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Industrial-Grade Monitoring Solution: HOISTCAM

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INDUSTRIAL-GRADE MONITORING SOLUTION: HOISTCAM™

THE NEED

Safety and productivity are top priorities for contractors and industrial operations. Improving either makes a company more profitable and competitive. Technology advancements that can do both are important for every company to consider. HoistCam™ industrial-grade video monitoring solutions can improve employees' productivity and workplace safety in the construction industries. HoistCam also improves efficiency of operations and reduces job site accidents resulting in substantial cost savings to a contractor. Furthermore, the video monitoring solution does not require welding and drilling for mounting and installing HoistCam, and the HoistCam Director easily works with other existing camera systems.

The needs of HoistCam™ can be summarized as the three benefits: i) safety, ii) cost saving; and iii) ease of use.

i) SAFETY

Increases Situational Awareness

- The most important aspect of many industrial and construction operations is Safety. HoistCam increases the operator's ability to make better, safer decisions. HoistCam = Reduced Accidents
- The operator can clearly see the rigger, the personnel around the load and can instantly verify that the cables are properly attached to the hook block.
- Blind lifts or blind spots are a thing of the past with HoistCam. It enables the operator to clearly see and verify the location of the hook block and the load.
- Radio commands from the rigger can be confirmed visually by the crane operator.

ii) COST SAVINGS

Less Time, Save Costs

- Case studies by HoistCam users have documented remarkable improvements in operations. For example, a marine shipyard terminal realized a 60% improvement: <http://netarus.com/about/casestudy/> Many customers experience similar benefits.
- What is an increase in efficiency worth to your organization in time and cost savings?

Less Effort



- The HoistCam is self-contained, wireless, and, most importantly, portable. The operator decides where they want their line-of-sight to be.
- Installs and attaches quickly without interrupting the flow of the work site. No welding or drilling is required to set-up.

Reduce Operating Cost

- Achieve immediate ROI (Return-On-Investment) by improving efficiency of operations and preventing safety losses. No welding or drilling is required for the mounting and installation of HoistCam: it quickly installs and is ready to use.
- Requires very limited training to use. It is intuitive, simple to use and provides an immediate benefit to crane operators. Operators can clearly see the job site and critical details of lifts.
- Netarus provides all necessary technical support and training.

iii) EASE OF USE

HoistCam – Increase Flexibility

- The HoistCam integrates into new or retrofits onto existing cranes with little effort. The 9 inch monitor is delivered with the HoistCam camera and installs in the operator cab.
- Compatible with all other camera systems through a single composite video interface.
- The HoistCam Director provides live video sharing with anyone, anywhere. All secure. The video data is hosted by Netarus under subscription. The data is archived and maintained for as long as the customer desires to continue the service. Access to the video data is controlled by logon and password under a subscription service. The Director service from Netarus manages the data and provides the live streaming and search capabilities. Access to the data can be set-up via a customized project for other systems.
- HoistCam is highly customizable.
- Static flex-mount cameras, external batteries, split screen displays, and additional full service customization are available. The rechargeable battery will last about 20 hours between chargings. The system is very simple to move and very easy to set-up. The most important site activities can be viewed with ease.



FIGURE 1 HOISTCAM -VIEW FROM CAMERA (IMAGE COURTESY OF NETARUS)



THE TECHNOLOGY

HoistCam™ is an integrated, wireless video system. The use of HoistCam eliminates blind lifts, blind spots and can share the live video with anyone, anywhere with solid security and easy control. It provides digital video recording and embedded sensors coupled with a custom, cloud-based software platform to securely share the video streams anywhere in the world. Crane operators attach HoistCam to a crane's hook block with a video monitor in the cab to provide them "in-cab" situational awareness. HoistCam allows the operator to see everything in detail where in the past they operated blind. The optional HoistCam Director service employs a mobile recorder that sits alongside the monitor in the operator's cab and allows supervisors and management to see each job and site activity live, and to record any desired operation directly to the cloud for later viewing or analysis. HoistCam provides several layers of benefits to workers, supervisors and management including: (1) eliminating blind lifts and unsure long-distance lifts for operators of heavy equipment, (2) providing supervisors, safety directors and superintendents real-time access to a sites entire field of operations, and (3) allowing management to streamline schedules, increase productivity and reduce insurance claims by preventing accidents, thereby increasing profits for their company. HoistCam is becoming an industry standard for increasing safety, productivity and profits in the industrial workplace by providing its customers an easily deployable solution that improves situational awareness and operational speed. The HoistCam product line is uniquely attractive to construction companies seeking to cut costs, improve the bottom line and reduce the costs and delays of workplace accidents.



FIGURE 2 HOISTCAM (HC180&HC183) (IMAGE COURTESY OF NETARUS)

THE BENEFITS

Netarus manufactures and sells innovative and market leading industrial-grade video monitoring solutions – HoistCam™ in particular – which improve employee productivity and workplace safety in the construction, industrial, marine and transportation industries. HoistCam is a rapidly deployable wireless camera system that places the eyes of the crane operator anywhere on the job. The crane operator can see



the details of every lift. No more blind lifts or blind spots in equipment operations! The HoistCam system is very easy to install and does not require any drilling of holes into equipment or welding to mount and install. The HoistCam product line also includes a market leading optional remote monitoring, recording and management analytics capability for crane operators and site supervisors, called HoistCam Director. Other systems do not have this capability. Netarus' HoistCam Director enables centralized monitoring of the job site using HoistCam cameras or other cameras and even drones, all tied together and viewable through the HoistCam Director. The HoistCam SiteTrax.io is also available as an additional service to provide customized and automated analytic and reporting capabilities that include video records, safety analysis and 3D models. This analytics capability is unique to the HoistCam system.



FIGURE 3 HOISTCAM DIRECTOR (IMAGE COURTESY OF NETARUS)

STATUS

Netarus is well established as a global leader in the construction and industrial process marketplaces. Education, word of mouth and pro-active marketing have been critical to rapidly capturing market share and mindshare. The company has grown rapidly with plans to move quickly ahead of potential competitors through the quality of the product and brand recognition. The company continues to grow its sales team to reach more potential customers. The company has an outstanding Customer Relationship Management system and a growing pipeline of customers from trade shows, industry conferences and existing customer referrals. Effectively managing dealer follow-ups is a company strength. Netarus has three stocking dealers and several non-stocking outlets. Netarus continues to sell directly in areas not covered by dealers and



sells abroad with plans to increase the number of dealers in locations around the world. Internationally, Netarus has a HoistCam stocking dealer in the U.K. to represent Netarus's interests in Europe.

The products: HoistCam and the HoistCam Director are fully developed and operational. Product improvements continue with each new generation and upgrade. The HoistCam SiteTrax.io data analytics system completed development in early 2017 and became available as an additional service to HoistCam customers.

BARRIERS

Many crane operators are accustomed to making blind lifts. They have been doing those blind lifts for years. HoistCam eliminates the need to do a blind lift or to operate any equipment with blind spots. That is new to many crane operators and contractors. A new product that can change the way some crane operators, industries and contractors operate can meet resistance from those who do not like change, regardless of the benefits. The HoistCam system is very easy to install and to use, but many crane operators and contractors have a natural resistance to doing something new regardless of the immediate safety and operational benefits.

Construction company managers and owners are accustomed to driving out to job sites to see progress and site conditions. The HoistCam Director provides live video feeds that can show every job site or shop floor in detail to managers and owners who are at the home office or on another location. This greatly reduces the need for expensive and time consuming travel, and improves timely decision making by managers and owners regardless of where they are. Many owners and managers are unaccustomed to the benefits of having live video feeds available to them that instantly show the jobsite or any part of the job in detail. That is new, and some managers and owners resist embracing something new regardless of the cost savings, safety and management benefits.



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REVIEWERS

Peer reviewed as an emerging construction technology

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