

# Lattice boom crawler crane Monitoring of the motion path and surroundings

# **Crawler crane**

# Monitoring of the motion path and surroundings



Due to their dimensions, crawler cranes are hard to oversee and rather challenging for the operator when moving loads. On the construction site, persons may be present in the pivoting range or motion path of the crane without being noticed by the crane operator. Intelligent camera systems for crawler cranes provide the operator with perfect views from up to 16 cameras, thereby helping to prevent serious accidents.

# System advantages

#### More safety

The operator can spot persons and obstacles in time, thereby preventing accidents.

#### Higher level of efficiency

The operators can control their crawler cranes more precisely and efficiently with a camera system.

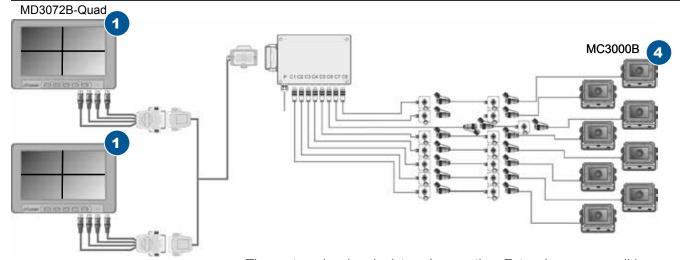
#### Quick and safe manoeuvring

Cameras make manoeuvring easier and help the operator to keep an eye on the surroundings.

## View of:

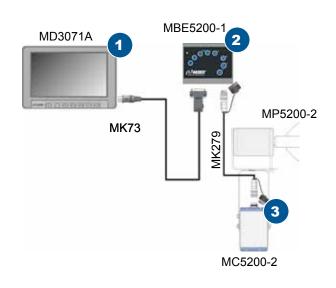
- Persons and objects in front of and behind the machine in the danger area
- Persons and obstacles in the motion path
- Persons and obstacles in the pivoting range
- Observation of the support process
- Observation of the rope winches to avoid slacking of the rope
- Monitoring of the suspended load

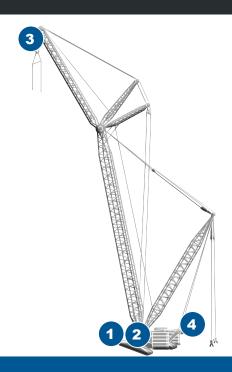
## System drawing of a system for monitoring the motion path and surroundings



- The system drawing depicts only a section. Extensions are possible.
- Different image modes possible (model MD3072B-Quad).

# System example and drawing of a load monitoring system





MD3071A/MD3072B-Quad monitor

MBE5200-1 control unit





MC5200-1 motor zoom camera



MC3000B heavy-duty camera





#### MD3071A/MD3072B-Quad monitor

- 7" monitor (17.8 cm diagonal)
- PAL/NTSC video system
- Supply voltage of 9 V to 60 V DC (MD3071A)
- Supply voltage of 12 V to 24 V DC (MD3072B-Q.)
- Ingress protection rating IP30
- Operating and storage temperature -30 °C...+80 °C (MD3071A)
- Operating temperature -20 °C...+80 °C (MD3072B-Q.)
- Storage temperature -30 °C...+85 °C (MD3072B-Q.)



## MBE5200-1 controller

- Control of the motor zoom camera
- Activation of an additional camera
- Supply voltage 24 V DC
- Ingress protection rating IP 54
- Foot switch available as an option



#### MC5200-1 motor zoom camera

- Robust aluminium housing
- Sharp, high-contrast images
- Up to 26x optical zoom
- 1.6°...47.5° horizontal viewing angle
- Operating temperature -35 °C...+60 °C
- Storage temperature -40 °C...+85 °C



#### MC3000B camera

- Robust housing made of machined aluminium
- Extremely high chemical and mechanical resist-
- CMOS ¼" image sensor with a sensor resolution of 640 x 480 pixels (horizontal x vertical)
- Resistant to high-pressure cleaners IP69K
- Operating and storage temperature -60 °C...+85 °C