



Safety on Rail

Motec Camera Systems for Rail Traffic

Motec

Systematic safety

Covering a whole range of freight service, rail traffic, industrial, municipal, or agricultural applications, Motec has been a leading provider of high-quality, intelligent camera/monitor systems for 20 years. One of our key strengths is being able to tailor our systems exactly to your individual requirements. We use premium components that are designed to withstand even the toughest conditions in permanent operation, ensuring reliability regardless of wind and weather.

Motec is a flexible and reliable partner for initial equipment. Our processes for development, production and service correspond to OEM levels and meet industry standards. Established international manufacturers of vehicles, machines and plants have been relying on our systems and components as well as on our problem-solving skills for many years.

Premium components for rail vehicle applications

Based on Motec components you are able to safely meet the requirements of the EC Machinery Directive 2006/42/EU as well as the DB (German Railways) Technical Guidelines.

Monitors

- Top-quality workmanship
- Easy installation
- High functionality
- Digital technology for premium image quality
- Suitable for modular use

Cables and connectors

- More than 500 cables and connectors - robust, water-tight, reinforced
- In-house assembly
- Individual pre-cut
- Any connection possible
- High-quality material mix

Cameras

- Top-quality workmanship
- Robust and resistant
- Suitable for use with high-pressure cleaners (IP69K)
- State-of-the-art camera technology
- Suitable for modular use

Associations



Certified quality

Top quality at every level Motec is certified in accordance with ISO 9001 and ISO14001 and carries the AEO certificate as an Approved Economic Operator.



Grinders / Rail grinders

Efficient grinding processes

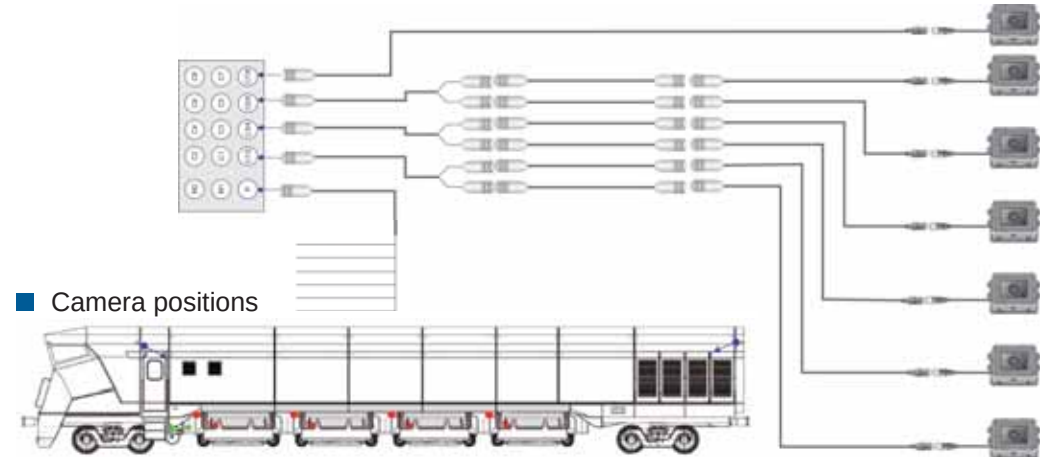
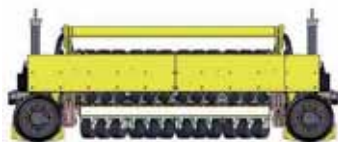


Cameras – one each for both sides of the rail – are monitoring the grinding and milling of the rail surfaces. Operators are able to see the grinding tool and its wear status, allowing them to exactly control the application and the change interval. These systems are tailored to the requirements of each individual application.



Allows the driver to see

- Persons in front of/behind the machine
- Grinding tool, rails and exhaust system
- Grinding and milling of rails
- Status/wear rate of grinders



MB1406

- Individual display of 8 cameras
- CAN bus control possible
- Connection and power supply for 2 monitors
- Freely selectable control cables



MK334

- Y-cable for MB1406
- Two cameras connected to one
- Input in the video control unit



MC3000A

- Sturdy, weather-resistance aluminium casing
- Extremely high chemical and mechanical resistance

Tunnel cleaning trains

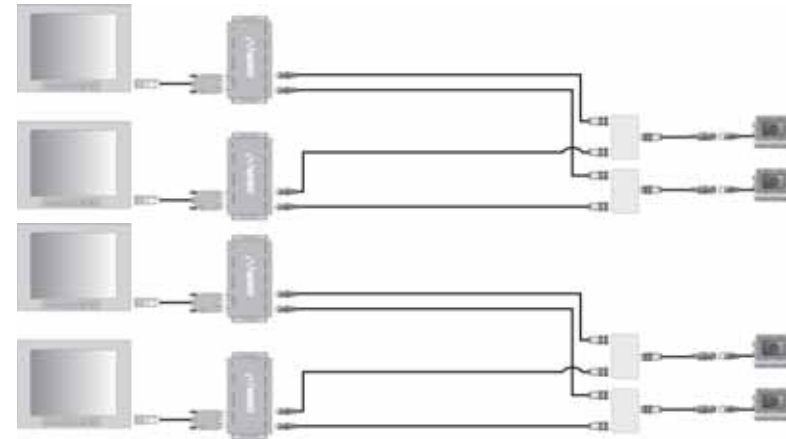
Cleaning control



Cameras facilitate the control of the cleaning units. Operators can see the suction device so that congestions and defects can be detected and remedied at an early stage. Additional cameras installed at both ends of the machine provide additional safety when driving and shunting.

Allows the operator to see

- Persons and objects in front of and behind the machine
- Working areas
- Cleaning unit



MD3100

- Product characteristics at a glance
- Screen diagonal 25.9 cm / 10.2"
- Sturdy metal housing
- Degree of protection IP54 (front)
- Power supply via MVCU



MB1405-Quad

- Simple control for up to four cameras
- Split function - up to four images at once
- Camera selected via control cables or control unit
- Power supply for cameras and monitor



MC3000A

- Sturdy, weather-resistance aluminium casing
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Mechanical tampers

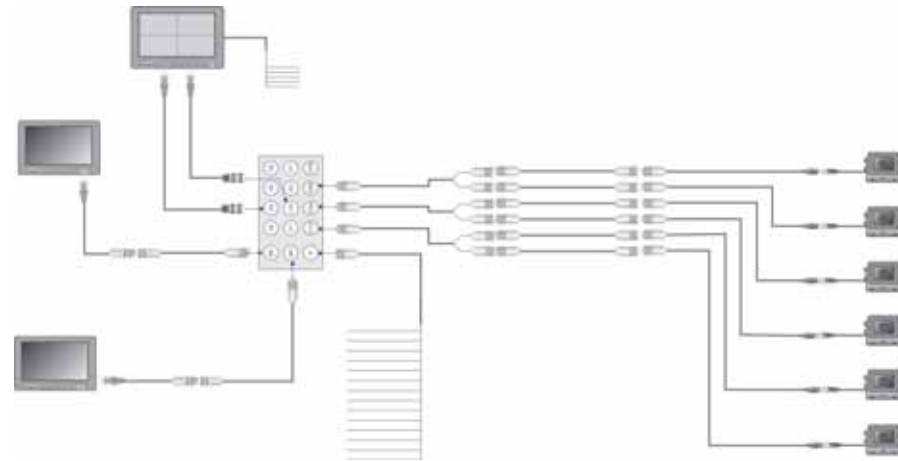
Monitoring of the compression process



Systems with six and more cameras ensure efficient and safe operation. Cameras installed underneath the machine are pointed at the carriage and at the tamping devices so that operators always have full control of the compression process in the roadbed.

Allows the operator to see

- Carriage
- Tamping pick
- Tamping operation/ compression process in the roadbed
- Persons in front of and behind the machine



MD3072B-Quad

- Split screen - up to four images at once
- Up to four cameras can be connected directly
- Manual or automatic camera selection
- Screen diagonal 17.8 cm



MB1406

- Individual display of 8 cameras
- CAN bus control possible
- Connection and power supply for 2 monitors
- Freely selectable control cables



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Rescue trains

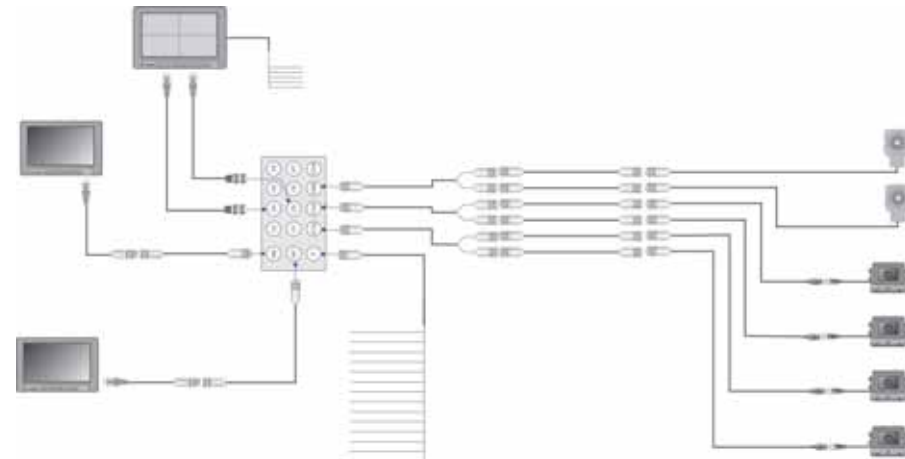
Safe rescue missions



For rescue trains, six and more cameras are combined to form a compact system providing utmost safety. Infrared cameras installed at both ends of the train provide high-contrast images to the driver even in heavy or fog. Additional cameras are pointed at the transport, extinguishing agent, ambulance and equipment wagon.

Allows the driver to see

- Tracks in smoky or foggy conditions
- Compartments of the wagons
- Persons in front of and behind the train



MD3072B-Quad

- Split screen - up to four images at once
- Up to four cameras can be connected directly
- Manual or automatic camera selection
- Screen diagonal 17.8 cm



MB1406

- Individual display of 8 cameras
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PathFindIR

- No light sources required
- Sharp images in darkness, fog, rain and snow
- Detects persons and obstruction even at very great distances

Switch engines

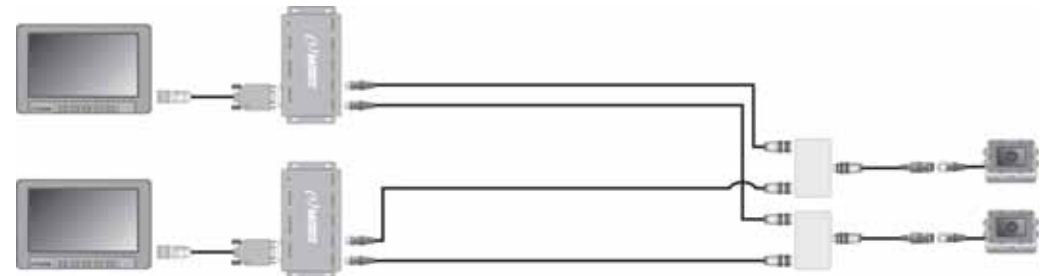
Reduced number of accidents



Up to four cameras installed in a switch engine effectively help to avoid accidents. Two cameras – one each at both ends – help drivers to see the track. Optional cameras installed at the sides (with image angles up to 120 degrees) provide an almost complete panorama view.

Allows the operator to see

- Track in both directions
- Persons in front of and next to the switch engine



MD3070A

- Flat, compact design - fits into virtually all cabins
- Integrated backlight
- High temperature resistance



MB1405-Quad

- Simple control for up to four cameras
- Split function - up to four images at once
- Camera selected via control cables or control unit
- Power supply for cameras and monitor



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Haulage trains

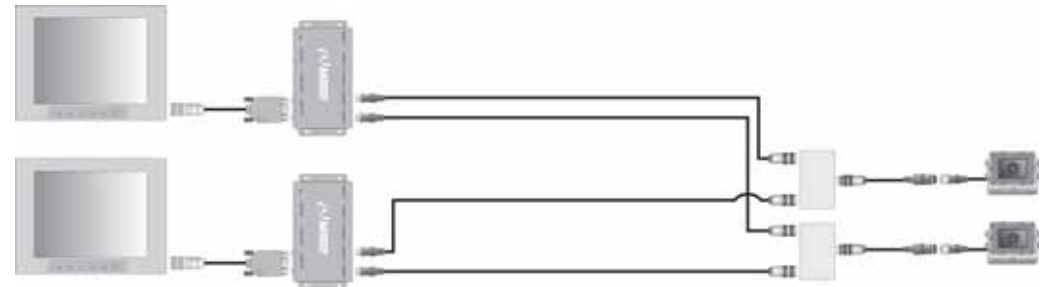
Safe shunting



Camera systems facilitate both shunting and coupling operations. Cameras with large image angles up to 120 degrees detect the close-up range in front of and behind the train. Depending on the application, either wireless or wired systems can be used for haulage trains.

Allows the operator to see

- Persons/objects in front of and behind the machine
- Tracks
- Coupling operations



MD3100

- Product characteristics at a glance
- Screen diagonal 25.9 cm / 10.2"
- Sturdy metal housing
- Degree of protection IP54 (front)
- Power supply via MVCU



MB1405-Quad

- Simple control for up to four cameras
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Road rail excavators

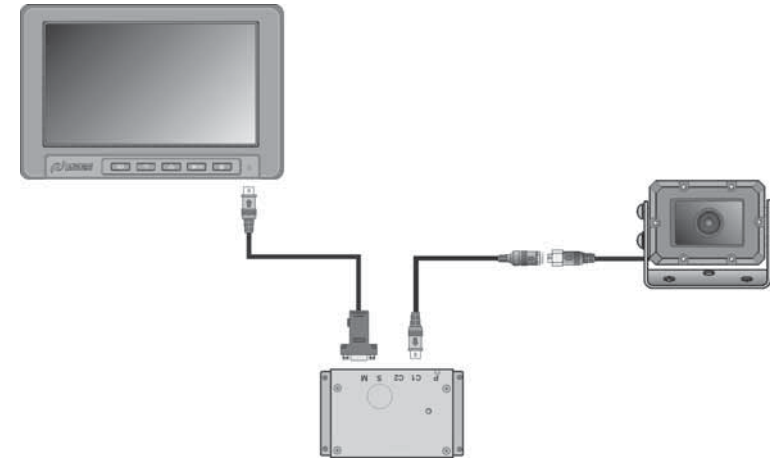
Effective monitoring of rear area and lateral areas



Camera systems are mandatory for rail-bound machines. A camera installed at the upper carriage almost completely detects the area behind the excavator (track axis). Rerailing and coupling operations can be completed by the driver more easily and safely.

Allows the operator to see

- Persons/objects behind and next to the machine
- Rerailing and coupling operations
- Track interruptions (e.g. de-installed tracks)



MD3070A

- Flat, compact design - fits into virtually all cabins
- Integrated backlight
- High temperature resistance



MB1205

- Simple control for up to two cameras
- Mirror function for each camera
- Supports flash-controlled side camera
- Automatic trailer detection for semi-trailer trucks



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Rail milling train

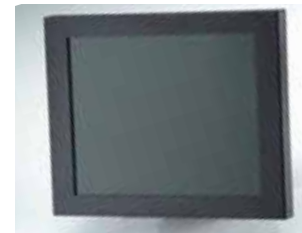
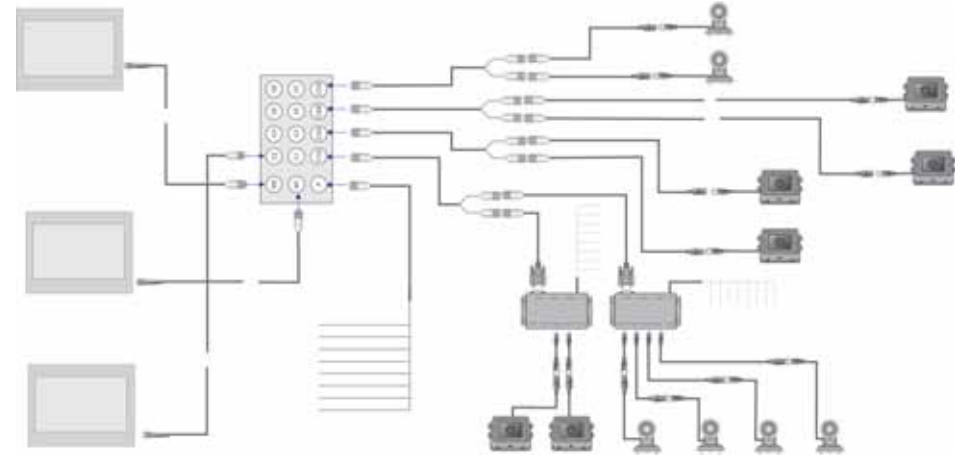
Efficient milling processes



Cameras – one each for both sides of the rail – are monitoring the milling of the rail surfaces. Operators are able to see the milling tool and its wear status, allowing them to exactly control the application and the change interval. These systems are tailored to the requirements of each individual application.

Allows the driver to see

- Persons in front of/behind the machine
- Milling tool, rails and exhaust system
- Milling of rails
- Status/wear rate of milling tool



17" Monitor

- For industrial and stationary applications
- Sturdy, resistant casing
- Casing degree of protection IP54 (front)



MB1406

- Individual display of 8 cameras
- CAN bus control possible
- Connection and power supply for 2 monitors
- Freely selectable control cables



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- Sturdy, weather-resistance aluminium casing
- Extremely high chemical and mechanical resistance



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