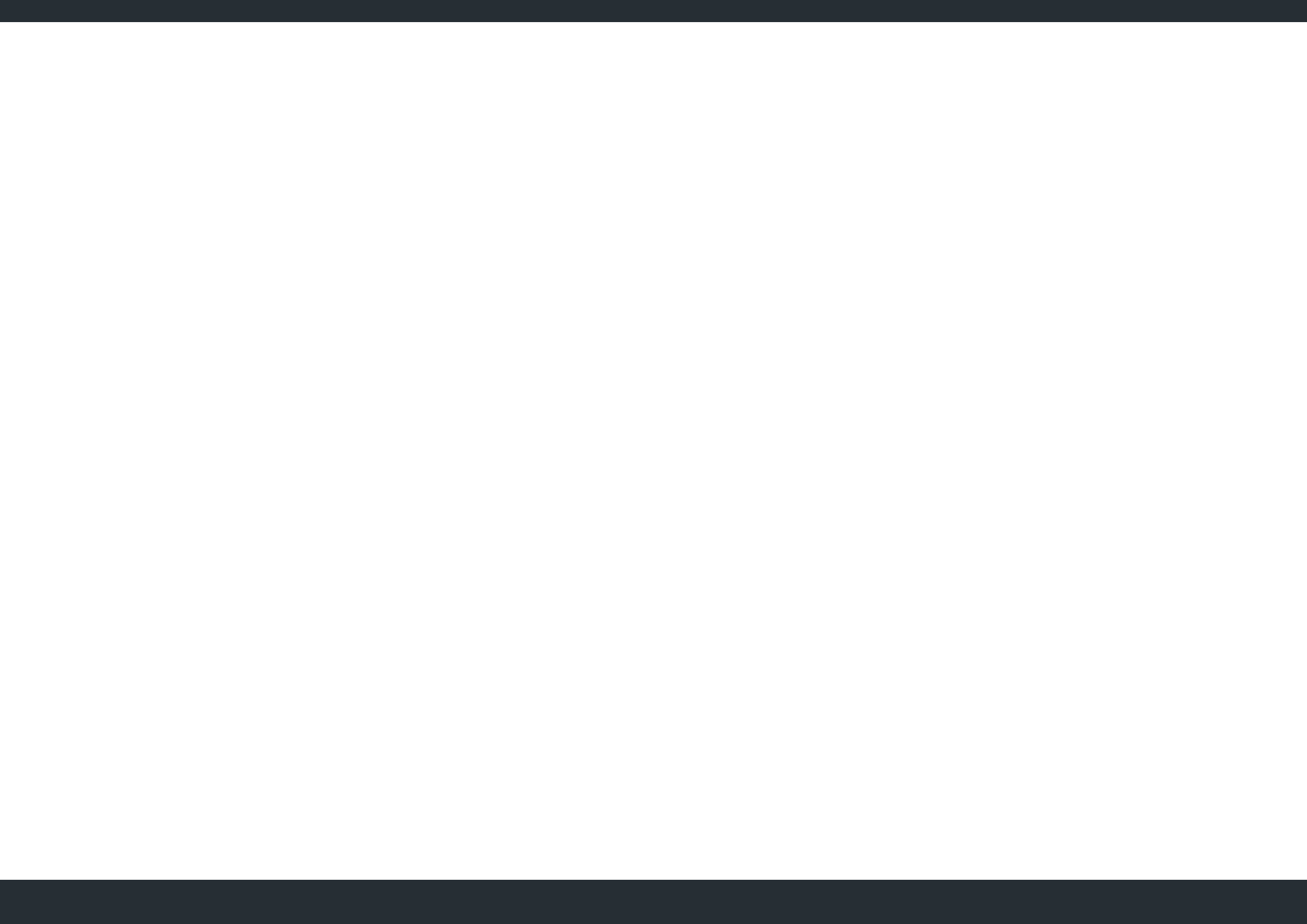




Logistics

The highest of safety

Motec camera systems for logistic, harbour and industrial applications



Motec

Systematic safety

Whether freight, rail traffic, industry, municipalities, logistics or agriculture – Motec has been one of the leading manufacturers of high-quality and intelligent camera monitoring systems for mobile applications for over 20 years. Our strength: Systems which we customise perfectly to your needs. High-grade components designed for continuous operation under the toughest conditions which function reliably in wind and rain.

Motec is a flexible and reliable partner for initial equipping. Our processes in the development, production and service are at OEM level and meet the industrial standards. Renowned international vehicle, machine and system manufacturers are relying on our systems and components since years and trust in our solution expertise.

Motec camera systems for logistic, harbour and industrial applications

Motec camera solutions offer drivers of forklifts and reach stackers a clear view of the machine track when transporting bulky loads and thus help to prevent serious accidents. They can also serve as an effective tool for helping the driver position the load, thus allowing them to maintain an ergonomic posture while working. This brochure contains a presentation of our selection of possible system solutions for your applications.

Monitors

- Top processing
- Easy installation
- High functionality
- Digital technology for the highest image quality
- Can be installed as modules

Cables and plugs

- More than 600 cables and connectors - robust, waterproof, reinforced
- Customised assembly
- Individual tailoring
- Every connection possible
- High quality material mix

Cameras

- Top processing
- Robust and resistant
- Suitable for high pressure cleaners (IP69K)
- Modern camera technology
- Can be installed as modules
- Automatically controlled camera heating

Certified quality

Top quality at all levels Motec is certified in accordance with ISO 9001 and ISO14001 and holds the AEO certificate as an “Authorised Economic Operator”.



Technical service

Fast help guaranteed

Top quality also includes top service. We are also available to assist you with technical questions or problems. Our sales and technology divisions work closely together. You will benefit from short distances and efficient communication. Our service employees know your needs, can understand your processes and quickly find a solution.

Associations



Forklift

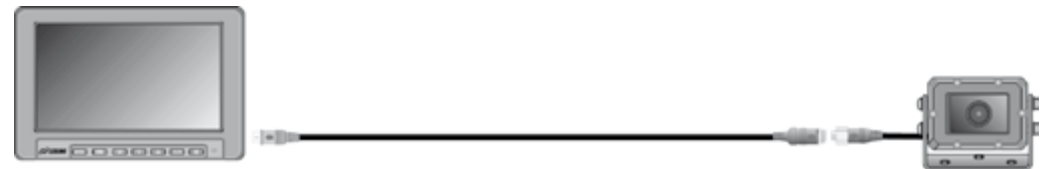
View of the driving direction



A camera on the lift mast allows a view of the directly in front of the forklift. The system can be expanded to include an automatically activated rear view camera.

Allows the driver to see

- Persons in the path of the forklift
- Objects and obstacles in front of the forklift



MD3071

- Screen size 17.8 cm (7")
- Connection of up to two cameras
- Image mirroring
- Sharp and high-contrast images even in heavy sunlight



MK496

- High-quality Motec-standard cable
- Waterproof plug connector IP67
- Meets the highest requirements in accordance with the industrial standard



MC3000A

- Robust housing of machined aluminium
- Extremely high chemical and mechanical resistance

Forklift

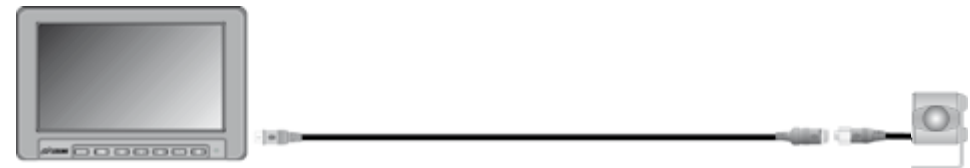
Monitoring of the rear view: Safe and ergonomic



A camera in the rear is automatically activated as soon as the forklift reverses. A plus for ergonomics: The driver sees the rear area without turning his head.

Allows the driver to see

- Persons and objects behind the forklift
- Distances to the stored goods and shelves



MD3071

- Screen size 17.8 cm (7")
- Connection of up to two cameras
- Image mirroring
- Sharp and high-contrast images even in heavy sunlight



MK496

- High-quality Motec-standard cable
- Waterproof plug connector IP67
- Meets the highest requirements in accordance with the industrial standard



MC7000P-E

- Modern image electronics (CMOS-Chip)
- Adapts easily to changing lighting conditions
- Sharp images even in back-light
- With stainless steel mount

Reach trucks

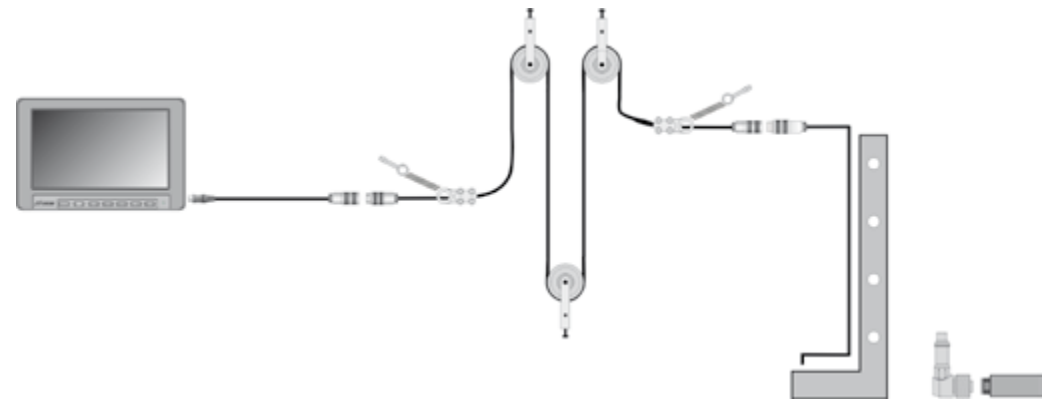
Fork shank camera system



In comparison to the mounted forks camera, the robust and compact MC9150 is attached to the fork shank. The camera is optimally protected against impacts and shocks. The image angle of 50° additionally offers a clear view of both forks.

Allows the driver to see

- Optimal view of both forks when loading and unloading



MD3071

- Screen size 17.8 cm (7")
- Connection of up to two cameras
- Image mirroring
- Sharp and high-contrast images even in heavy sunlight



MK554

- Stable and high-grade mast cable
- For laying through deflection rollers



MC9150

- Robust stainless steel housing
- Suitable for high pressure cleaners (IP69K)
- Shock resistance 100g
- 3mm pin hole objective
- CMOS sensor
- Optimal images even in poor lighting

Reach trucks

Fork tine camera system



The loading and unloading of deep loads in the warehouse requires precision and the full attention of the driver. A camera mounted on the fork enables faster and safer handling of the load.

Allows the driver to see

- Optimal view of both forks when loading and unloading



MD3072B-Quad

- Direct connection of up to four cameras
- Split screen - up to four images at one time
- Automatic camera selection
- Screen size 17.8 cm (7")
- Crystal clear images



FLT cable reel

- For the transmission of video signals
- Extremely robust
- Suitable for refrigerated warehouse
- Effective length: 10 Meter



MC9050

- Stainless steel housing
- Highest shock resistance up to 100g
- Mounting on the inside of the fork

Reach trucks

Duo-camera system



Two cameras, attached to the inner mast, allow simultaneous viewing of the right and left external sides of the pallet. Both camera images are displayed at the same time (split screen mode).

Allows the driver to see

- Optimal view beneath and on the sides of both forks



MD3100

- Screen size 25.9 cm (10.2")
- Stable metal housing
- Protection class IP54 (Front side)
- Crystal clear images



MK587

- Twin mast cable
- Transmits 2 camera images at one time
- Laying over deflection rollers



MC3000A

- Robust housing of machined aluminium
- Extremely high chemical and mechanical resistance

Reach trucks

Mast camera system



Motec compact cameras, mounted in the mast, are always at the height of the load and facilitate faster and safer handling of the pallets in high-bay warehouses.

Allows the driver to see

- Optimal view of the underside of the fork carrier on both forks



MD3074A-Quad

- Screen size 17.8 cm (7")
- Suitable for cold stores and outdoor applications
- Waterproof IP65
- Connection of up to four cameras



MK554

- Stable and high-grade mast cable
- For laying over deflection rollers
- Waterproof plug connector

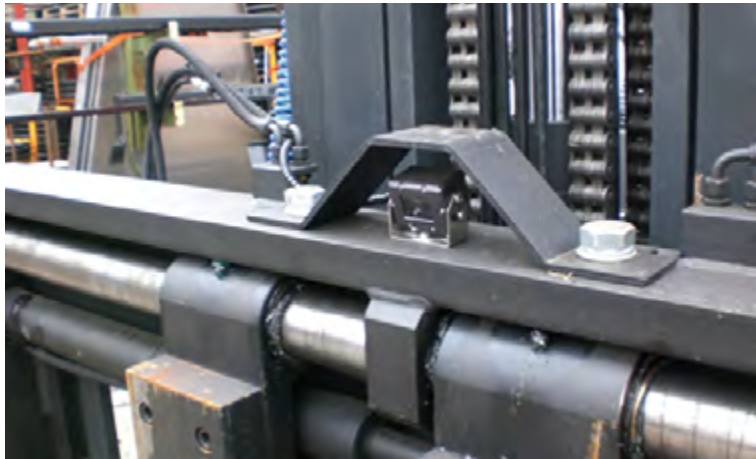


MC3000A

- Robust housing of machined aluminium
- Extremely high chemical and mechanical resistance

Attachments

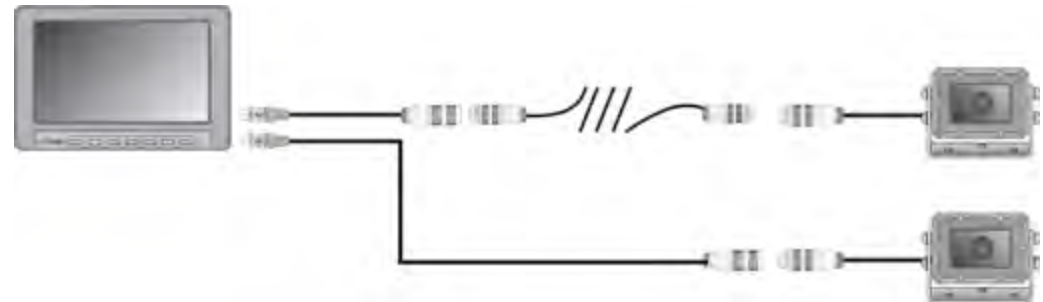
Visual aid for rotators, paper clamps or telescopic forks



Bulky loads such as those in the paper industry or rotators in heavy industry require special system solutions to support the driver effectively.

Allows the driver to see

- Loading during transport
- Immersion of the telescopic fork
- Position of the rotator
- Persons in the machine track



MD3071

- Screen size 17.8 cm (7")
- Connection of up to two cameras
- Image mirroring
- Sharp and high-contrast images even in heavy sunlight



MK588

- Robust spiral cable
- Easy and quick laying on the mast
- Waterproof plug connector



MC3000A

- Robust housing of machined aluminium
- Extremely high chemical and mechanical resistance

Electric tow tractor

Rear view monitoring



The trailer-mounted camera always ensures the driver a view of the entire area behind the vehicle when manoeuvring: They can better estimate distances, recognise obstacles on time and manoeuvre more safely with loads.

Allows the driver to see

- Persons and objects behind the vehicle



MD3052A-L

- Screen size 14.2 cm (5.6")
- Two switchable camera images
- Fits into every cabin
- Light protection hood
- Image mirroring



MK25-MA2

- Stable connection cable
- Suitable for winter road maintenance
- Coupling point for system change



MC6000C

- Stable and weather-proof housing
- High shock and vibration resistance
- Automatically controlled window heating
- Automatic brightness compensation

Reach Stackers

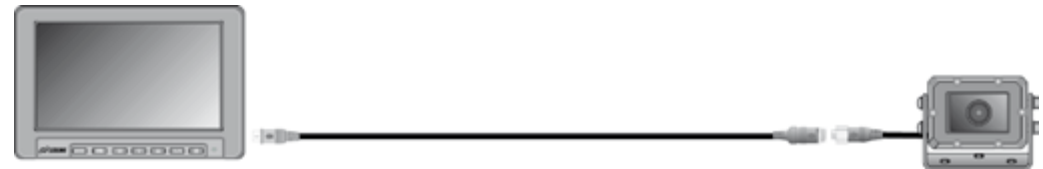
Rear view monitoring



Motec cameras provide a view of the rear area of the reach stacker and help the driver to quickly and safely load the containers.

Allows the driver to see

- Persons and objects behind the vehicle



MD3071

- Screen size 17.8 cm (7")
- Connection of up to two cameras
- Image mirroring
- Sharp and high-contrast images even in heavy sunlight



MK496

- High-quality Motec-standard cable
- Waterproof plug connector IP67
- Meets the highest requirements in accordance with the industrial standard



MC3000A

- Robust housing of machined aluminium
- Extremely high chemical and mechanical resistance

Reach Stackers

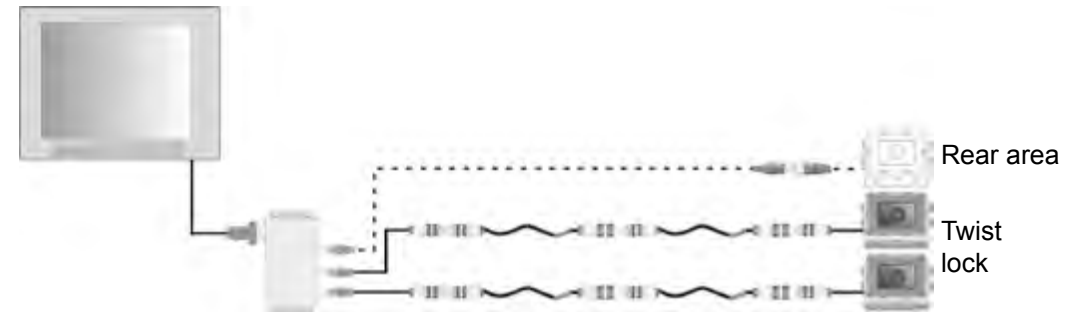
Twist lock monitoring and manoeuvring assistance for container handling



The mobility of reach stackers is restricted without camera technology. Side or rear-view mirrors are often not sufficient for viewing the entire rear area, let alone for driving the reach stacker safely and in a controlled manner.

Allows the driver to see

- Position of the twist locks for quick and safe handling
- Persons in the hazard zone



MD3100

- Screen size 25.9 cm (10.2")
- Stable metal housing
- Protection class IP54 (Front side)
- Crystal clear images



MB1405-Quad

- Easy control of up to four cameras
- Split function - up to four images at one time
- Camera selection using control cables or operating unit
- Power supply for cameras and monitors



MC3000A

- Robust housing of machined aluminium
- Extremely high chemical and mechanical resistance

Straddle Carriers

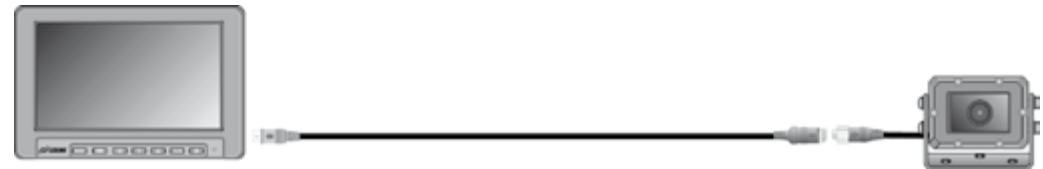
Rear-view monitoring



Motec cameras provide a view of the rear area of the machine even when a container is picked up.

Allows the driver to see

- Persons in the hazard zone behind the machine (rear area)



MD3071

- Screen size 17.8 cm (7")
- Connection of up to two cameras
- Image mirroring
- Sharp and high-contrast images even in heavy sunlight



MK496

- High-quality Motec-standard cable
- Waterproof plug connector IP67
- Meets the highest requirements in accordance with the industrial standard



MC3000A

- Robust housing of machined aluminium
- Extremely high chemical and mechanical resistance

Straddle Carriers

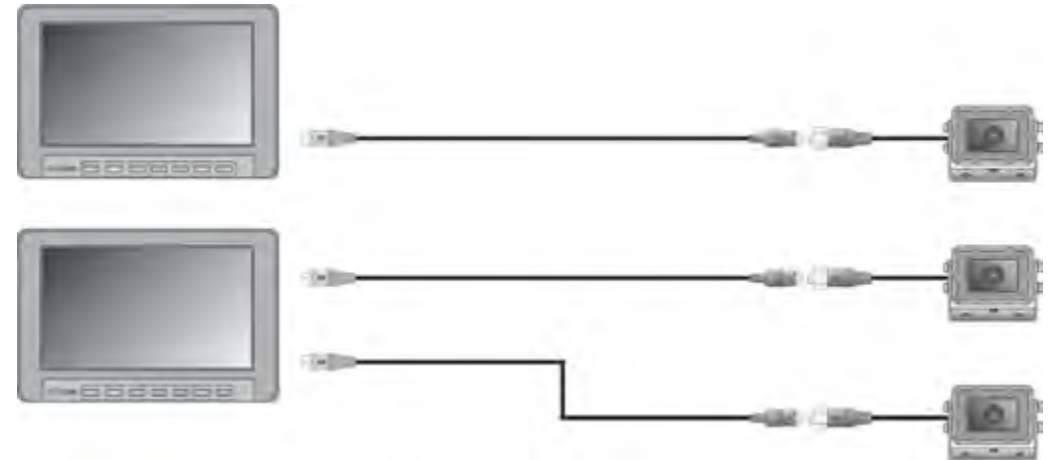
Quick and safe handling of containers



Motec cameras provides the best view of the twist locks. The images are transmitted to two monitors allowing the driver to position the container with millimetre precision.

Allows the driver to see

- Position of the twist locks for truck loading operations
- Persons and objects in the hazard zone



MD3071

- Screen size 17.8 cm (7")
- Connection of up to two cameras
- Image mirroring
- Sharp and high-contrast images even in heavy sunlight



MK496

- High-quality Motec-standard cable
- Waterproof plug connector IP67
- Meets the highest requirements in accordance with the industrial standard



MC3000A

- Robust housing of machined aluminium
- Extremely high chemical and mechanical resistance

Side stackers

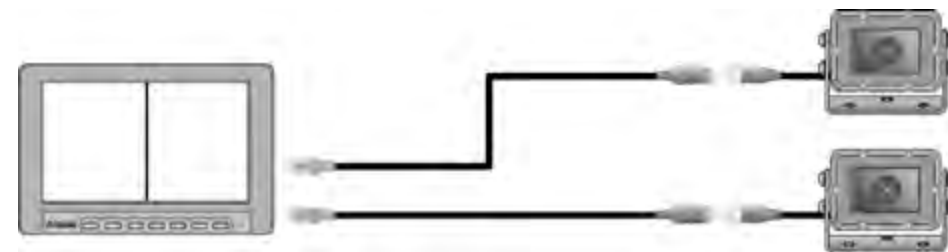
All-round camera view for more safety



Rear and side view cameras provide the driver with a view in all travel directions and increase driving safety.

Allows the driver to see

- Persons and obstacles in the side stackers surroundings
- The positioning of the forks when loading and unloading



MD3072B-Quad

- Direct connection of up to four cameras
- Split screen - up to four images at once
- Automatic camera selection
- Screen size 17.8 cm (7")
- Crystal clear images



MK496

- High-quality Motec-standard cable
- Waterproof plug connector IP67
- Meets the highest requirements in accordance with the industrial standard



MC3000A

- Robust housing of machined aluminium
- Extremely high chemical and mechanical resistance

Fourway sideloader

Fork carrier camera system



The loading and unloading of deep loads in the warehouse requires precision and the full attention of the driver. A camera mounted on the fork carrier enables faster and safer handling of the load.

Allows the driver to see

- Best view of the loading and/or the forks



MD3071

- Screen size 17.8 cm (7")
- Connection of up to two cameras
- Image mirroring
- Sharp and high-contrast images even in heavy sunlight



MK554

- Stable and high-grade mast cable
- For laying trough deflection rollers
- Waterproof connector



MC3000A

- Robust housing of machined aluminium
- Extremely high chemical and mechanical resistance

Log stackers

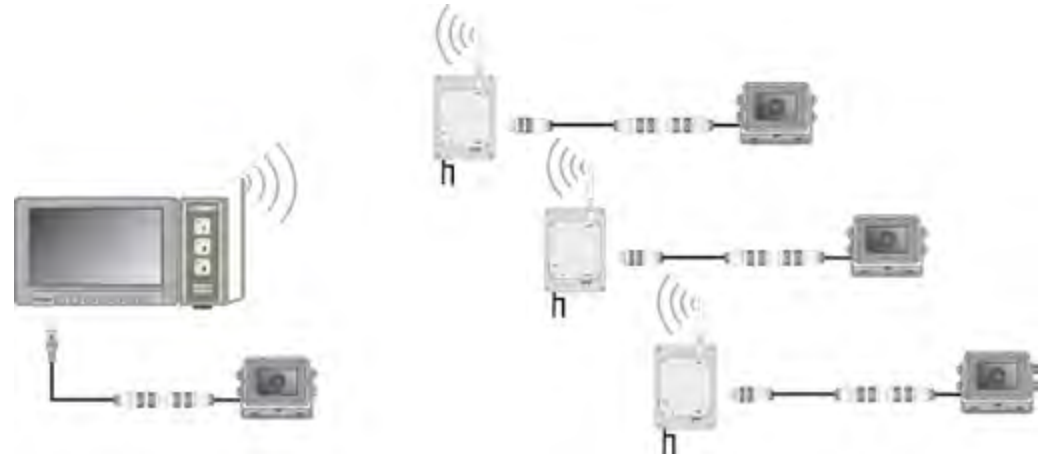
Efficient material handling using radio camera systems



The camera images on the shredder hopper are transmitted by radio to the monitor of the log stacker. The driver can thus detect material blockages sooner.

Allows the driver to see

- Fill level of the hopper
- Material blockage during the filling process
- Foreign objects in the hopper



MD3071

- Screen size 17.8 cm (7")
- Connection of up to two cameras
- Image mirroring
- Sharp and high-contrast images even in heavy sunlight



MVR6065

- Range: approx. 500 m
- 3 channels for trouble-free image transmission
- Frequency range 2.4 – 2.4835 GHz
- ISM Band
- Waterproof IP65



MC3000A

- Robust housing of machined aluminium
- Extremely high chemical and mechanical resistance

Telescopic forks

Palett handling



The camera is always well protected at the height of the fork on the inside of the pallet separator. With a 50° image angle the driver can always securely see both forks and the fork pockets of the pallets.

Allows the driver to see

- Optimal view of both forks when loading and unloading
- Good view even in poor lighting conditions with Motec Power Light LED



MD3071

- Screen size 17.8 cm (7")
- Connection of up to two cameras
- Image mirroring
- Sharp and high-contrast images even in heavy sunlight



MK554

- Stable and high-grade mast cable
- For laying over deflection rollers
- Waterproof plug connector



MC9150

- Robust stainless steel housing
- Suitable for high pressure cleaners (IP69K)
- Shock resistance 100g
- 3mm pin hole objective
- CMOS sensor
- Optimal images even in poor lighting

Forklift

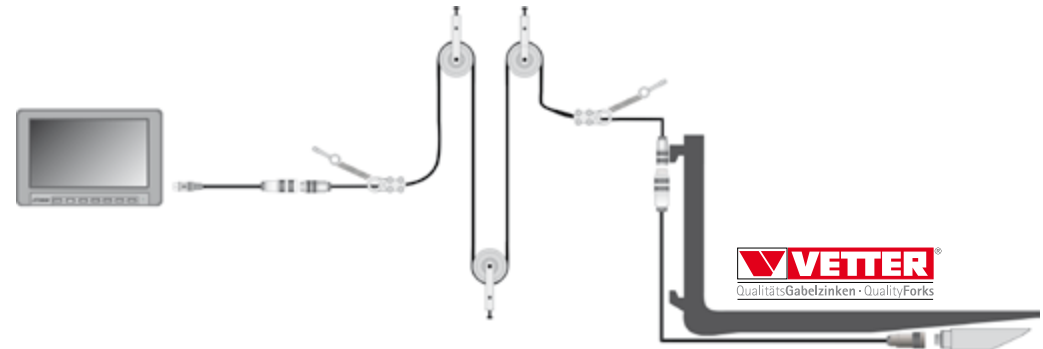
Truck loading – fork camera



The camera is integrated in the tip on the bottom side of the forks and is thus protected against mechanical damage.

Allows the driver to see

- Optimal front visibility even when a load is picked up
- Truck loading edge always in view



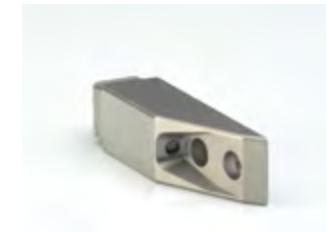
MD3071

- Screen size 17.8 cm (7")
- Connection of up to two cameras
- Image mirroring
- Sharp and high-contrast images even in heavy sunlight



MK554

- Stable and high-grade mast cable
- For laying through deflection rollers
- Waterproof plug connector



MC9050-1

- Stainless steel housing
- Highest shock resistance
- Mounting on the underside of the fork

Forklift

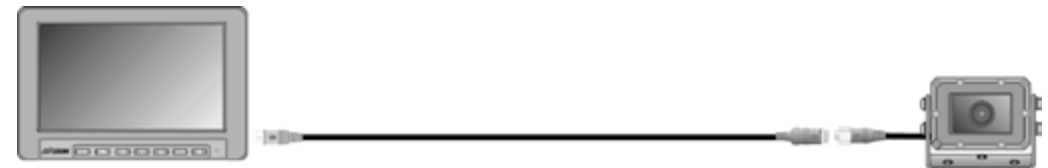
Truck loading



A camera mounted firmly on the lifting gear allows a view of the underside of the fork directly on the load. The system can be extended with an automatically activated rearview camera.

Allows the driver to see

- Optimal view of the loading edge
- Persons near the truck



MD3071

- Screen size 17.8 cm (7")
- Connection of up to two cameras
- Image mirroring
- Sharp and high-contrast images even in heavy sunlight



MK496

- High-quality Motec-standard cable
- Waterproof plug connector IP67
- Meets the highest requirements in accordance with the industrial standard



MC3000A

- Robust housing of machined aluminium
- Extremely high chemical and mechanical resistance

High-rack forklifts

Rear view monitoring



A camera on the rear lifting device allows the driver of this vehicle an ideal rear view.

Allows the driver to see

- Persons and objects behind the vehicle
- Distances to the stored goods and shelf



MD3074A-Quad

- Screen size 17.8 cm (7")
- Suitable for cold stores and outdoor applications
- Waterproof IP65
- Connection of up to four cameras



MPM48

- Suitable for cold stores
- Easy "backpack assembly" on the monitor rear
- Input voltage 48V



MC7000P-E

- Modern image electronics (CMOS-Chip)
- Adapts easily to changing lighting conditions
- Sharp images even in back-light
- With stainless steel mount

High-rack forklifts

Duo-camera system



Two cameras on the forks and one on the fork carrier allows a simultaneous view of the load and rack.

Allows the driver to see

- Ideal view of the fork tines
- Ideal view of the loading and the rack cross-beams above it.



MD3072B-Quad

- Direct connection of up to four cameras
- Split screen - up to four images at one time
- Automatic camera selection
- Screen size 17.8 cm (7")
- Crystal clear images



MC3000A

- Robust housing of machined aluminium
- Extremely high chemical and mechanical resistance



MC9150

- Robust stainless steel housing
- Suitable for high pressure cleaners (IP69K)
- Shock resistance 100g
- 3mm pin hole objective
- CMOS sensor
- Optimal images even in poor lighting

Storage and retrieval machine

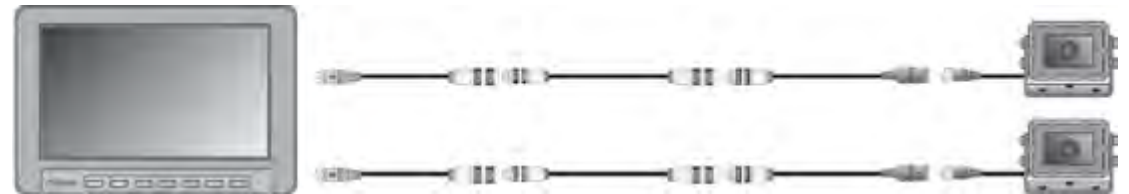
View of the telescope forks



The mounting of 2 cameras allows the operator a view of the space between the slide and shelf for detection of fault sources (such as paper, foil, etc.). This eliminates the need for time-consuming and dangerous climbing to locate the fault.

Allows the driver to see

- View of the space between slide and shelf for the detection of fault sources (such as paper, foil etc.)



MD3072B-Quad

- Direct connection of up to four cameras
- Split screen - up to four images at one time
- Automatic camera selection
- Screen size 17.8 cm (7")
- Crystal clear images



MK66

- For laying in the towing chain



MC3000A

- Robust housing of machined aluminium
- Extremely high chemical and mechanical resistance

Heavy-load forklifts

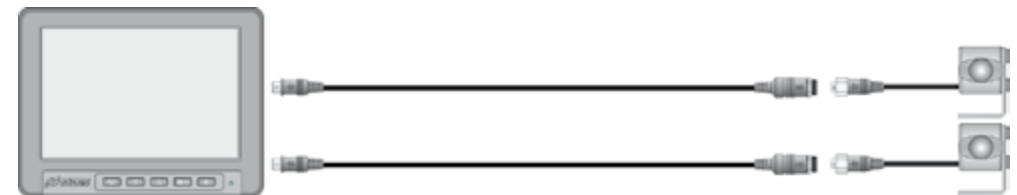
Front and rear view monitoring



Depending on the structure, the driver's front and rear view can be restricted. Automatic switching of the camera images between the front and rear areas.

Allows the driver to see

- Persons and objects around the forklift



MD3052A-L

- Screen size 14.2 cm (5.6")
- Two switchable camera images
- Fits in every cabin
- Light protection hood
- Image mirroring



MK496

- High-quality Motec-standard cable
- Waterproof plug connector IP67
- Meets the highest requirements in accordance with the industrial standard



MC7000P-E

- Modern image electronics (CMOS-Chip)
- Adapts easily to changing lighting conditions
- Sharp images even in back-light
- With stainless steel mount

Forklift load monitoring

Record, secure and transmit images



Cameras allows an ideal view of the load for the detection of damage and to document images for later analysis.

Allows the driver to see

- Optimal view of the load



MD3071

- Screen size 17.8 cm (7")
- Connection of up to two cameras
- Image mirroring
- Sharp and high-contrast images even in heavy sunlight



DVR-EDR410H

- Digital recording for mobile applications
- Supports up to 4 cameras and 2 monitors
- Automatic activation by switching signals
- Recording on removable hard disks suitable for mobile applications



MC3000A

- Robust housing of machined aluminium
- Extremely high chemical and mechanical resistance

Transport manipulators

Rear and front view monitoring

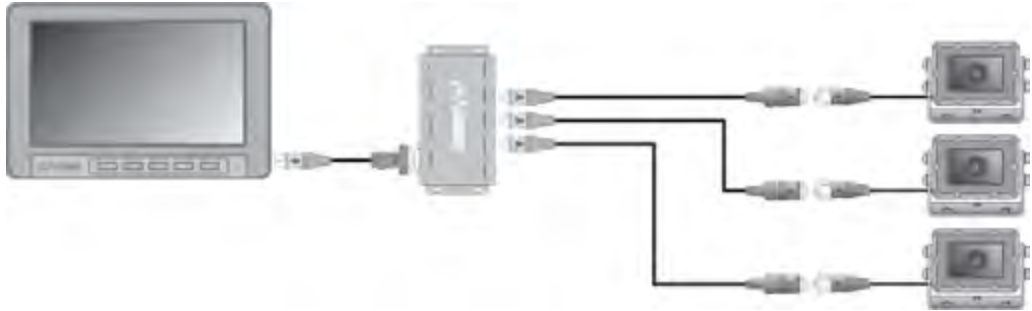


DANGO & DIENENTHAL Maschinenbau GmbH, Siegen, Deutschland (DDS)

Transport manipulators for the handling of heavy work-pieces between furnace and press in an open die forge.

Allows the driver to see

- Persons and objects around the machine
- No blind spots



MD3071

- Screen size 17.8 cm (7")
- Connection of up to two cameras
- Image mirroring
- Sharp and high-contrast images even in heavy sunlight



MB1405-Quad

- Easy control of up to four cameras
- Split function - up to four images at one time
- Camera selection using control cables or operating unit
- Power supply for cameras and monitors



MC3000A

- Robust housing of machined aluminium
- Extremely high chemical and mechanical resistance

Injection moulding machine

Workpiece monitoring



Cameras on the gripper and transport container secure control of the correct positioning of the workpiece or semi-finished product.

Allows the driver to see

- Correct positioning of the workpiece / semi-finished product in the transport box



MD3100

- Screen size 25.9 cm (10.2")
- Stable metal housing
- Protection class IP54 (Front side)
- Crystal clear images



MB1405-Quad

- Easy control of up to four cameras
- Split function - up to four images at one time
- Camera selection using control cables or operating unit
- Power supply for cameras and monitors



MC3000A

- Robust housing of machined aluminium
- Extremely high chemical and mechanical resistance

Forklift

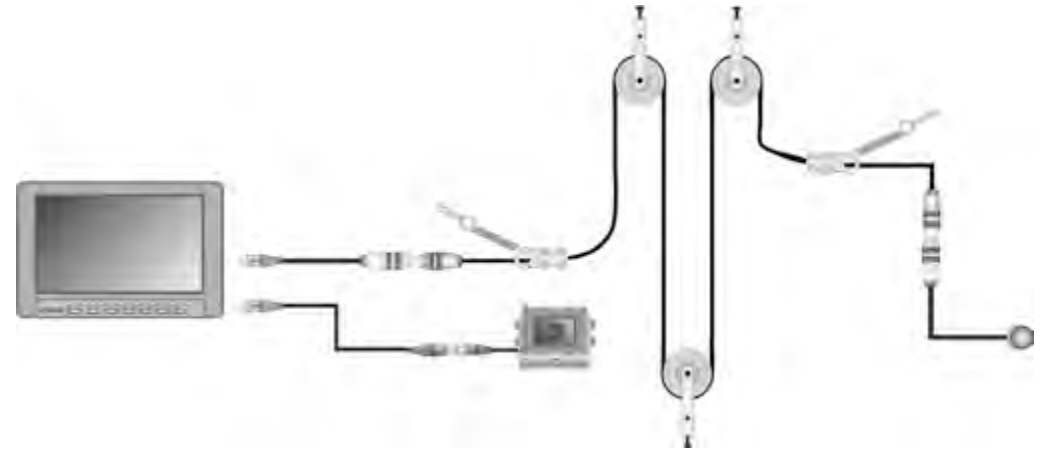
Coil transport



The driver's front view is blocked when transporting bulky loads such as coils.

Allows the driver to see

- Persons in the machine track
- Obstacles behind the forklift
- Area in front of the forklift for secure lowering of the coils



MD3072B

- Screen size 17.8 cm
- Built-in video control element
- Connection of up to two cameras
- Image mirroring

MK554

- Stable and high-grade mast cable
- For laying through deflection rollers
- Waterproof plug connector

MC7000P

- Modern image electronics (CMOS-Chip)
- Adapts easily to changing lighting conditions
- Sharp images even in back-light

Customised solutions for numerous additional sectors

System solutions



Construction machinery and cranes



Industrial systems and vehicles



Utility vehicles in freight traffic and communal use



Armoured and all-terrain utility and transport vehicles



Agricultural machinery



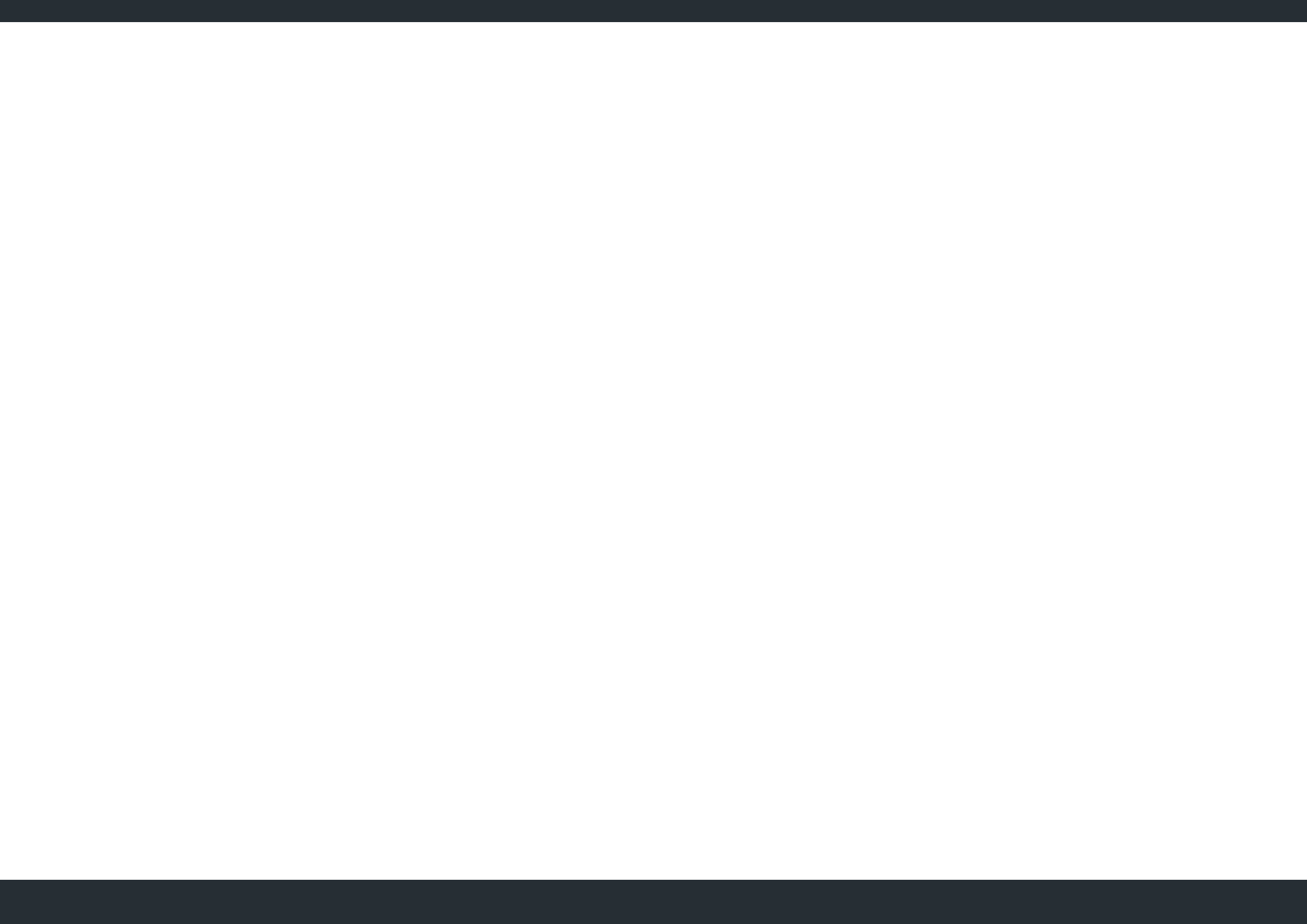
Track and railroad vehicles



Forklifts and industrial applications



Maritime and offshore applications





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Your local motec dealer

