from the banksman. If for example the load gets unbalanced whilst being lifted, the operator sees this immediately and can take instant action. The Orlaco vision system also enables the operator to verify the instructions he receives from the banksman. A simple misunderstanding on what is left or right can easily be made. Operators can work without doubt much safer and more efficiently with an Orlaco camera system.



Help when driving: rear view, front view and navigation

These days, most telescopic cranes are operated by a single operator. He drives the crane to the jobsite, erects it and then starts operating it. Telescopic cranes up to 100 tons with sometimes an extra trailer hooked up behind it are driven with counterweight, lifting tackle, additional jib sections and support plates. Driving such a crane into a congested construction site or in busy inner city area is a very difficult task. Orlaco is offering the operator the much-needed help! A camera is positioned on the rear end of the upper carriage (wireless) or alternatively on the under carriage, which enables the operator to see accurately who or what is behind the crane. A front view camera positioned on the right hand side of the cabin helps the operator when he is making a turn to the right and thus preventing the crane from accidentally hitting traffic signs. Finally the system can be extended with a navigation system for travelling as fast as possible from one job to another. All of these three functions can be combined and viewed on one single monitor. The system switches automatically between the various functions (rear, front and navigation) when the switch wires are connected to the reversing lights and direction indicator.

The advantages of Orlaco crane viewing systems:

- Optimal visibility of the load and work area when lifting over obstacles.
- Improved visibility of the hook and the area around it.
- Increased safety.
- Fewer chances of the crane or the area around it being damaged whilst manoeuvring the load.
- Work is carried out more efficiently which leads to an improved service offered by the crane rental company to their customers.
- The operator is less dependent on the help from others.
- Excellent vision of the winches prevents damages to the lifting cable.
- The rear and front view cameras make easy and safe manoeuvring even on small and narrow construction sites possible.
- The navigation system ensures excellent road support.



Orlaco keeps a sharp eye on technology:

- The camera is mounted to an oil-damped pendulum which guarantees a perpendicular position of the camera at all times and excludes unnecessary swaying of the camera by the wind.
- The auto focus colour zoom camera has a robust stainless steel encasing and is IP69 waterproof.
- The complete camera unit is installed by mounting a stainless steel tube to the boom tip and connecting the camera's power lead to the 24V power outlet present on modern telescopic cranes.
- A video transmitter connected to the zoom camera and a video receiver on top of the cabin, ensure a perfect wireless connection between the zoom camera and the monitor. With the use of a wireless system, there are no risks of cable breakage and the system is maintenance free.
- The camera system can be fitted to the main boom as well as to any type of jib.
- The crane operator has a user-friendly remote control in his cab to zoom in and out. Furthermore, he can activate the night vision and brightness mode from the cab with the remote control.
- The camera has better visibility than the human eye during dusk and dawn due to the 0-lux night vision mode
- When the brightness function is activated, dark, shadowed work areas become clearly visible.





- Monitors are available in the sizes 7" and 10".

Orlaco, a smart choice!

Orlaco specialises in developing and manufacturing camera-monitor solutions to solve visibility problems around various types of machines ranging from trucks and ships to tower cranes and forklift trucks. Our camera-monitor systems support the craftsmanship of machine operators and make operating conditions easier and less stressful. Orlaco is certified according to ISO 9001-2000 and offers customers excellent service with extra attention to quality. An Orlaco viewing system can make the operation of a crane easier, more efficient, and most of all, safer. In many respects this is an investment, which can pay itself back in short time. As service to our customers is our top priority, the Orlaco service and support department is ready to reply to any of your requests at any time!

You and your employees deserve working with a professional system.

For further detailed information regarding viewing systems please refer to **www.orlaco.com**

An Orlaco solution always repays itself!





