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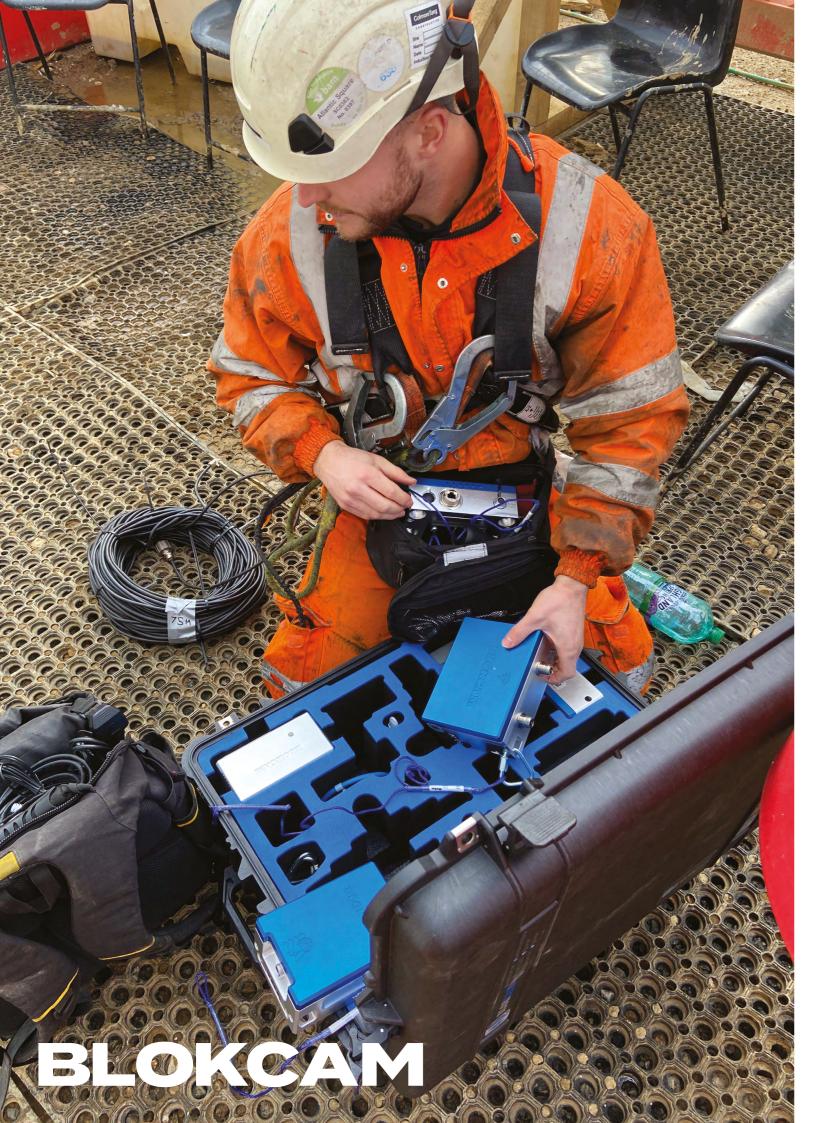
WHAT IS BLOKALERT?

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WHAT IS BLOKCAM?

BlokCam is a wireless system that can be quickly and easily deployed to the hook block or boom tip of a crane.

The sound and view from below the camera is then transmitted and received wirelessly via the antenna systems to a screen in the cab.

This allows the operator to see and hear the load and surroundings, giving an unobstructed, live, audio-visual feed of the critical areas that working in the blind would never allow.



HOW BLOKCAM WORKS

1. On the Hook Block and/or Boom Tip

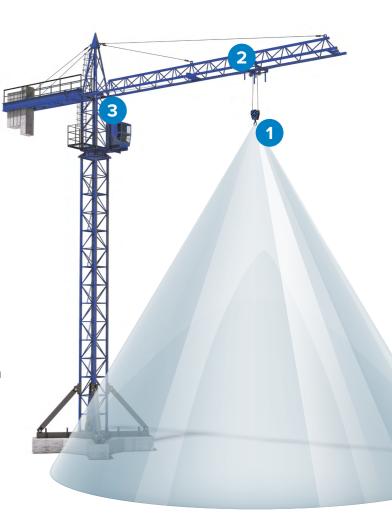
The Sensor captures the audio-visual feed and sends it to the transmitter. The signal is then transmitted to a repeater on the Jib, Boom or Cab. The battery powers both the Transmitter and the Sensor. Each component attaches magnetically and can be mounted on the block, including between the cheek plates and on the boom tip.

2. Repeater on the Jib/Boom and/or Cab

The Repeater receives the wireless signal from the transmitter and is relayed back to a monitor in the cab. The Repeater position and configuration is dependent on the type of crane, type of jib/boom and length of jib/boom.

3. In the Operator's Cab

The live audio-visual feed is then processed and displayed on the screen positioned inside the cab, allowing the operator to see and hear live footage of everything below the camera.



SAFETY

Reducing The Hazards

A high percentage of crane-related injuries are caused by uncontrolled loads striking personnel in the area surrounding the hook block; this is an extremely hazardous area where 21% of injuries occur. With BlokCam fitted the operator now has eyes and ears in that zone to make the necessary corrections to avoid any incidents.

Reduce Impacts & Collisions

Modern construction sites are becoming more and more congested and as buildings are going higher, crane operators are required to place their loads in even more restricted and tighter areas than before. The probability of impacts and collisions are still as great if not more so. Having BlokCam fitted with its clear and uninterrupted audio-visual feed, allows the operator to respond to any adjustments to avoid any potential accidents before they happen, allowing for a safer and more productive lift.

Improved Communication

The crane operator can now have eyes and ears from the block allowing detailed views of the load, site and its surroundings. This provides the ability to communicate to the banksmen, slingers and signallers with any information necessary to move from point to point in a more controlled environment and enhances the ability to communicate more efficiently.

Helping Reduce Stress

Crane operators have a lot of responsibility when operating a crane; long shifts in difficult conditions can cause additional stress, especially in all weather conditions. BlokCam helps to reduce this stressful activity by verifying the radio communications, bringing the operators that step closer to being in touching range of the load and site areas with a visual view that confirms the loads security, balance and any hazards below and around the load.

Confirming Load Security

BlokCam allows the operator to view and hear the load and surrounding area, confirming the balance and security before starting the lift. This confirms the communication with the banks-men and also helps keep the utilisation of the equipment to a maximum, without any delayed lifts and re-slinging. Rigging/Slinging failures account for 10% of crane-related incidents.

BlokCam Reducing The Blind Lift

The highest factor in many below the hook accidents occur in blind lift situations, where the operator is completely reliant on the radio communications, which can fail for a number of reasons, leaving a delay in the message and a potential incident happening. BlokCam reduces the blind lift by giving the operator live audio and video footage and the ability to see and hear what's going on below the hook and around the load.

Improve Lifting Times

With BlokCam giving a close up view of the load below the hook and surrounding area, the operator will have more situational awareness, allowing an increase in speed and accuracy in all scenarios. This will improve the lift efficiency and reduce time in task completion. This increase in productivity could be measured in hundreds of man-hours saved and a more controlled utilisation of equipment.

Recorded Results

According to a university study in the Journal of Construction Engineering and Management, having a camera system installed on a crane can help increase productivity by up to 39% in the blind and 27% in the open as a direct result.

Adjustments and Corrections

BlokCam allows an operator's experience to be maximised and put to use in critical lifts, whilst providing visual and audible information, contextual awareness and aid communication with the banks-man. Imagine driving a car blindfolded while the passenger directs you where to go, when to stop and how fast to move, it would be a difficult, dangerous and stressful task to complete. Now imagine how much safer and more efficiently the driver can manoeuvre without the blindfold? The operator can quickly make adjustments required to minimise corrections and overshoots and help improve the productivity.

Helping Hand

The operator now has the added advantage with the BlokCam system fitted as a visual aid to help position the hook block into the required position, whilst working in tandem with the instructions given by the banks-men/slinger over the radio, complimenting and confirming the correct position, keeping a steady flow of continued and sustainable lifting tasks, helping to increase the productivity.

Return on the Bottom Line

With BlokCam fitted, the benefits of improved communication and maximised safety all play their part in the contribution to the greater efficiency and enhancement to the productivity of the lifting tasks on any site. If you can reduce the blind lift, reduce any corrections and overshoots you will see a drastic improvement in the overall bottom line of that projects lifting plan.

X3L CAMERA SYSTEM **TOWER CRANES**

Design Overview

- Easy and quick to install; can be fitted within an hour
- Uses high powered neodymium magnets
- The lens is auto-focus and always gives clear views of the load and surrounding area below the hook
- HD 1080p resolution
- · Audio from sensor to cab
- Optional single and split screen mode with additional cameras
- Long range transmission ⁵
- Record on loop for up to 30 days
- Purpose built aluminium housing
- Multiple built in lanyard anchors
- Safety lanyard provides secondary security tethering
- Hands free operation

- Multi positional sensor for variable views
- LED indicators
- Two batteries per system
- Non hazardous battery
- 12 hour battery life³
- Multivoltage AC and DC inputs
- Durable all-weather design, manufactured to IP67 4 rating
- -20°C to 55°C (-4°F to 131°F) operating temperature
- Optional mobile app and 4G live streaming²
- CE and FCC Approved
- High quality industrial connectors
- Colour coded connectors



More information, hook mounted safety system and accessories available online at thecrosbygroup.com/blokcam. For references please see page 13.

Modular design, compatible across a wide variety of cranes 1

Sensor (S5)









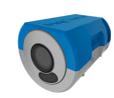








WHAT'S INCLUDED:





Transmitter (T3)

between the cheek plates.



The S5 is a 113° wide angle lens. The low profile design,

tool free operation and rotatable lens allows for easy

installation on any side of the hook block including in



Battery (B6)

B6 is a non hazardous lithium 14.54v Battery Pack. The clever tool-free design and easy grip finger slots makes it easy to install, remove and charge. IP67.



Charger (B6-CH3)

Our Li-Ion Charger is designed to improve the efficiency of your BlokCam Batteries and the performance of the camera system.



Repeater (R5)

Depending on the crane type and required installation the Repeater is mounted on the jib, boom tip or cab. The Repeater has been specifically designed for fast, wireless, telescopic deployment.



Monitor (M2)

Our HD Monitor is a 10.1 inch 16:9 LCD monitor with built in speakers and a HDMI input. It has a 1280 x 800 pixel panel with automatic brightness control.



Processor (P3)

Our purpose built Processor can project multiple high definition images and audio's through a single HDMI lead with less than 0.2 seconds of latency. The design of the Processor accomodates multivoltage AC and DC inputs making your BlokCam system compatible across all types of cranes. The Processor also provides power to the monitor, eliminating the need for a secondary socket or power supply.

For references please see page 13.

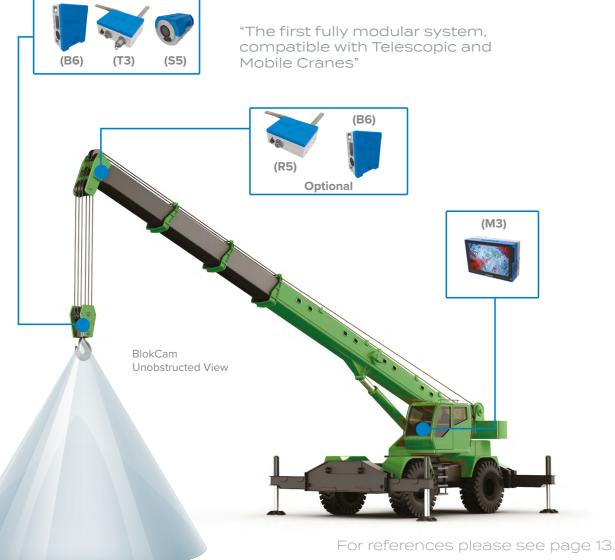
M3L CAMERA SYSTEM

MOBILE & TELESCOPIC CRANES

Design Overview

- Specifically designed for the mobile and crawler market
- Can be installed and removed within . Two batteries per system 5 minutes
- Uses high powered neodymium magnets
- The lens is auto-focus and always gives clear views of the load and surrounding area below the hook
- HD 1080p resolution
- · Audio from sensor to cab
- Long range transmission 5
- Record on loop for up to 30 days
- · Purpose built aluminium housing
- Multiple built in lanyard anchors
- Safety lanyard provides secondary security tethering
- Hands free operation

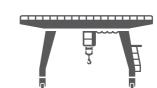
- Multi positional sensor for variable views
- LED indicators
- Non hazardous battery
- 12 hour battery life ³
- Multivoltage AC and DC inputs
- Durable all-weather design, manufactured to IP67 4 rating
- -20°C to 55°C (-4°F to 131°F) operating temperature
- · Optional mobile app and 4G live streaming²
- CE and FCC Approved
- High quality industrial connectors
- Colour coded connectors



Modular design, compatible across a wide variety of cranes 1











WHAT'S INCLUDED:



Monitor (M3)

The M3 is an all in one display that combines a monitor, repeater and processor in to a purpose built fast fit system. The M3 has a HD display with built in speakers, automatic brightness control, less than 0.2 seconds of latency and multivoltage AC and DC inputs.



Sensor (S5)

The S5 is a 113° wide angle lens. The low profile design, tool free operation and rotatable lens allows for easy installation on any side of the hook block including in between the cheek plates.



Transmitter (T3)

T3 dramatically improves the most important aspects of the BlokCam. The combination of performance, specification, aesthetics and 71mm low profile design make this a must for all crane operations. Connect up to two sensors.



Battery (B6)

B6 is a non hazardous lithium 14.54v Battery Pack. The clever tool-free design and easy grip finger slots makes it easy to install, remove and charge. IP67.



Charging Station (B6-CH3)

Our Li-Ion Charger is designed to improve the efficiency of your BlokCam Batteries and the performance of the camera system.

More information, hook mounted safety system and accessories available online at thecrosbygroup.com/blokcam. For references please see page 13.

BLOKCAM ACCESSORIES



BlokCam Office Link (OL1)

BlokCam Office Link allows the data from your BlokCam to be captured in a site office for site and crane monitoring and surveillance. Your host computer could monitor and download data from multiple systems.



4G Router (30184)

With a 4G router connected to your BlokCam system, you can live stream crane footage and extract recordings from anywhere in the world ².



V-Cam (VC4)

The Versatile-Cam is our hardwired option which gives you the ability to expand your BlokCam System to include additional Sensors. The build quality of the VC4 coupled with it's non intrusive size and mounting versatility means it can be deployed in seconds and used in a multitude of scenarios. Ideal for visual monitoring and data logging of the Hoist Drum, Luffing Drum, Slew Ring, Tail Swing and the Operator's Cab.



V-Cam (VC4a)

The VC4a is our hardwired camera with a built in microphone which is most commonly used for audio-visual monitoring and data logging of the Operator's Cab.



BlokMag (BM1)

Attach your crane camera system to a hook block with a curved surface. Flat, spherical, cylindrical, narrow, short or tall, our modular BlokMag system allows flat surfaces to magnetically mate with curved surfaces flawlessly.



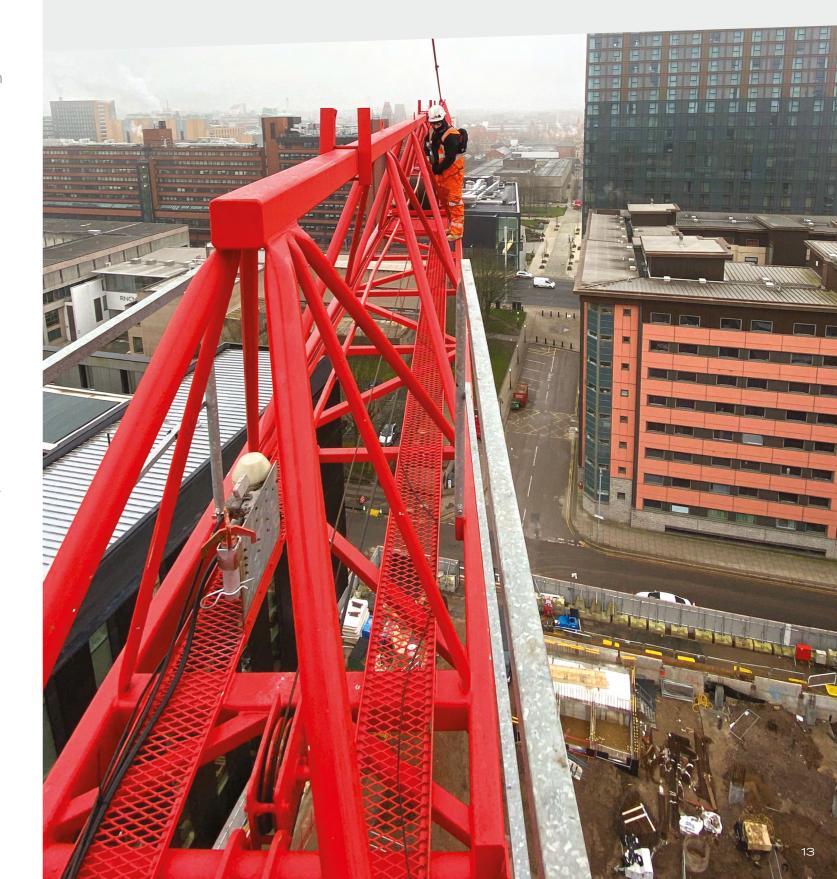
BlokLink

Complete with hook and bow, attach your crane camera system to a crane where you cannot if the block has a curved surface. Flat, spherical, cylindrical, narrow, short or tall, our BlokLink is the solution to provide a flat surface for your BlokCam or BlokAlert.

More information, hook mounted safety system and accessories available online at the crosbygroup.com/blokcam. For references please see page 13.

REFERENCES

- 1. Subject to Crane Make/Model.
- 2. Subject to availability of a suitable mobile network, data charges apply.
- 3. Battery life varies by use and configuration.
- 4. IP67 rating excludes IP65 audio sensor and sounder.
- 5. Transmission distance may vary depending on the environment.
- *Actual product may differ from rendered image.



BLOKCAM TESTIMONIALS



"At BAM, health and safety is our highest priority. BlokCam crane cameras help to ensure that crane operators on our sites have an unobstructed view of blind spots from inside the cab. We are very happy with the service & support we receive from the Crosby BlokCam team."

Mike Whitfield, Operations Manager BAM Construction Ltd

"We choose to use BlokCam camera systems on our tower cranes for several reasons. Firstly, the quality of the cameras is excellent, they are fit for purpose on busy construction sites where things can get knocked easily.

"Secondly, the team at Crosby BlokCam really know their stuff. They understand the construction and crane industry and therefore they have built a product that meets our needs precisely. The BlokCam system is an invaluable asset to our business, improving health and safety for our employees, our clients and everyone on site, as well as offering better unobstructed views for our crane operators from inside the cab.

"Technology such as this is certainly the future of crane operations as far as we are concerned."

Edward Seager, Managing Director Bennetts

"Crosby BlokCam has provided us with an innovative product that is well built with the service to back it up."

Rupert Cook, Associate Service Director Falcon Tower Crane Services Ltd



"BlokCam is one of the best investments London Tower Cranes has made. The quality, ability and value of their camera system is second to none. We have found the BlokCam to be an invaluable asset for the crane operators, lifting teams and business as a whole."

Martin Harvey, Managing Director London Tower Cranes



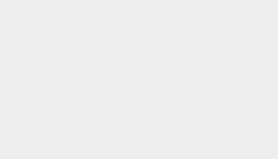
"HTC started working with Crosby BlokCam in 2015 - on first impressions we were very impressed by the level of expertise and professionalism of this company. We are proud to work in partnership with Crosby BlokCam and are delighted with the service which we are able to provide to our customers. It is great to work with such a forwardthinking and proactive company. Crosby BlokCam's experience and knowledge of the crane industry has allowed them to develop and offer the highest quality system on the market. Therefore, we are looking forward to many more years of working together."

Elliott Simpson, Accessories Manager WOLFF Onsite



"Radius NFT owns and rents out several BlokCam systems to its customers. The safety benefits are being identified by our customers and their clients, so much so, that some are now implementing the use of BlokCam as a minimum requirement."

Teddy Holt, Operations Director Radius Crane Management Ltd



TOWER CRANE PROFESSIONALS



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WHAT IS BLOKALERT?

BlokAlert is a wireless, audio-visual warning system that can be quickly and easily deployed to the hook block of a crane.

When activated by the lifting crew, the BlokAlert receiver gives out a recognisable audio-visual signal that can be seen and heard by site personnel in proximity to the hook block or load.

This forewarns the workforce to the position and movements of the hook block, increases awareness and reduces the risk of being struck by the crane's hook block, lifting accessories or load.



WHY BLOKALERT?

Traditionally: The distance between the horn, often located near the operator's cab, and the load, is inconsistent and does not efficiently warn site personnel to the position of the hook block or load. The same can be said for airhorns or whistles when used by riggers. In both scenarios, the attention of the work force is diverted to where the sound is coming from, as opposed to the hazard.

Solution: Fit a warning system to the hook block. When activated, the consistent proximity between the hook block and the load enhances the efficiency of the warning system and draws attention to the hazard, not away from it.



BLOKALERT SYSTEM

Design Overview

- Uses high powered neodymium magnets
- · Easy to install, remove and charge
- Two hand-held transmitters per system -10°C to 50°C (14°F to 122°F)
- · Easy to use, multifunction operation
- 2 x 78db 107db Electronic Sounders
 Easy Access Fuse
- 180° LED Beacon
- Choice of 4 Beacon Colours
- · Pair transceivers with the push of
- · Built in Lithium Ion battery with 124hour battery life ³
- Built in, fold away carry handles
- Long range transmitter and receiver ⁵
- Purpose built aluminium housing
- Built in lanyard anchors
- Safety lanyard provides secondary security tethering
- LED power indicator

- 86mm low profile design
- · Durable all-weather design. manufactured to IP67 4 rating
- operating temperature
- High quality industrial charge connector
- Optional cab transmitter
- CE and FCC Approved

Modular design, compatible across a wide variety of cranes ¹

















WHAT'S INCLUDED:



BlokAlert Receiver (BA-R1)

Along with the LED Beacon, the BlokAlert Receiver is capable of up to 528 different audible warnings. This audio-visual warning system, combined with great functionality, performance and design makes this a must for all lifting operations.

SIZE & WEIGHT (excluding Antenna)

Height: 173mm (6.82in) Width: 210mm (8.27in) Depth: 86mm (3.39in) Weight: 3,400g (7.5ibs)

BlokAlert Fob - 4 Button (60009)

The BlokAlert Fob allows the riggers to operate multiple BlokAlert systems across your site.

- Two x 4 Button Fobs per system
- · Rugged Design complete with neck lanyard
- · 8 and 16 button Fobs available on request

HOW BLOKALERT WORKS



1a, The Lifting Crew/Rigger

The handheld fob is activated by the riggers or lifting crew. When operated, the signal is transmitted to the receiver on the hook block of the crane.

And/or



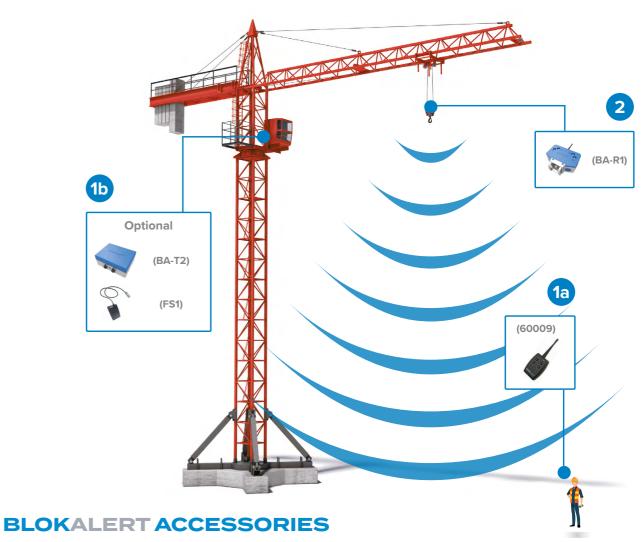
1b, In the Operator's Cab

The transmitter is activated by a footswitch in the crane cab. When operated, the signal is transmitted to the receiver on the hook block of the crane.



2. On the Hook Block

On receipt of a signal from a transmitter, the Receiver is activated, alerting the workforce to the proximity of the hook block.





BlokAlert Transmitter (BA-T2)

Through the use of a footswitch, the BlokAlert Transmitter gives the crane operator, hands free operation of the BlokAlert System.



BlokAlert Footswitch (FS1)

The Footswitch provides the hands-free operation of the BlokAlert Transmitter. It is quick and easy to install.

More information, hook mounted safety system and accessories available online at the crosby group.com/blokcam

For references please see page 13.



the **Grosby** group

About The Crosby Group

The Crosby Group is a global leader in the innovation, manufacturing and distribution of products and services used to make lifting and load securement safer and more efficient, with premier brands such as Crosby, Gunnebo Industries, Crosby Straightpoint, Crosby BlokCam, Acco, McKissick, Crosby Feubo, Trawlex, Lebus, and CrosbyIP.

With global engineering, manufacturing, distribution and operations, the company provides a broad range of products and solutions for the most demanding applications with uncompromising quality that exceed industry standards.

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MEMBER SCRA

BLOKALERT - Patent Pending **BLOKCAM** - Patent Granted

