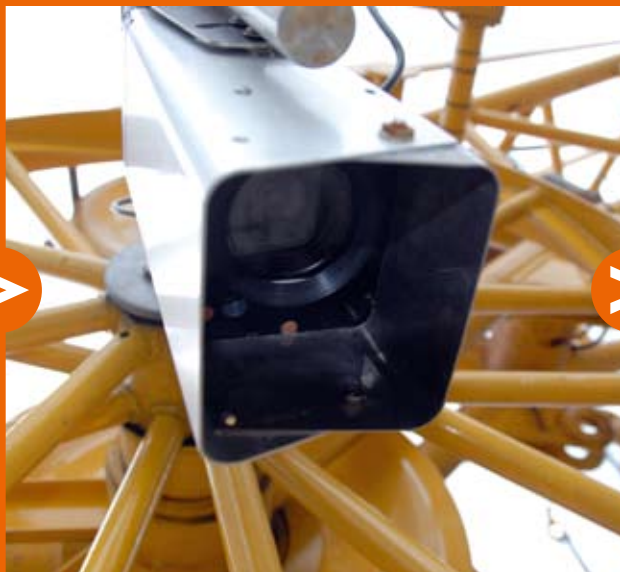


# Eyes in the sky

## Crawler crane



Vision is  
our Mission



### High eyes on crawler cranes

The crawler crane can be used for various purposes; on construction sites to erect heavy pre-cast concrete elements, pile foundation poles, vibrate dam walls or erecting windmills. Wherever there is a need for large heavy loads to be lifted to high or elevated places or at an extremely large working radius, the crawler crane is always ready for use. The crawler crane operator is often as multifunctional as his crane, however when he sits in his low positioned cabin, he often does not have any visibility of his crane hook and the area around it. Despite the fact that he is assisted by a banksman

giving him instructions through a Porto phone, he just has two eyes to view all major parts of his crane like the crane hook, the winches and the area round the crane. Orloco is offering him a real solution and some relief with their eyes high in the sky. The Orloco load view camera is fitted on the tip of the boom, and is looking vertically downwards on top of the hook. On a monitor in the cab the operator has at all times a crystal clear image of the position of the hook and if necessary 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" operations with the use of an Orloco 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 ensures extra safety

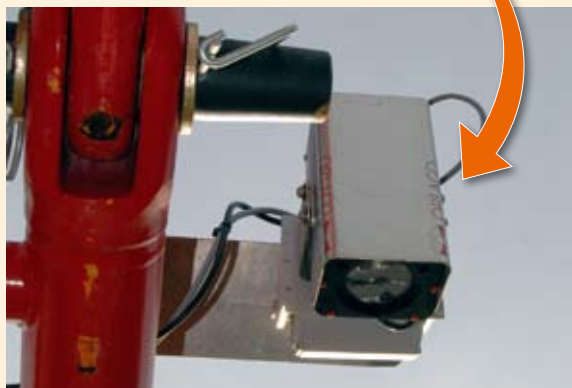
A winch view camera can also be connected to the monitor. The operator is able to switch easily from camera to camera by just pressing a button on the monitor. With the use of the winch view camera, the operator is able to check if the wire rope is spooling correctly and neatly over the cable drum and that the wire rope is not being damaged in any way. When the crane operator sees that the cable drum is rotating, he knows immediately that a load is moving. The costs saved in preventing one un-repairable damaged wire rope are often enough to cover the complete initial investment made in a camera-monitor system.



### Total safety

The camera not only enables the operator to work easier and more efficiently, it also contributes to additional 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 via a Porto phone? Fortunately, with the use of an Orlaco camera system, the operator is far less dependent on instructions from the banksman. If for example the load gets out of balance whilst being lifted, the operator would see this immediately and is able to take instant action. The viewing

system also enables the operator to verify the instructions he receives. A simple misunderstanding on what is left or right can be easily made, especially if the crane operator and banksman are an inexperienced team. In short it can be concluded that crane operators are able to work safer and more efficiently with an Orlaco camera system.



### Maximum freedom of movement

Especially on a luffing jib crawler cranes, cameras are also fitted to the middle section of the mast. To point the camera on the crane hook it is mounted on a pan & tilt unit, which is manoeuvred by the operator left, right, up and down with a joystick in the crane cab. The advantage of this system is that the operator has better visibility of the height of the hook. The rear view camera has proven to be an excellent tool in helping the crane operator to safely reverse the crane. The crane operator can also use the camera to observe if the counterweight of the crane is not hitting objects on the jobsite when slewing the crane.

### The advantages of Orlaco crane vision systems:

- Optimal visibility of the load when lifting behind and above obstacles.
- More detailed visibility of the hook and the area around it.
- Positive contribution to safety during lifting operations.
- Fewer chances of the crane or the area around it being damaged whilst manoeuvring the load.
- Less need for verbal communication, possibly resulting in an increase in the efficiency of the crane.
- The operator is less dependent on the help of others.
- Fewer chances of irreparable damages occurring to the wire rope by the winch view camera.



### 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.
- By activating the brightness mode of the zoom camera, shadowed work areas become clearly visible.
- The camera has better visibility than the human eye during dusk and dawn due to the 0-lux night vision mode.
- The auto focus colour zoom camera has a robust stainless steel encasing and is IP69 waterproof.
- With buttons on the monitor the crane operator can zoom in and out, activate the brightness and put the night vision mode on and off.
- If necessary, a joystick can be connected to the monitor for zooming in and out.
- A heavy-duty cable drum is included in order to safely store the cable whilst the crane is in transit. It is positioned in the bottom section of the crane's mast. Once the mast has been fully assembled, the cable can be easily unrolled and fastened to various sections of the mast.
- 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 forklifts. 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 for quality. An Orlaco viewing system can make the operation of a crane easier, more efficient, and most of all, safer. In many cases, this is an investment, which can pay itself back in short time as the performance of the lift is improved. 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](http://www.orlaco.com)

### An Orlaco solution always repays itself!



Your Orlaco-dealer is:

