

Lattice boom crawler cranes Load hook, winch and route monitoring

Machine downtimes due to collision or slack cable formation cause unnecessary expenditures in time and money. Camera and monitor systems boost efficiency and reliability of the work processes and reduce costs.

The operator can remotely observe the load hook, the route and the winch. The quad monitor displays all images simultaneously, enabling the driver to see all danger zones at any given time.



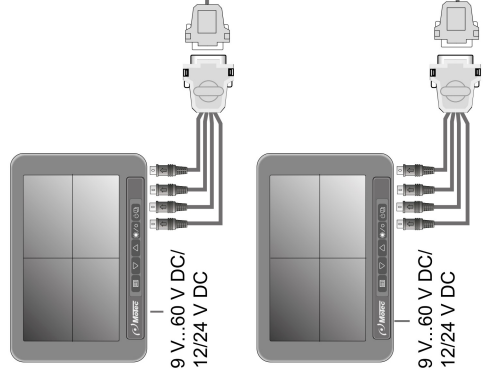
Top: Lattice boom crawler crane deployed in the installation of a wind power station.

Right: Mounted MC3000B for winch monitoring.

EXAMPLE: Crawler crane

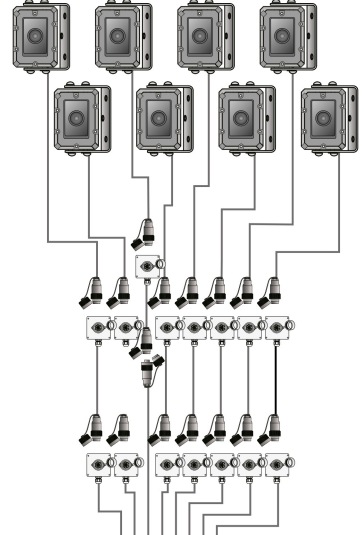
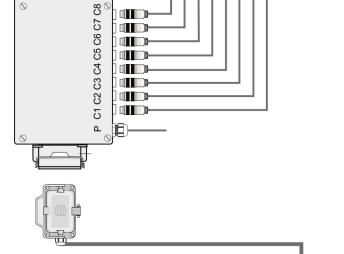
MD3071A/MD3072B-Quad
Heavy-duty monitor

1



MB618A
Video distributor

2



MC3000B
Heavy-duty camera

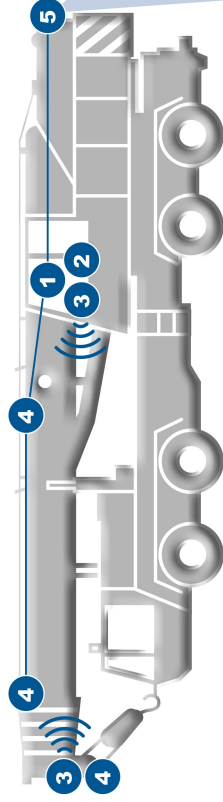
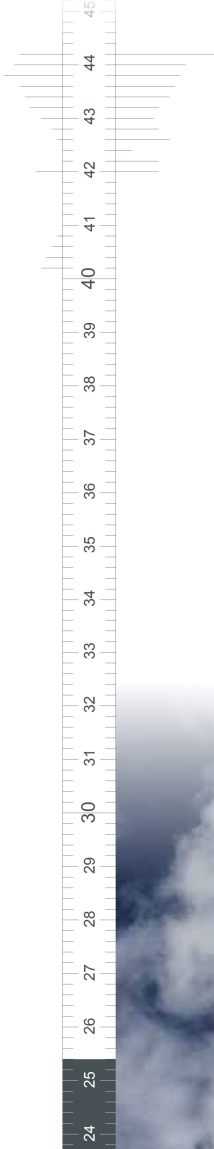
3



Telescopic cranes Safely moving loads

Telescopic cranes frequently operate beyond one's field of vision, making the operator dependent on signals by colleagues. By using a camera and monitor system and a special motor zoom camera with pendulum mounting at the telescopic boom, the operator can act without needing a signaller and, furthermore, has an unrestricted and constant view of the load.

One or two additional heavy-duty cameras increase safety when starting or manoeuvring the equipment.



EXAMPLE:
Telescopic crane

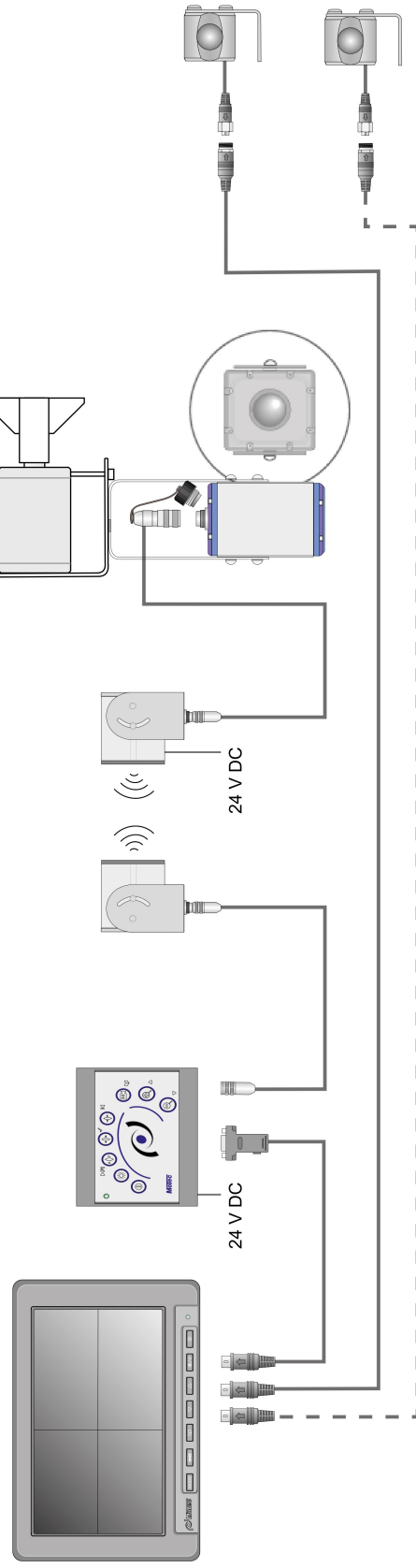
MD3072B-Quad
Heavy-duty monitor

MBE5200-1
Operator control module

MRV5200-1
Wireless system

MC5200-1
Heavy-duty motor zoom camera

MC7000P-E
Heavy-duty camera



Slewing tower cranes

Moving loads – safely and without damage

Operators of slewing tower cranes frequently work at extreme heights and depend on radio or special signals to safely control the boom.

By using a camera and monitor system and a special motor zoom camera with pendulum mounting at the telescopic boom, the operator can act without needing a signaller and, furthermore, has an unrestricted and constant view of the load, the steel rope and colleagues working within the slewing zone of the boom.



Detail view of a top-slewing tower crane with cabin. The motor zoom camera and the radio transmitter are mounted at the crane carriage.

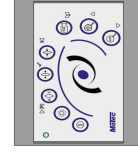


EXAMPLE: Slewing tower crane

1 MD3071A
Heavy-duty monitor



2 MBE5200-1
Control system

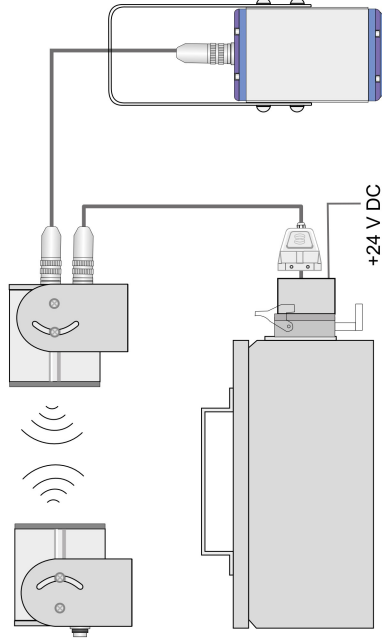


24 VDC

3 MVR5200-1
Wireless system



4 MC5200-1
Heavy-duty motor zoom camera



+24 V DC
Charging battery

Derricking jib cranes The load always in sight

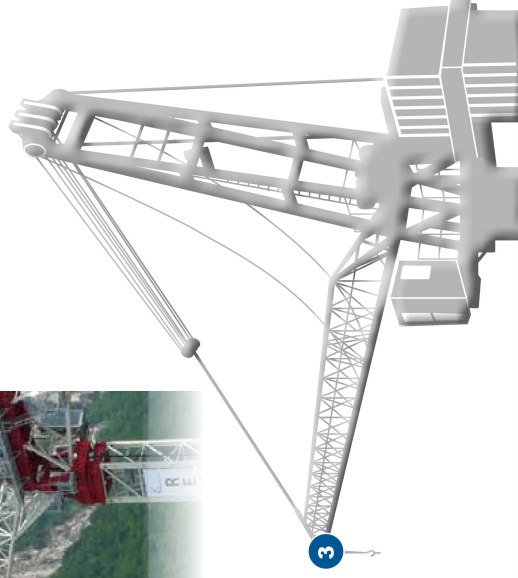
Operators of slewing tower cranes are far removed from the load they move and are dependent on signals by colleagues.

By using a camera and monitor system and a special motor zoom camera, the operator can act without needing a signaller and, furthermore, has an unrestricted and constant view of load and destination.

Due to the adjustable setting angle of the jib, the crane requires that the holder be flexible. Thanks to a pendulum mounting concept, the camera will always be vertical.



Motor zoom camera at a jib.
The pendulum mounting allows the camera to adapt to the jib's tilt angle.



EXAMPLE: Derricking jib crane

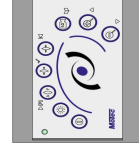
1 MD3071A
Heavy-duty monitor

2 MBE5200-1
Operator control module

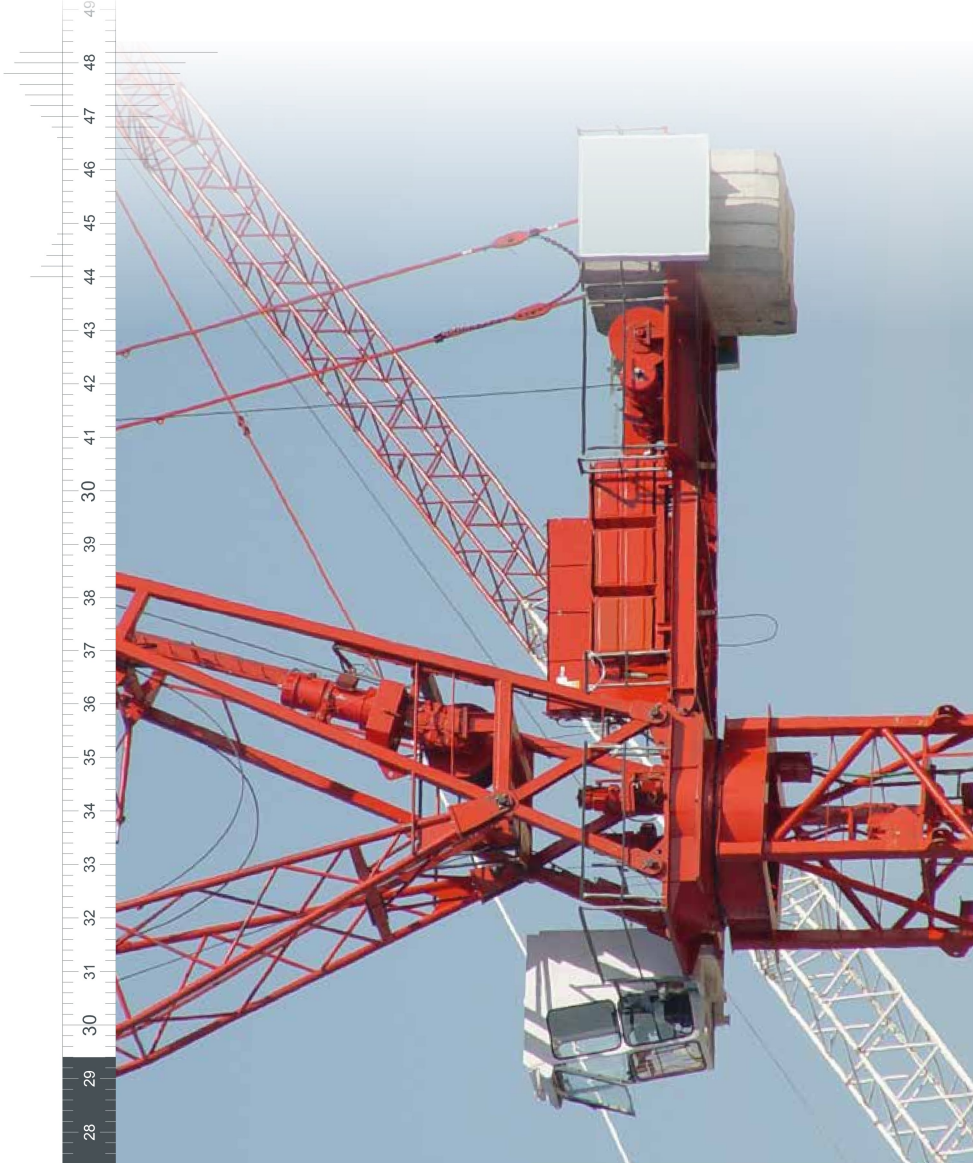
3 MC5200-1
Heavy-duty motor zoom camera



9 V..60 V DC



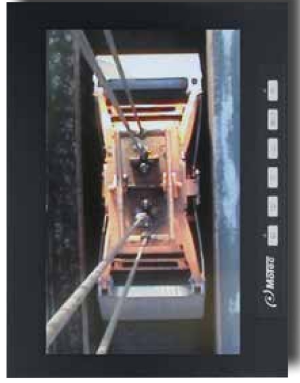
24 V DC



Mobile harbour cranes and material handling equipment CAN bus-controlled MVCU1500 video control unit

The demands on mobile harbour cranes and material handling equipment are very high. They must work quickly and without causing damage, despite poor visibility and, sometimes, with little space to manoeuvre. Under such conditions, the crane operator must not lose sight of the hooked load, distances to the ship's hull, the position of other containers and objects and, where required, the rear space.

An intelligent and expandable camera and monitor system optimally supports the crane operator in these issues and thus ensures efficient and cost-saving operations.



30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

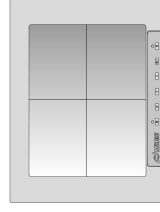
49

50

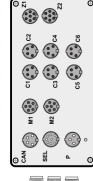


EXAMPLE: Mobile harbour crane

1
MD3100
Heavy-duty monitor



2
MVCU1500
Video controller

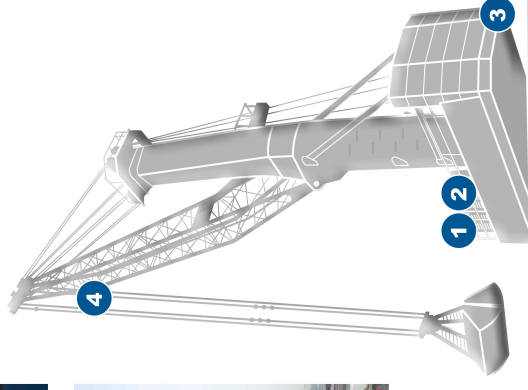


24 V DC

3
MC3000B
Heavy-duty camera



4
MC5200-1
Heavy-duty motor zoom camera

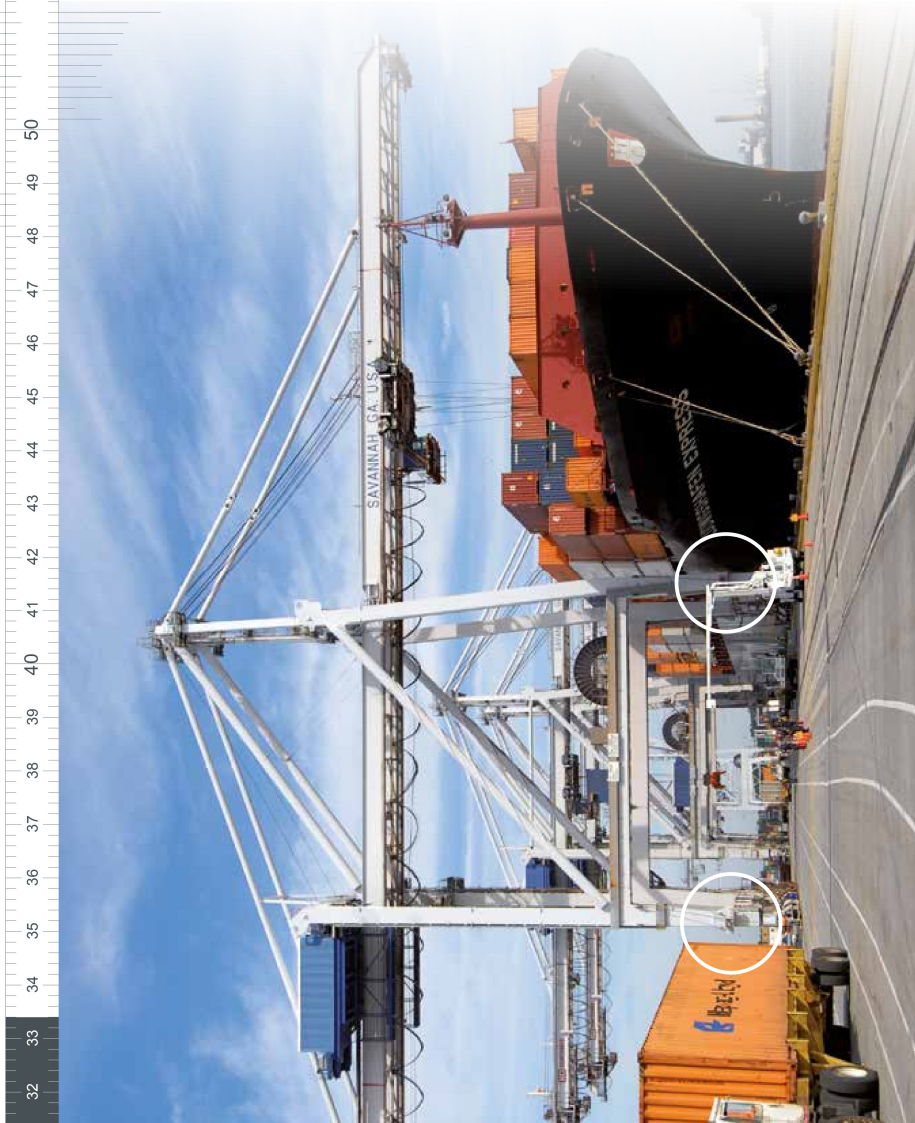


Motec camera and monitor systems used in load monitoring in container, general cargo and bulk handling.

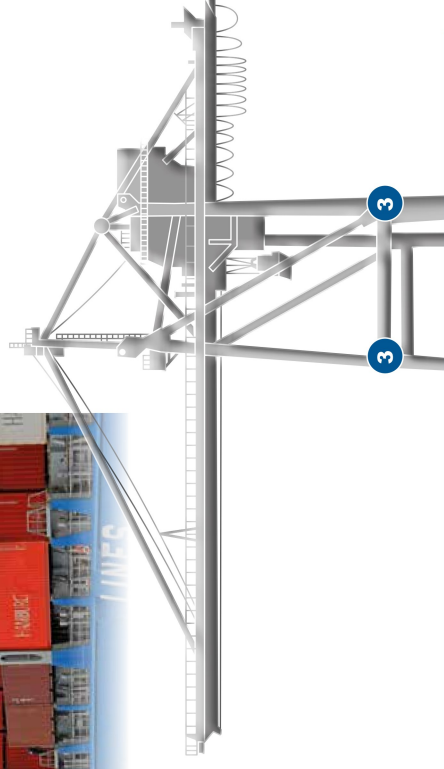
Container and ship-to-shore cranes View on the travel path during container handling

The restricted field of sight of a crane operator for container and ship-to-shore handling equipment greatly raises the risk of a collision with people, lorries or other objects. An intelligent camera and monitor system with video control unit surveys the travel path in both directions and simultaneously displays up to 4 camera images on a single monitor.

The crane operator sees the travel path area and load in one direction of view. Dangerous situations can be seen early without twisting the upper body ensuring an ergonomic, efficient and cost-saving operation.



Rail-bound mobile harbour crane handling containers.

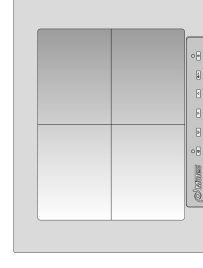


EXAMPLE:
Container crane

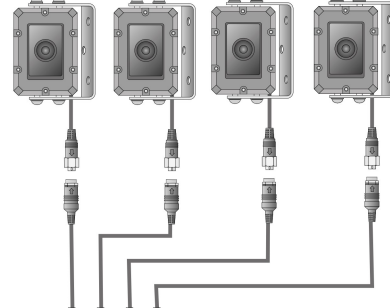
1 MD3100
Heavy-duty monitor

2 MB1405-Quad
Video controller

3 MC3000B
Heavy-duty camera



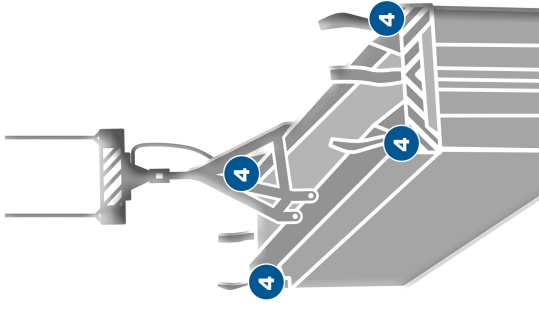
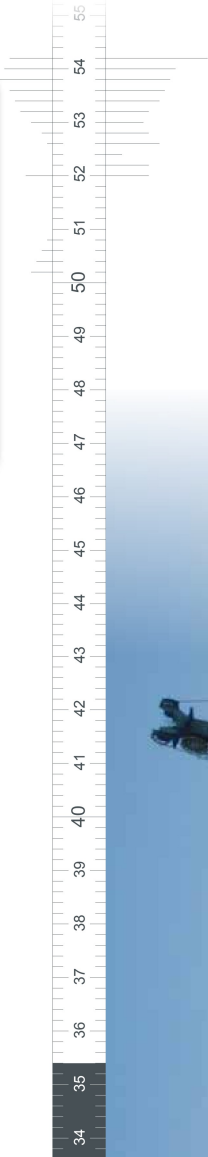
12/24 V DC



Spreaders

View on the load during container handling

Dock charges in the harbour are very high, making time a key factor in container handling. A camera and monitor system support efficient operation. Thanks to the rugged cameras at the spreader, the containers are securely and quickly picked.



Container bridge with spreader. Twistlock cameras help in centring the spreader during positioning on the container.

EXAMPLE: Spreader

17"/19"
Metal housing monitor

1

MVR5200-1
Wireless system

2

MVCU1401
Video controller

3

MC9150P+MPL
Heavy-duty camera

4

