



Camera Monitor Systems

FOR LOGISTICS, HARBOUR AND INDUSTRIAL APPLICATIONS

Motec Heavy-duty camera solutions

Motec specializes in the development and production of camera-based driver assistance systems for utility vehicles and mobile machinery.

Motec protects lives by making mobile machinery and their surroundings safer. Its cameras make operators' work easier by reducing stress and uncomfortable physical movements. And, it helps companies become more successful by accelerating processes and avoiding damage.

Motec has over 30 years of experience in the construction and manufacture of robust, reliable mobile cameras, including the associated electronics.

Its product range includes reversing cameras, industrial cameras, displays, advanced video controllers, DVRs, customer-specific wiring looms, and

wireless video transmission solutions.

Motec's customers are leading OEMs of utility vehicles and mobile machinery for industries working in tough environments.

At its development center for utility vehicle assistance systems (MENAS) Motec develops, tests and validates software algorithms for customized driver assistance systems. Its suite of algorithms incorporates solutions for real-time image processing, aerial view projection, sensor fusion, stereo view, image processing and driver assistance systems.

Motec is a unit of AMETEK Inc. a leading global manufacturer of electronic instruments and electro-mechanical products.



MOTEC CAMERA MONITOR SYSTEMS FOR THE LOGISTICS AREA

Motec camera monitor systems support the operator of large and complex vehicles to move them safely and more efficiently, regardless of the vehicle's size. With the assistance of extremely robust heavy-duty cameras, the operator can detect people and objects within the machine's danger zone before it is too late. This way, Motec systems save lives, make working conditions easier, and save costs.

Technical service – guaranteed fast support

Top quality means also top service. When faced with difficult technical challenges or questions that need answers, Motec can assist. Its sales and engineering departments work hand in hand. Customers benefit from efficient communication with no red tape. Motec engineers understand customers processes, know what they need and can find a solution quickly.

Hotline

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motec.service@ametek.com



ROBUST MODULAR HARDWARE AND INTELLIGENT SOFTWARE

- High housing protection rating
- Shock and vibration resistant
- Large temperature range
- Modular components
- Digital technology for superior image quality
- Development, validation and integration of algorithms
- Real-time image processing
- 270°/360° top-view projection
- Sensor fusion (ultrasonic/radar)
- Stereo cameras (object recognition)
- Operator assistance systems (active collision warning)

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Forklifts

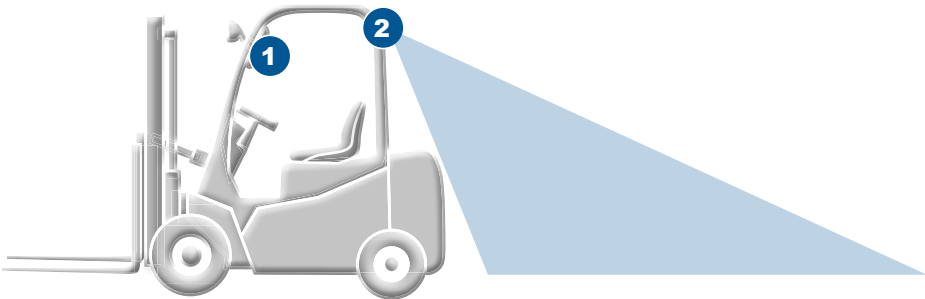
REAR VIEW MONITORING – SAFE AND ERGONOMIC

A camera at the rear – optionally with an angle of 115° or 180° – is automatically activated as soon as the truck is shifted into reverse. This way, people and objects behind the forklift truck are detected in time and accidents are avoided. This makes it also easier to judge distances to stored goods and racking so that material damage is less frequent.

Ergonomic advantage: the driver sees the rear area without having to turn around, which protects the driver's back and neck.



Various mounting positions for back room monitoring



EXAMPLE

MDDE1072
Digital 7" monitor

MCDE7000A
Ethernet camera

MDDE1072-EN45545



RAM-MH-15



MDDE1000-AK-1
12...36 V DC

PoE-Injektor

MCDE7115A-4D-pPoE

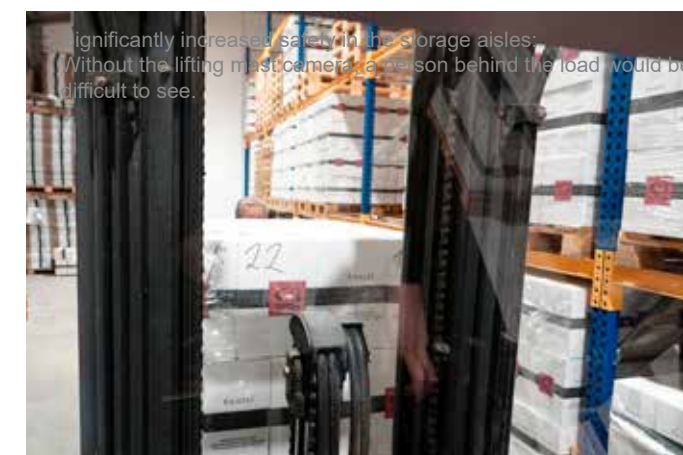


Forklifts

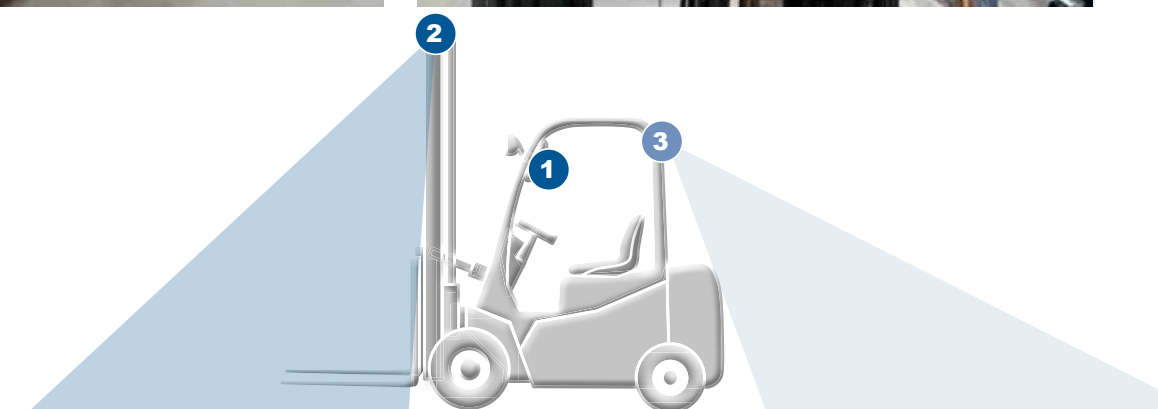
VISIBILITY OF CARRIAGE WAY

Large volume loads, e.g. in the beverage industry, block the driver's view to the front of the vehicle. A camera on the mast allows the operator to look ahead of the forklift truck into the storage aisle. This way, the driver can observe people in the lift truck's path and can detect objects and obstacles in front of his vehicle well ahead of time.

The system can be extended by a camera that is automatically activated when reversing the vehicle.



significantly increased safety in the storage aisles:
Without the lifting mast camera a person behind the load would be difficult to see.



EXAMPLE

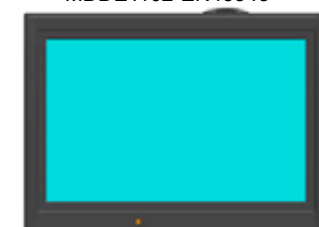
MDDE1102
Digitale 10" monitor

1

MCDE7000A
Ethernet camera

2

MDDE1102-EN45545



RAM-MH-15

MDDE1000-AK-1
12...36 V DC

PoE-Injektor

MCDE7115A-4D-pPoE

3 Optional rear area monitoring



Reach stacker

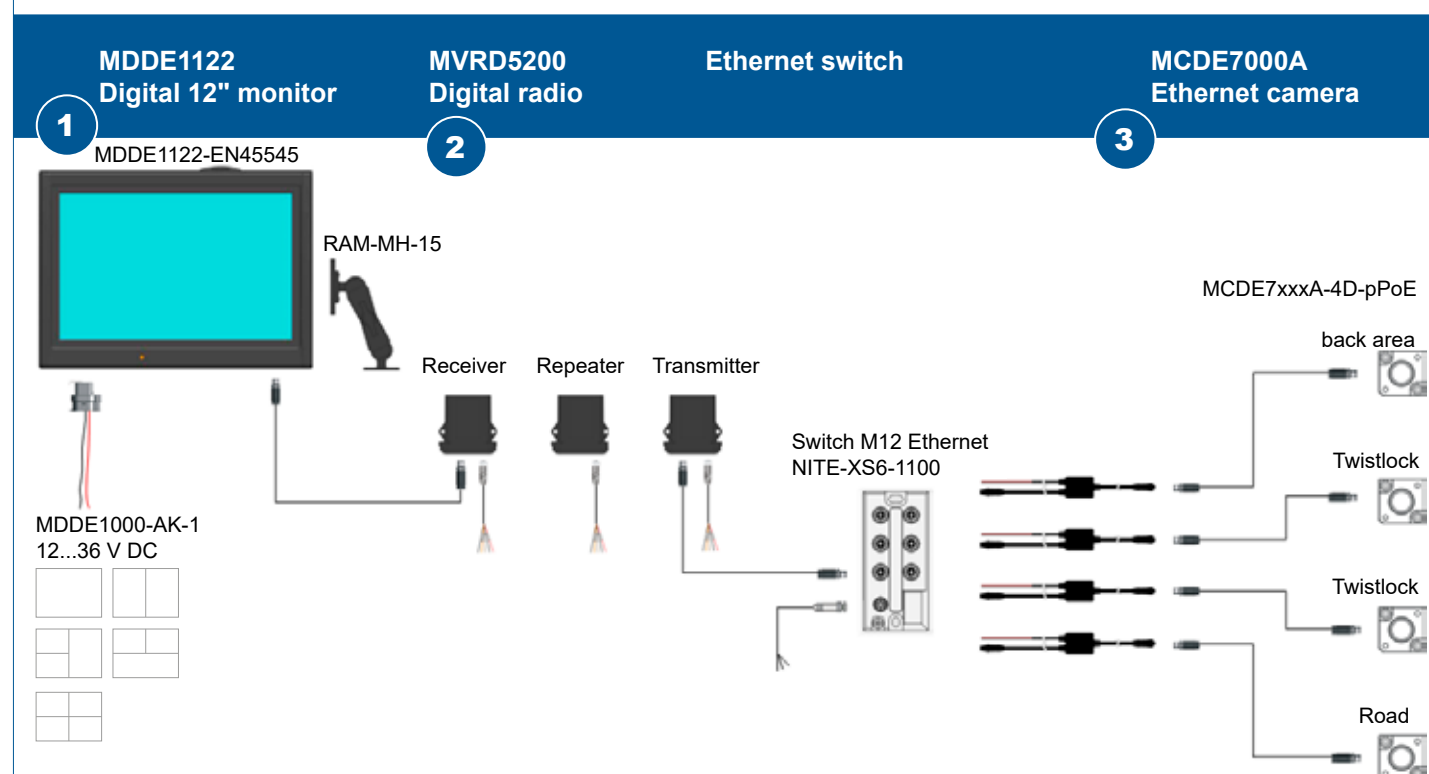
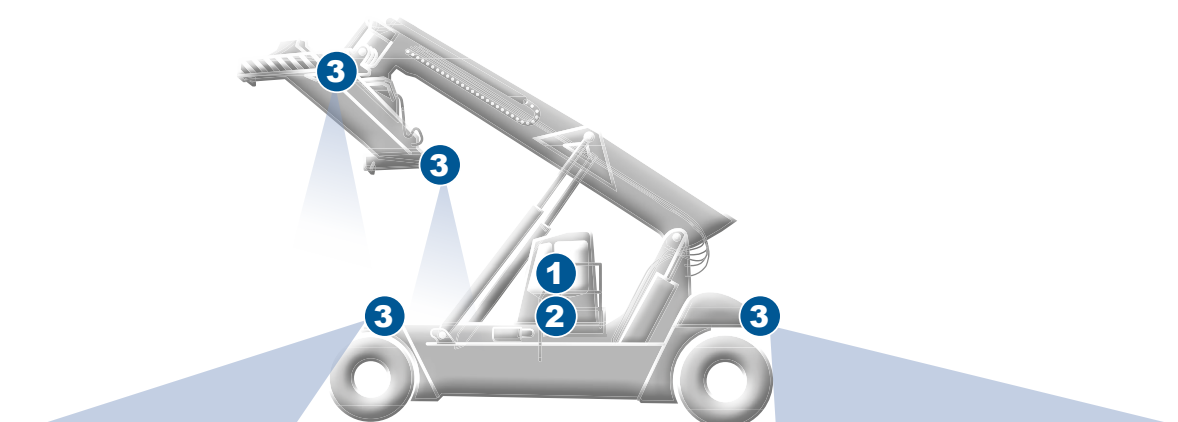
TWISTLOCK AND REAR VIEW MONITORING

The mobility of reach stackers is limited without camera technology. Motec cameras help the driver to see the rear area as well as the path ahead of him. The cameras help to assess distances and recognise persons or obstacles in the danger area well in time.

Additional cameras on the spreader support the driver and ensure the safe handling of containers by monitoring the position of the twistlocks. Consequently, it effectively prevents accidents and saves costs through fast operating procedures.



The cameras are mounted in such a way as to provide an optimum view onto the twistlocks.



Stationary and semi-stationary applications

EXAMPLE OF MACHINE TOOLS

In order to monitor production processes, cameras are mounted to the gripper and transport container. The cameras help you to verify the correct positioning of the workpiece or semi-finished product, or to display the filling level of the transport boxes.

This allows workflows and production planning to be optimised.

Alternatively, the system can be extended by a digital wireless system. In addition, it is possible to integrate an Ethernet camera.

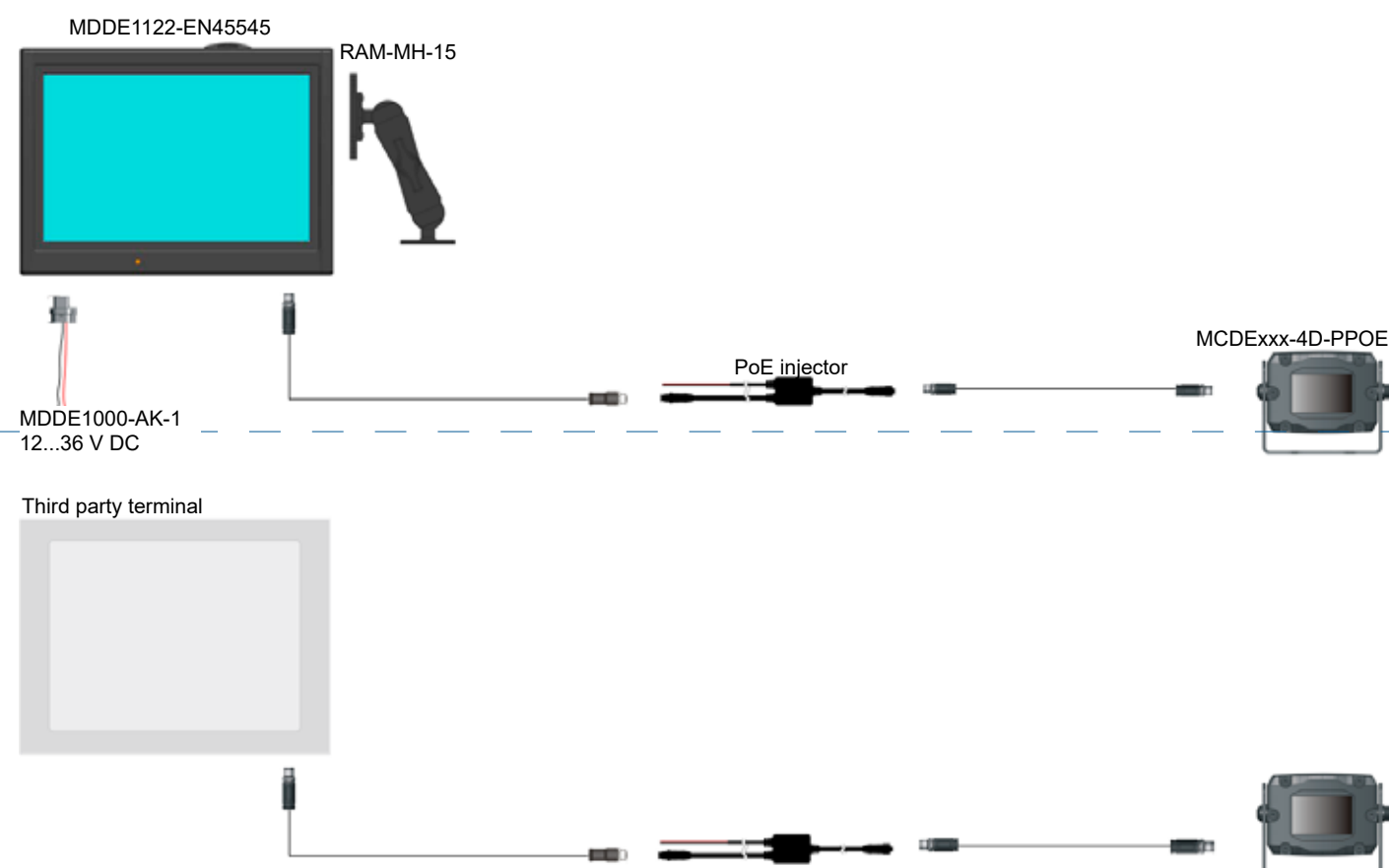


Camera-monitored workplace during line production.



MDDE1122
Digitale 12" monitor

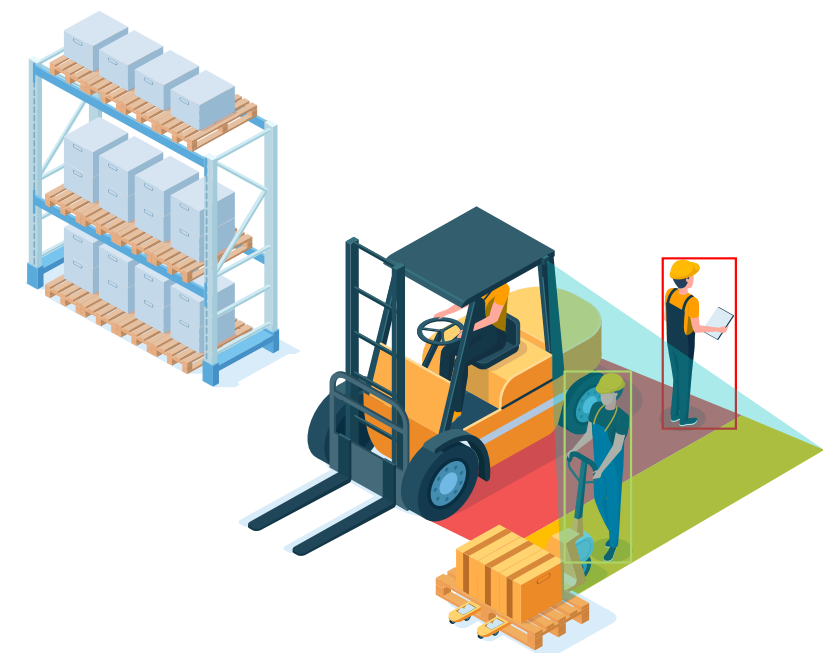
MCDE3000
Ethernet camera



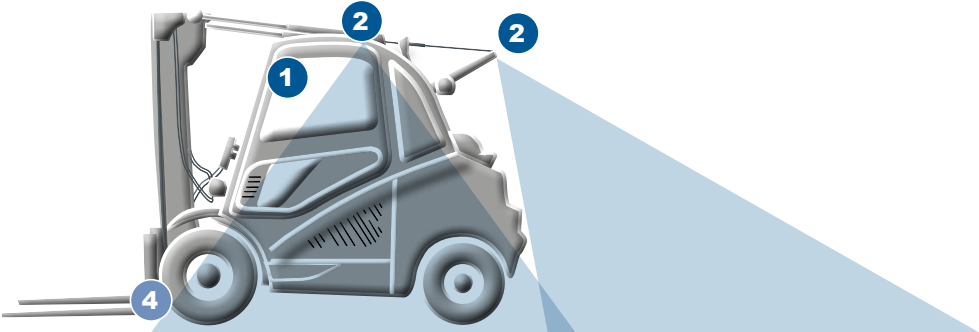
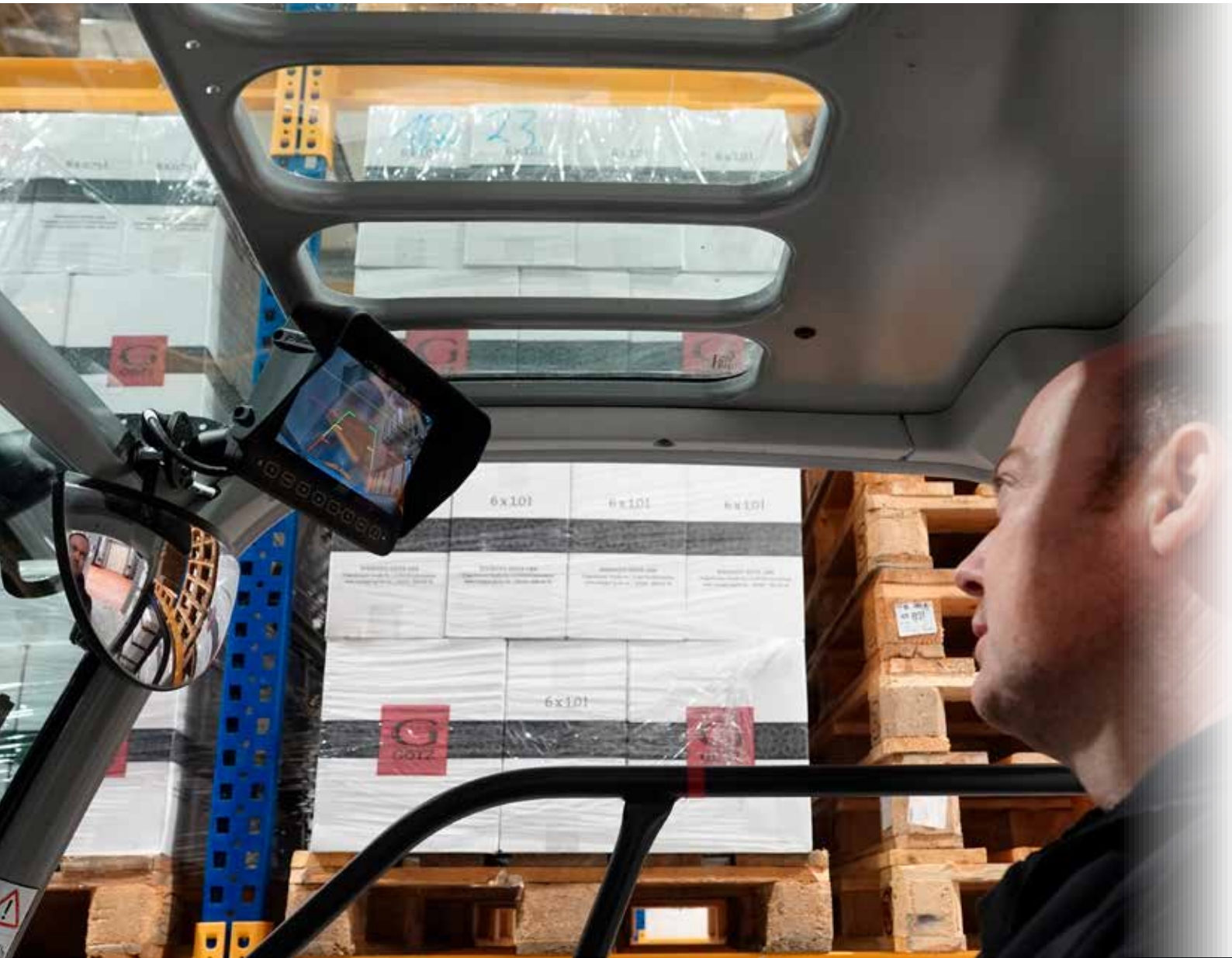
TVI AI Person Detection System
SAFETY FROM EVERY PERSPECTIVE

The TVI person detection system by Motec offers an innovative solution to enhance vehicle and personnel safety. Specially trained AI software recognizes persons in the defined warning zone and alerts the operator, providing vastly improved safety. Alarm signals are effectively filtered to prevent false alarms that could result in stress and desensitization of the driver. Only relevant warning signals reach the driver, eliminating unnecessary alerts.

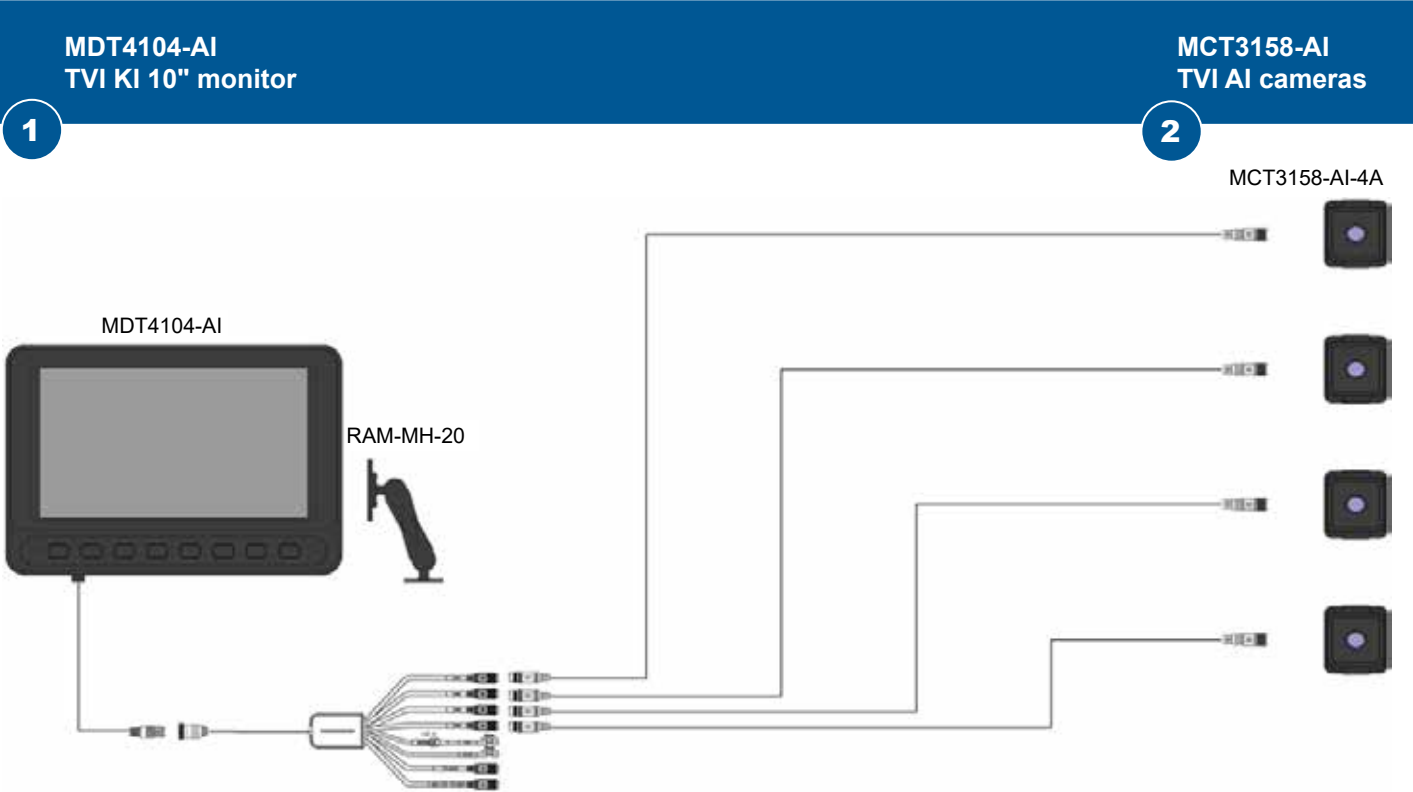
The result: Improved reaction time, enhanced vehicle and personnel safety, reduced risk of accidents and reduced costs.



TVI AI system:
People or objects are detected in different zones.



EXAMPLE



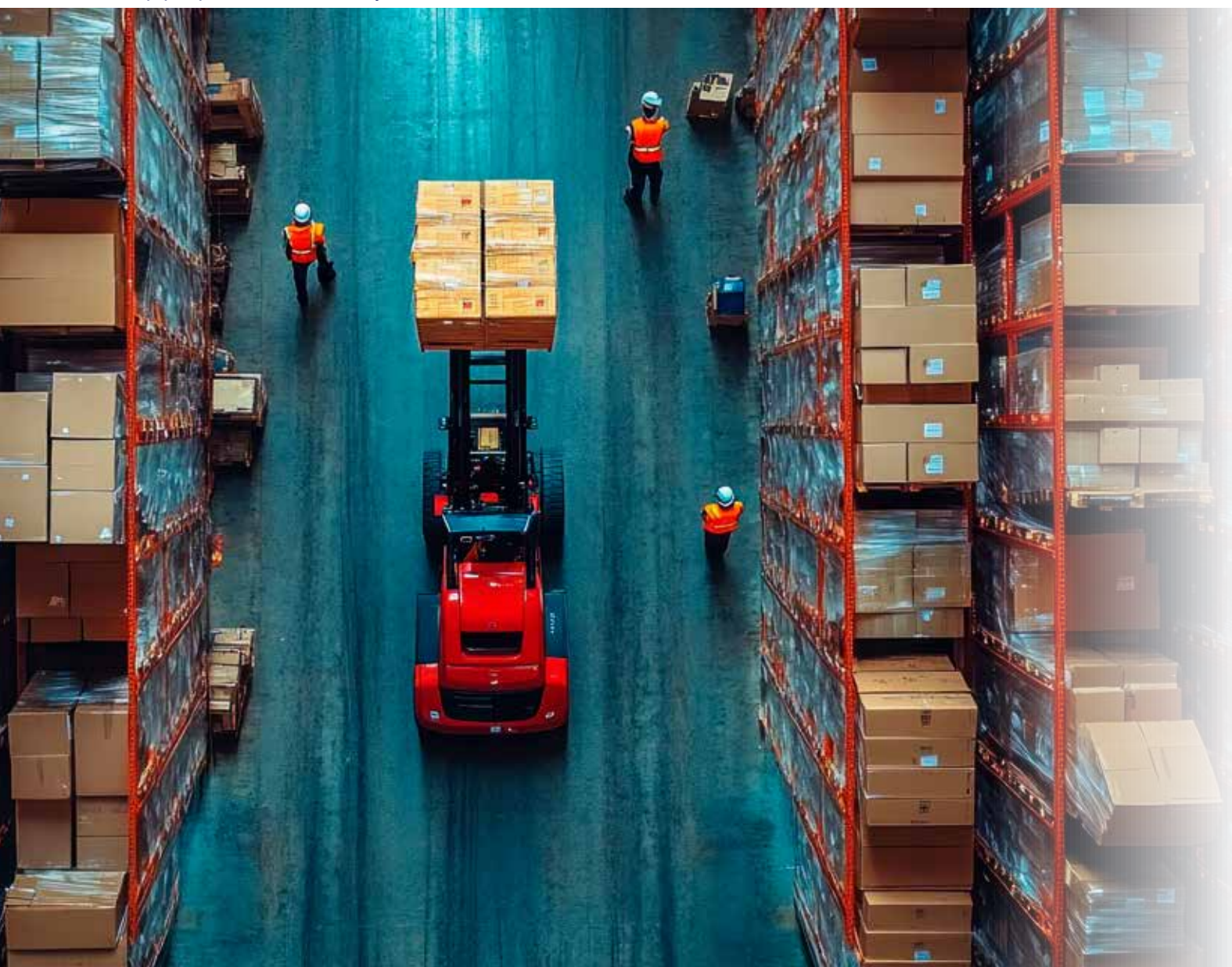
3D Bird's Eye View System TVI

SAFETY FROM EVERY ANGLE

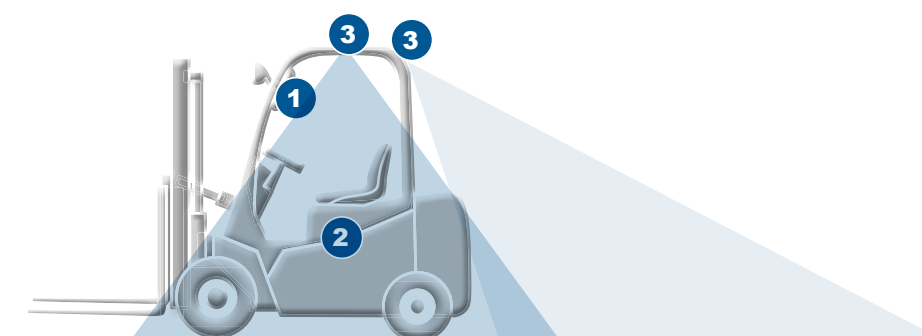
At Motec, we pride ourselves on providing cutting-edge solutions for enhancing vehicle safety and awareness. Our Heavy-Duty 3D Top View System TVI is designed to revolutionize the way you navigate your surroundings, offering unparalleled visibility and peace of mind on the road. Motec's Heavy-Duty 3D Top View System TVI meets all the requirements of heavy-duty and commercial vehicles used in logistics, but also many other applications such as agriculture, construction, municipal applications, on-road transportation etc.

The robust design guarantees a long service life in harsh conditions. Thanks to its flexibility, it can be used for a wide range of vehicles and the associated visibility problems.

Motec's Heavy-Duty 3D Top View System TVI protects lives, help people and save money.



Intelligent combined view tailored to your vehicle's application (29 view modes)

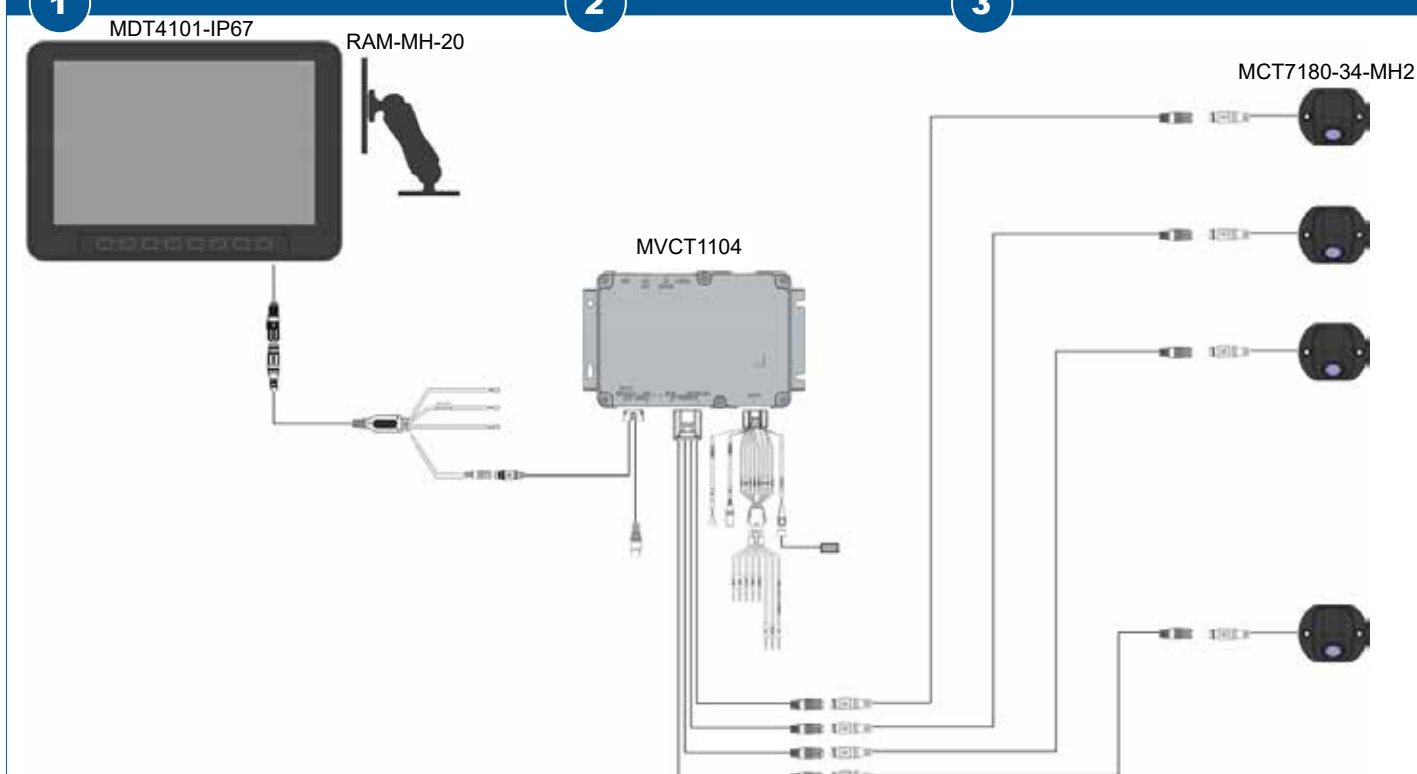


EXAMPLE

MDT4101-IP67
TVI 10" monitor

MVCT1104
TVI video controller

MCT7180-34-MH2
TVI camera



Reach trucks
FORK-MOUNTED CAMERA

The loading and unloading of extremely long and deep loads in the warehouse requires precision and the driver's careful attention. A fork-mounted camera makes it possible to monitor both forks.

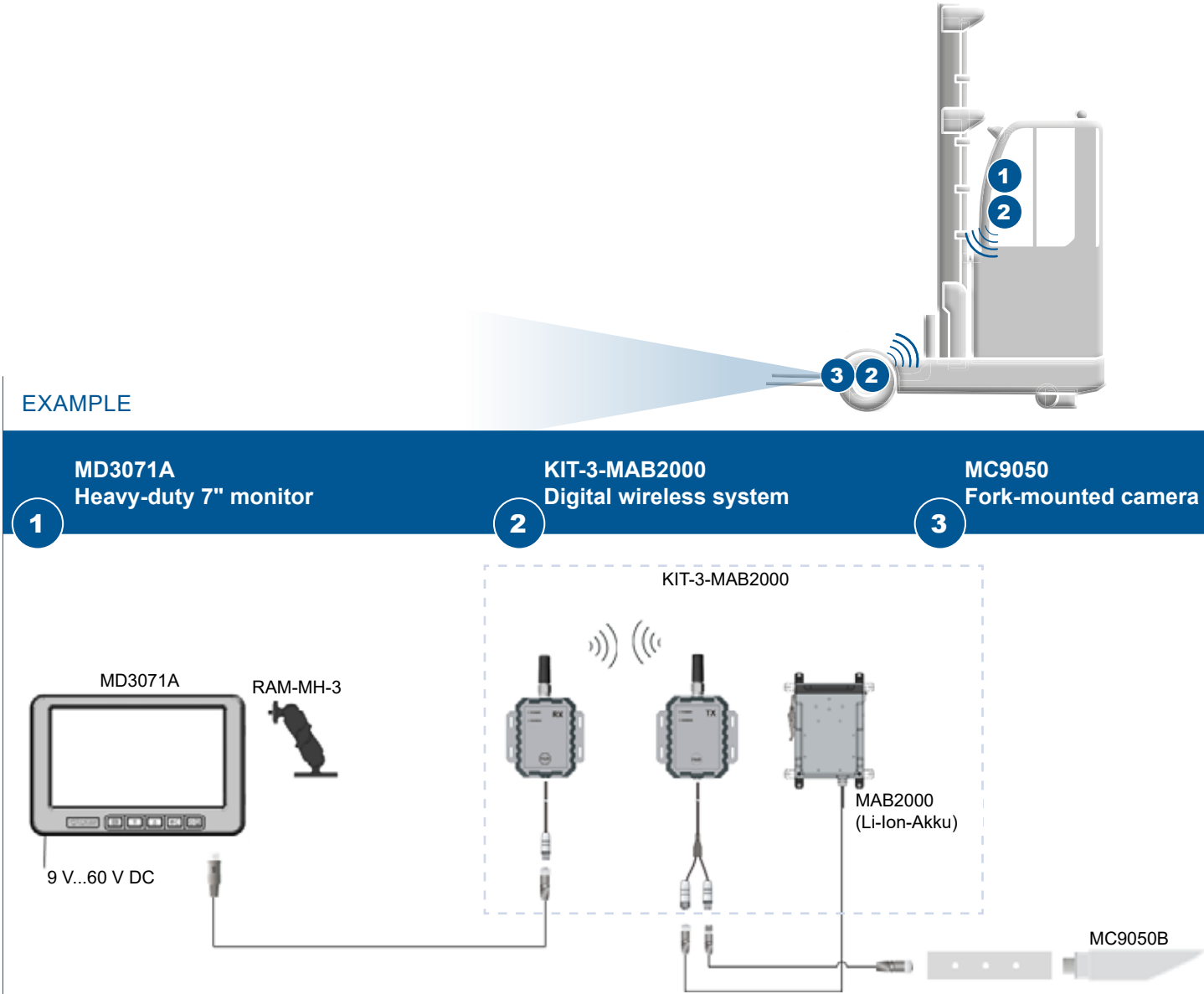
In order to avoid the installation of cables inside the mast, a wireless system can be installed. Digital signals provide the image transmission from camera to monitor across short or long distances. Several unit pairs operated in parallel allow high flexibility for the adaptation to a variety of forklift and visualisation problems.



The fork camera on the reach truck allows the view onto both forks.



EXAMPLE



Reach trucks

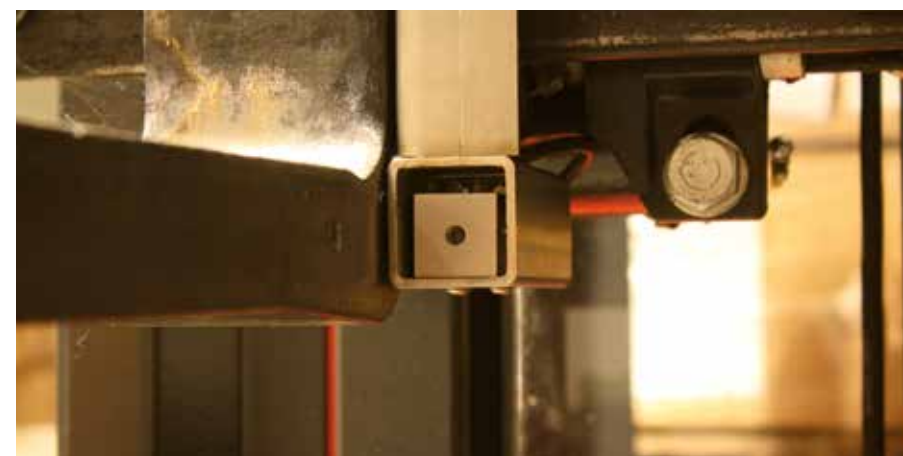
FORK SHANK CAMERA

Compared to the add-on fork-mounted camera, the rugged and compact MC9150B is mounted to the back of the fork. This provides the best protection for the camera against shocks and impacts. The 3 mm pinhole lens is also protected to prevent damages caused by pallet cages or pallets due to a pinhole opening.

The 50° angle of view provides an unobstructed view onto both forks facilitating the loading and unloading of goods.



Increased safety when used at high lifting heights and in poorly visible positions, thanks to Motec camera systems.



Protected installation position of the fork shank camera.

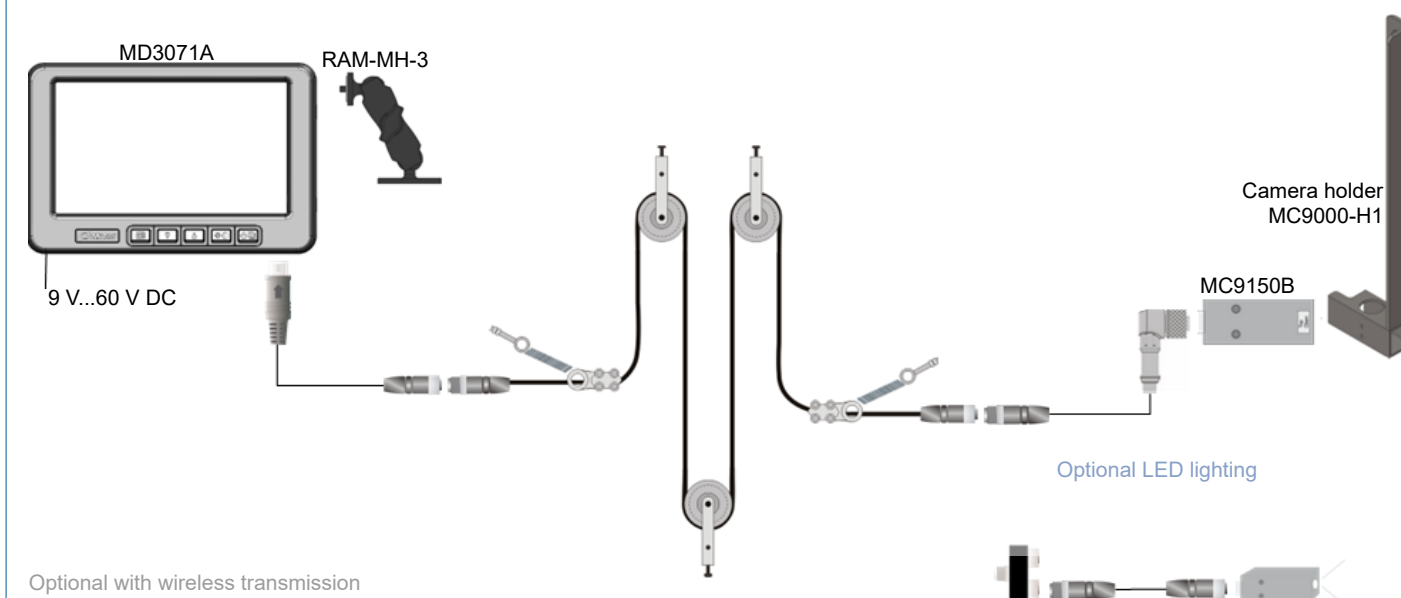


EXAMPLE

MD3071A
Heavy-duty 7" monitor
1

MK554
Mast cable

MC9150B
Fork shank camera
2

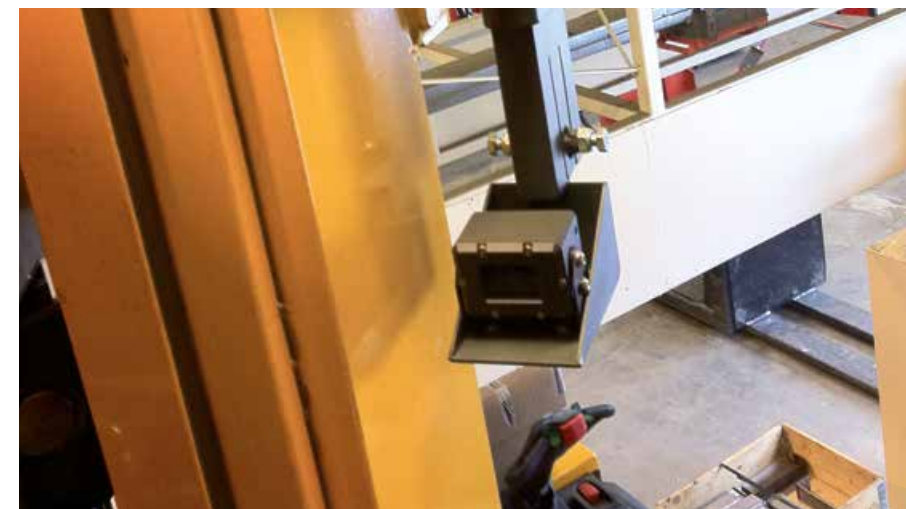


Reach trucks

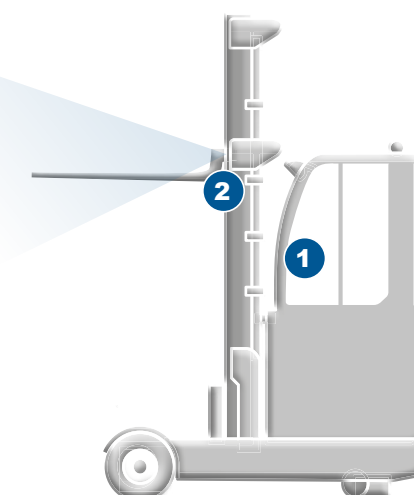
DUO CAMERA SYSTEM

2 cameras, fixed to the inside mast, also allow the view to the outer right- and left-hand side of the pallet. Both camera images are displayed simultaneously on the monitor (split-screen mode).

The operator can visualise both forks and can see the area below and to the side of the forks or load.

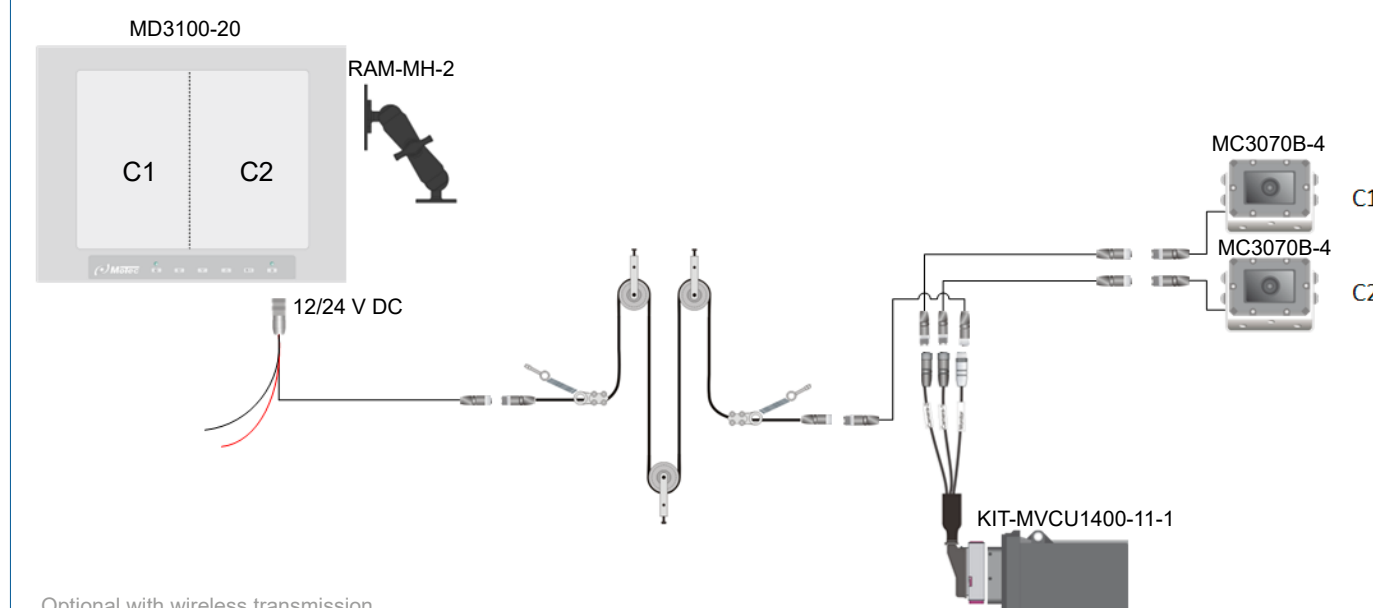


Cameras allow simultaneous viewing of the outer left- and right-hand side of the pallet.



EXAMPLE

1	MD3100 Heavy-duty 10,2" monitor	MK554 Mast cable	KIT-MVCU1400 Video control unit	2	MC3000B Heavy-duty camera
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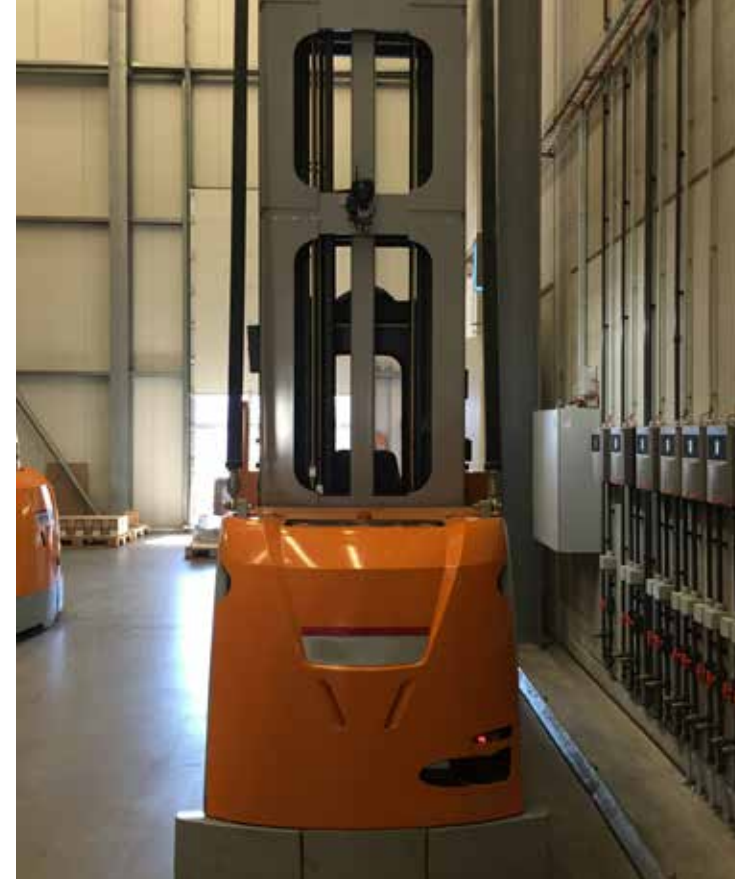


Optional with wireless transmission

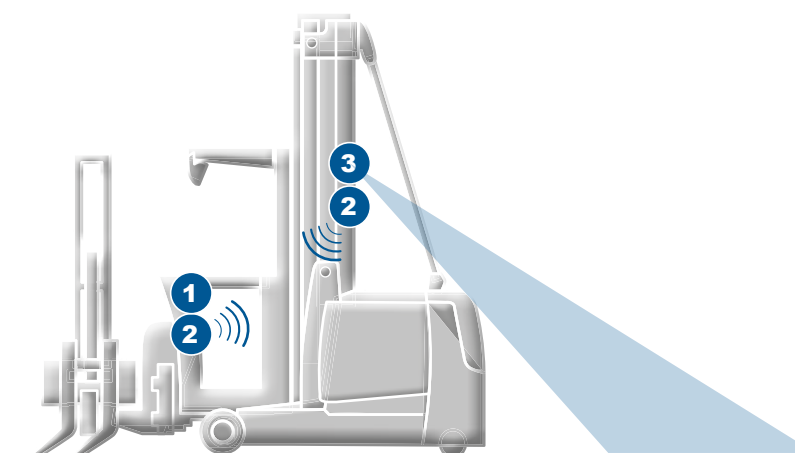
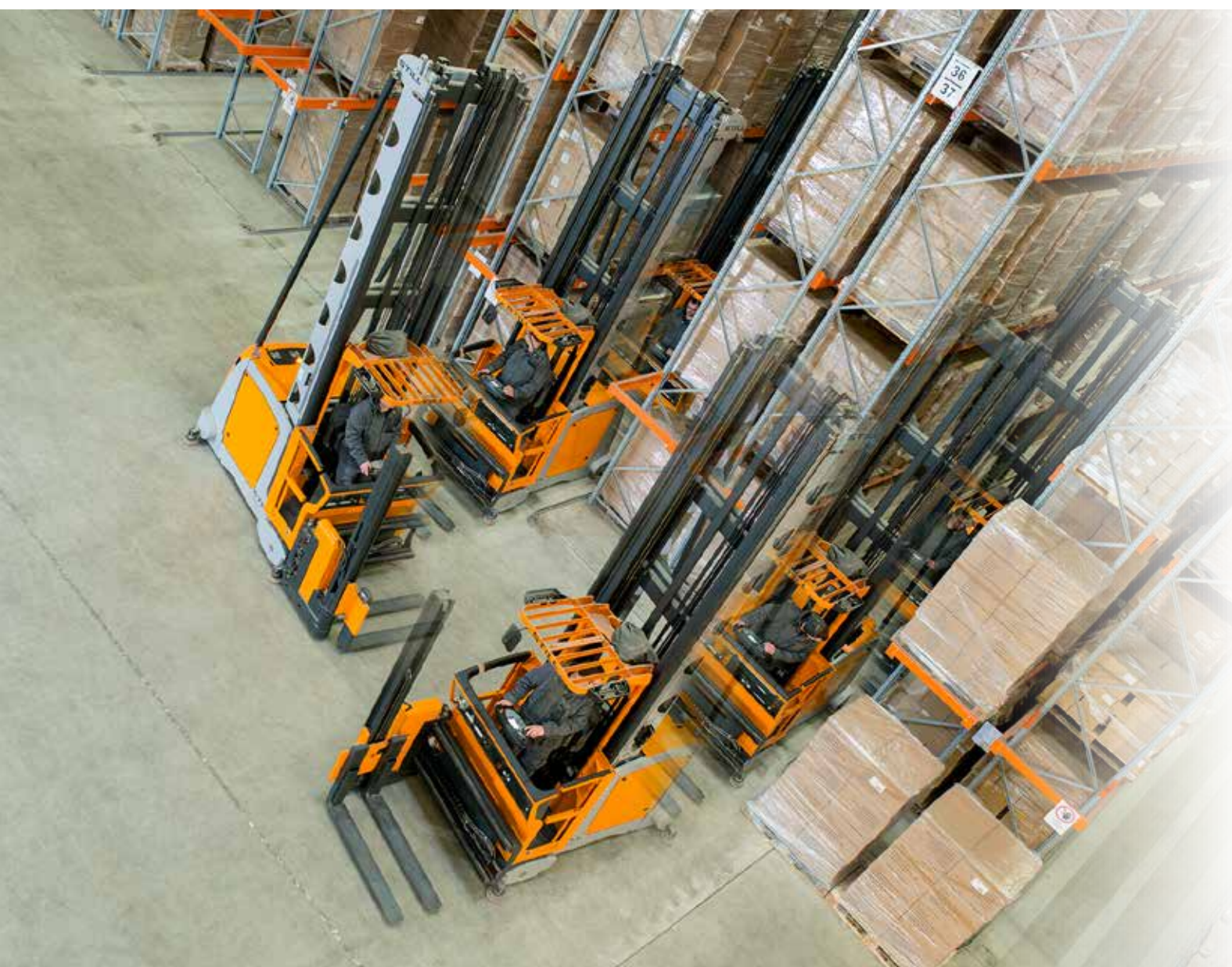
High rack stackers

REAR VIEW MONITORING

High rack stackers use a camera that is attached to the rear mast. The camera is activated automatically as soon as the driver engages the reverse gear. This way, people and objects behind the forklift truck are detected in time and accidents are avoided. This makes it also easier to judge distances to stored goods and racking so that material damage is less frequent. Ergonomic advantage: the driver sees the rear area without having to turn around, which protects the driver's back and neck.



Camera mounted to the rear mast.

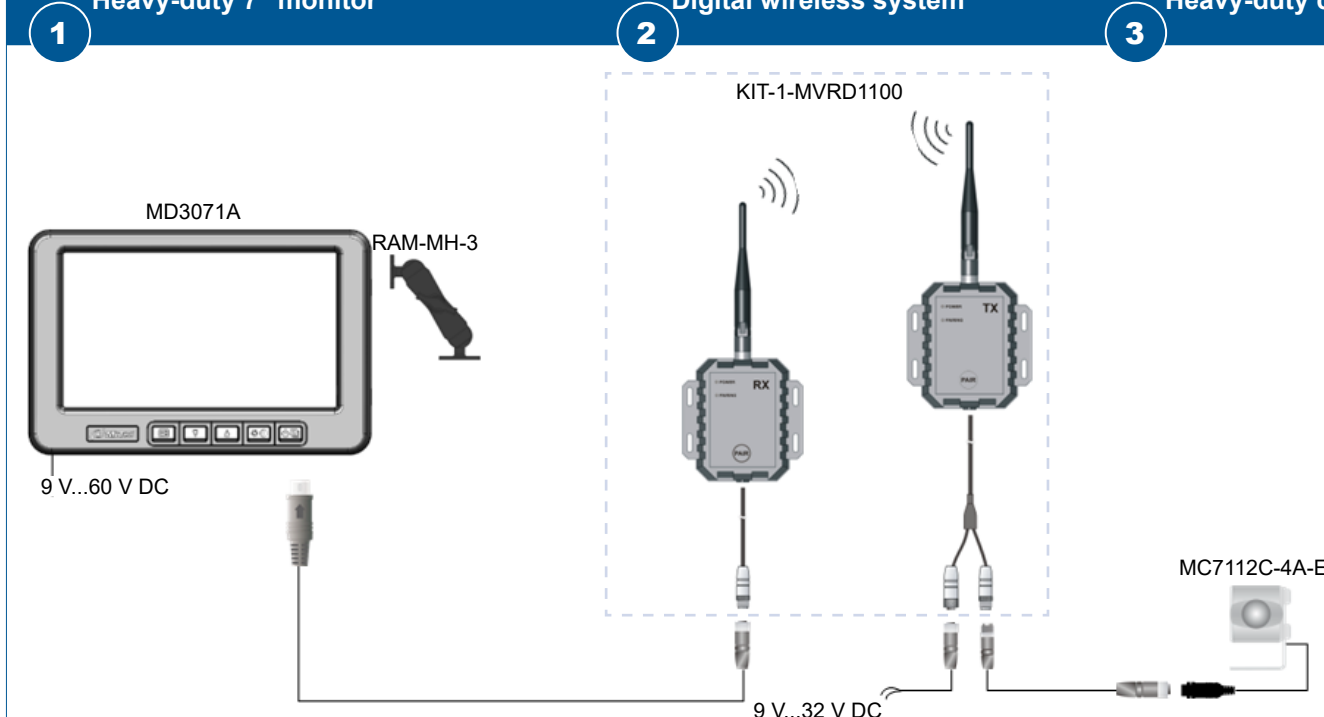


EXAMPLE

MD3071A
Heavy-duty 7" monitor

KIT-1-MVRD1100
Digital wireless system

MC7000C
Heavy-duty camera



Forklifts

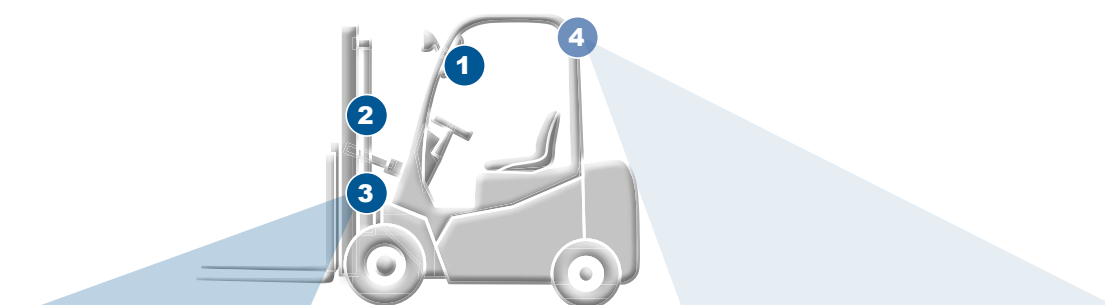
CARRIAGE MOUNTED CAMERA

The fork carrier camera provides the operator with an optimal view onto the forks and the area in front/underneath his vehicle. This allows a safe access into a variety of load carriers. In addition, the camera provides an indirect view of the area in front of the truck.

The system can be extended by a camera that is automatically activated when reversing the vehicle.



A carriage mounted camera is lifted simultaneously with the load.

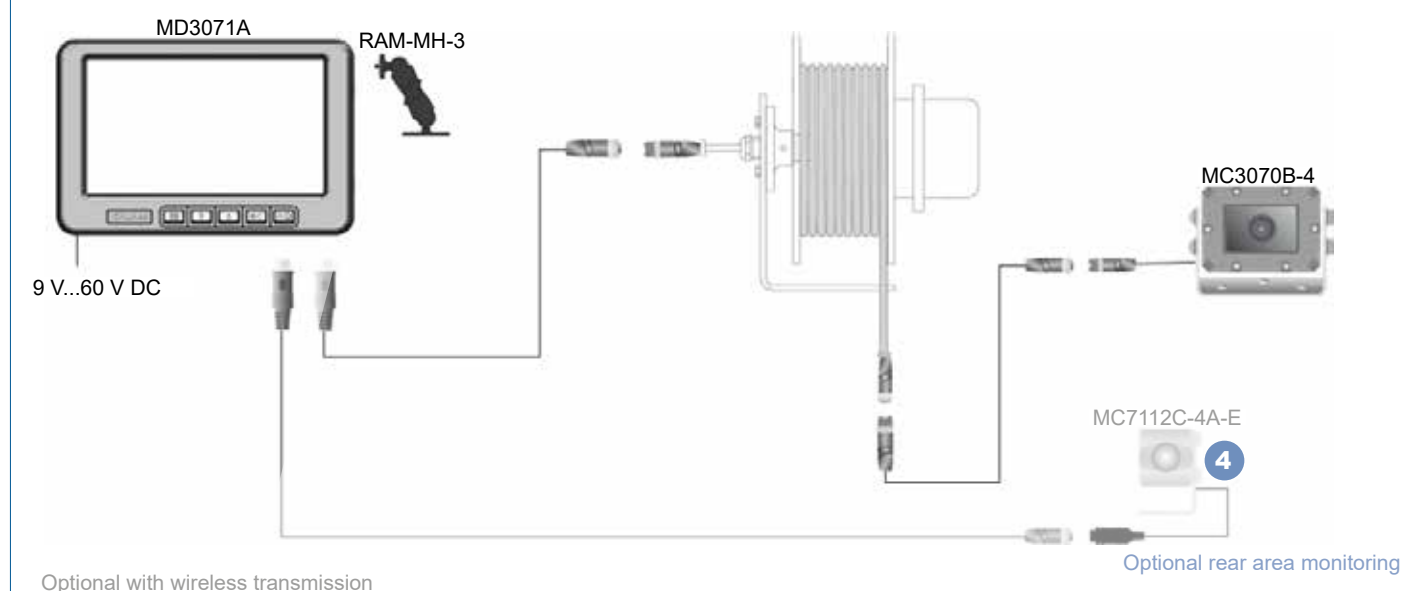


EXAMPLE

MD3071A
Heavy-duty 7" monitor
1

FLT
Cable drum
2

MC3000B
Heavy-duty camera
3



Forklifts

TRUCK LOADING WITH IMAGE RECORDING

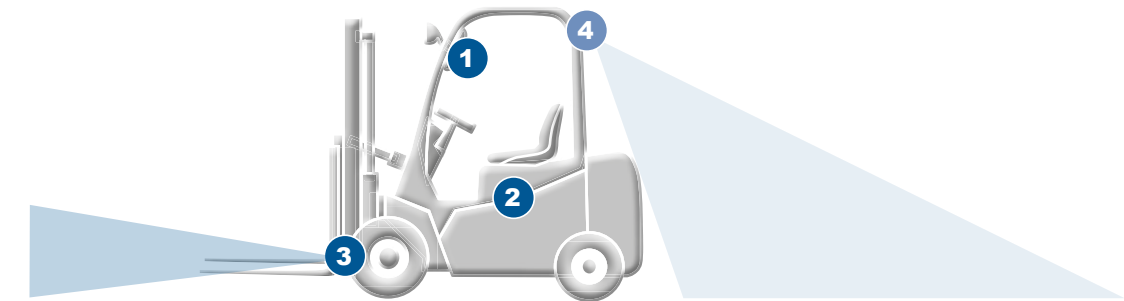
A camera mounted on the mast allows you to look underneath the lift truck forks, directly onto the load or loading edge.

In addition, a WLAN-capable digital recorder with a recording capacity of up to 5 days can be connected. A live view and recording of the images are possible simultaneously. Recording takes place at the push of a button and can be event- or time-controlled.

The system can be extended by an automatically activated rear view camera to detect other vehicles or persons in the danger area.



Camera-assisted truck loading.

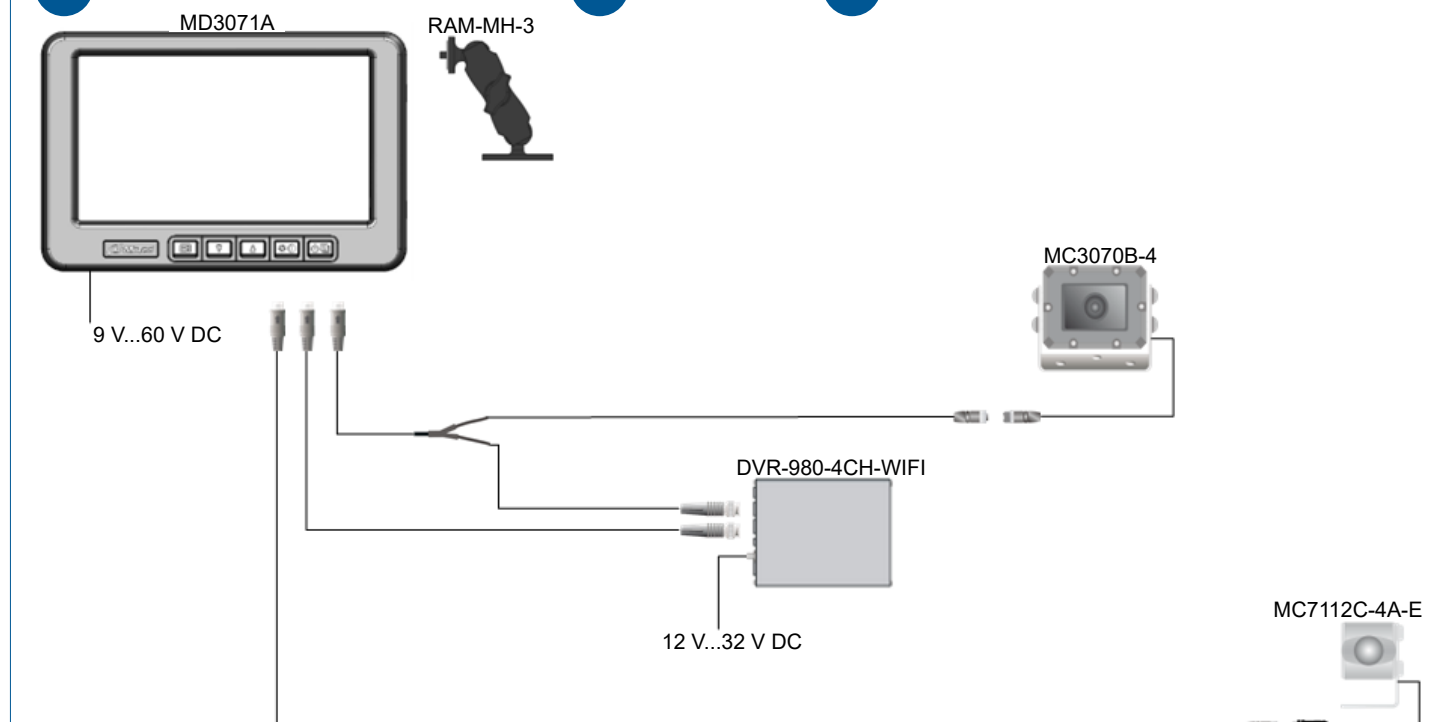


EXAMPLE

1 MD3071A
Heavy-duty 7" monitor

2 Digital
recorder

3 MC3000B
Heavy-duty camera



Attachments

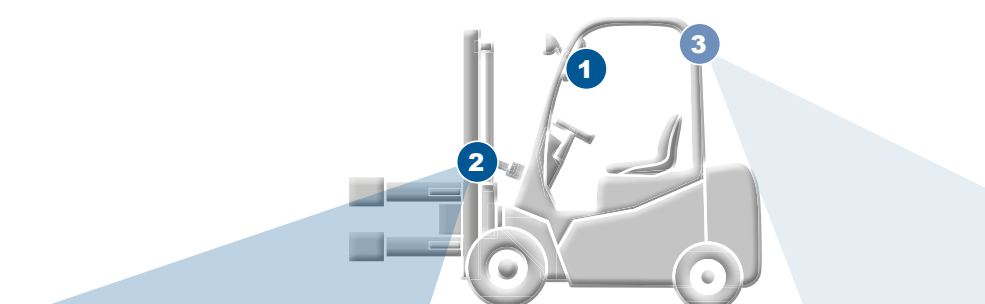
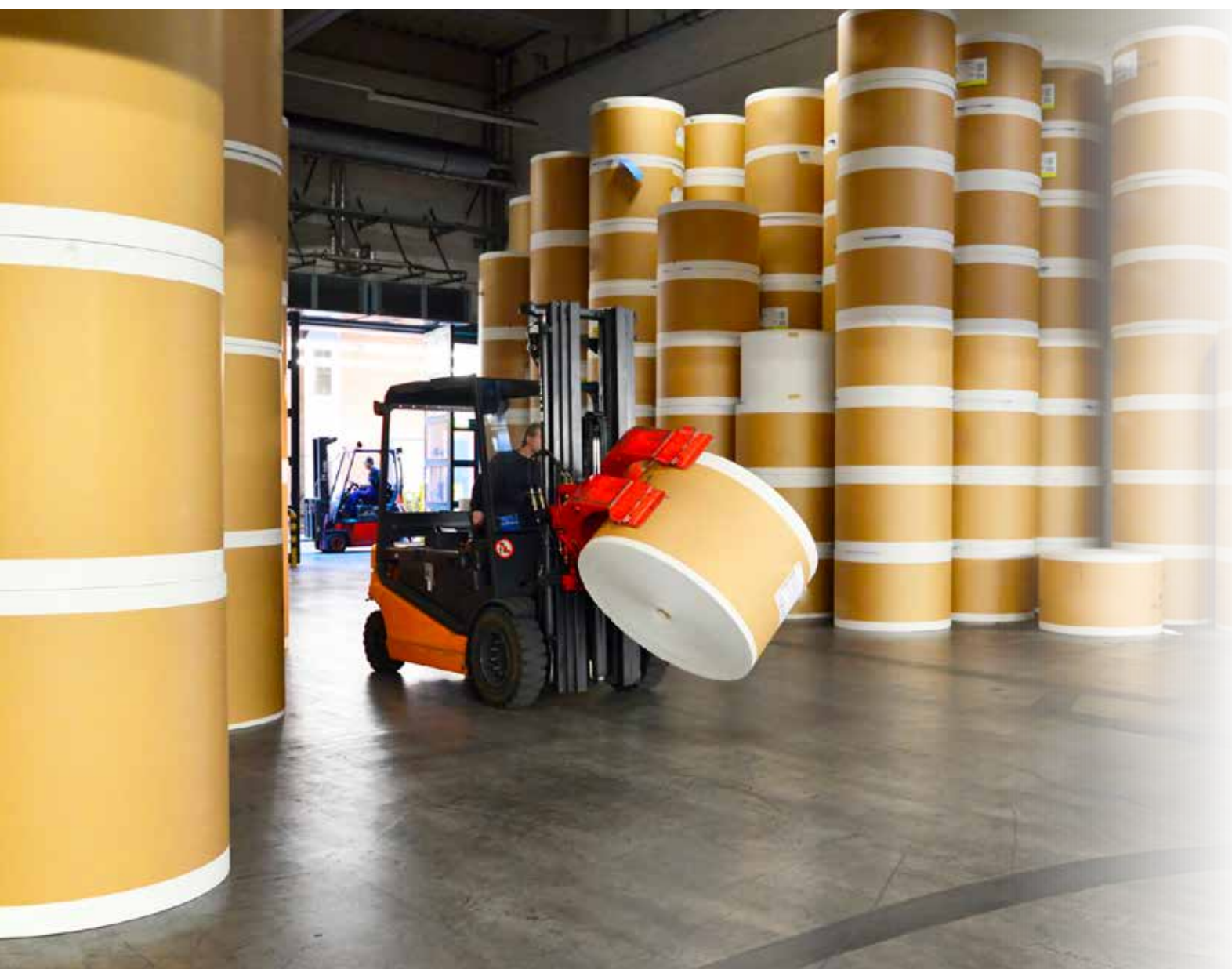
VISUAL AIDS FOR ROTATORS, PAPER ROLL CLAMPS

Bulky loads, e.g. rolls used in the paper industry or rotators in, obscure the view forward. Special system solutions effectively support the driver when manoeuvring load in the storage aisle and when positioning an attachment or a truck lift fork.

The safety risk for man and machine is reduced to a minimum and the efficiency is increased.



The camera allows visibility ahead of or below the load.

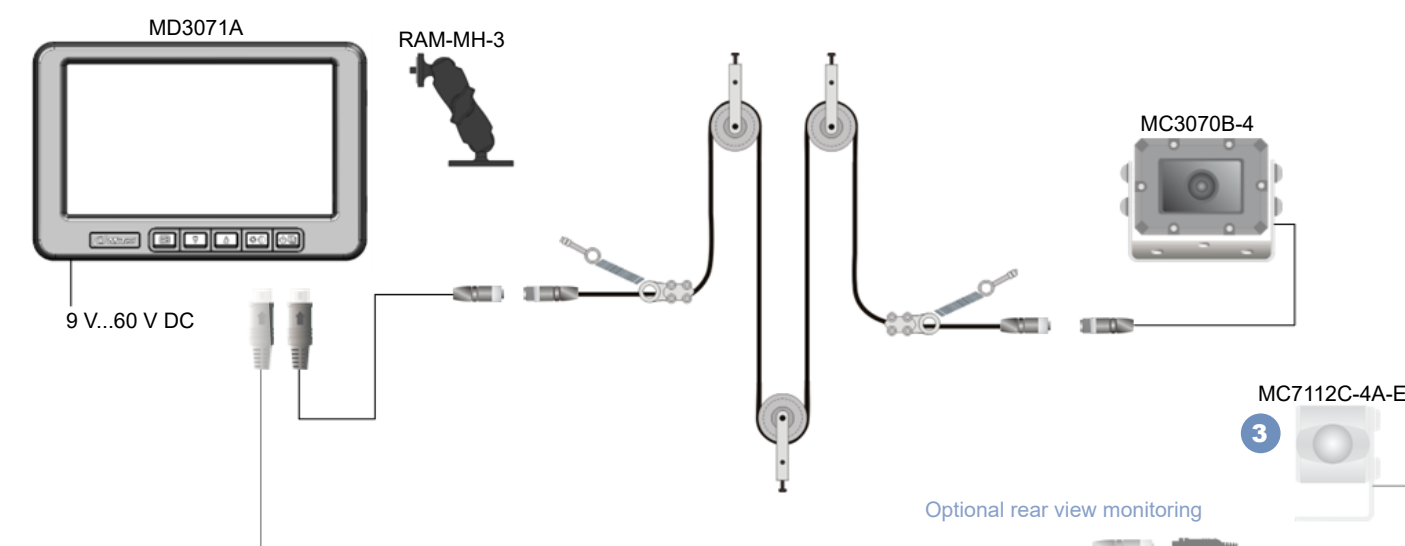


EXAMPLE

MD3071A
Heavy-duty 7" monitor

MK554
Mast cable

MC3000B
Heavy-duty camera



Optional with wireless transmission

Telescopic fork

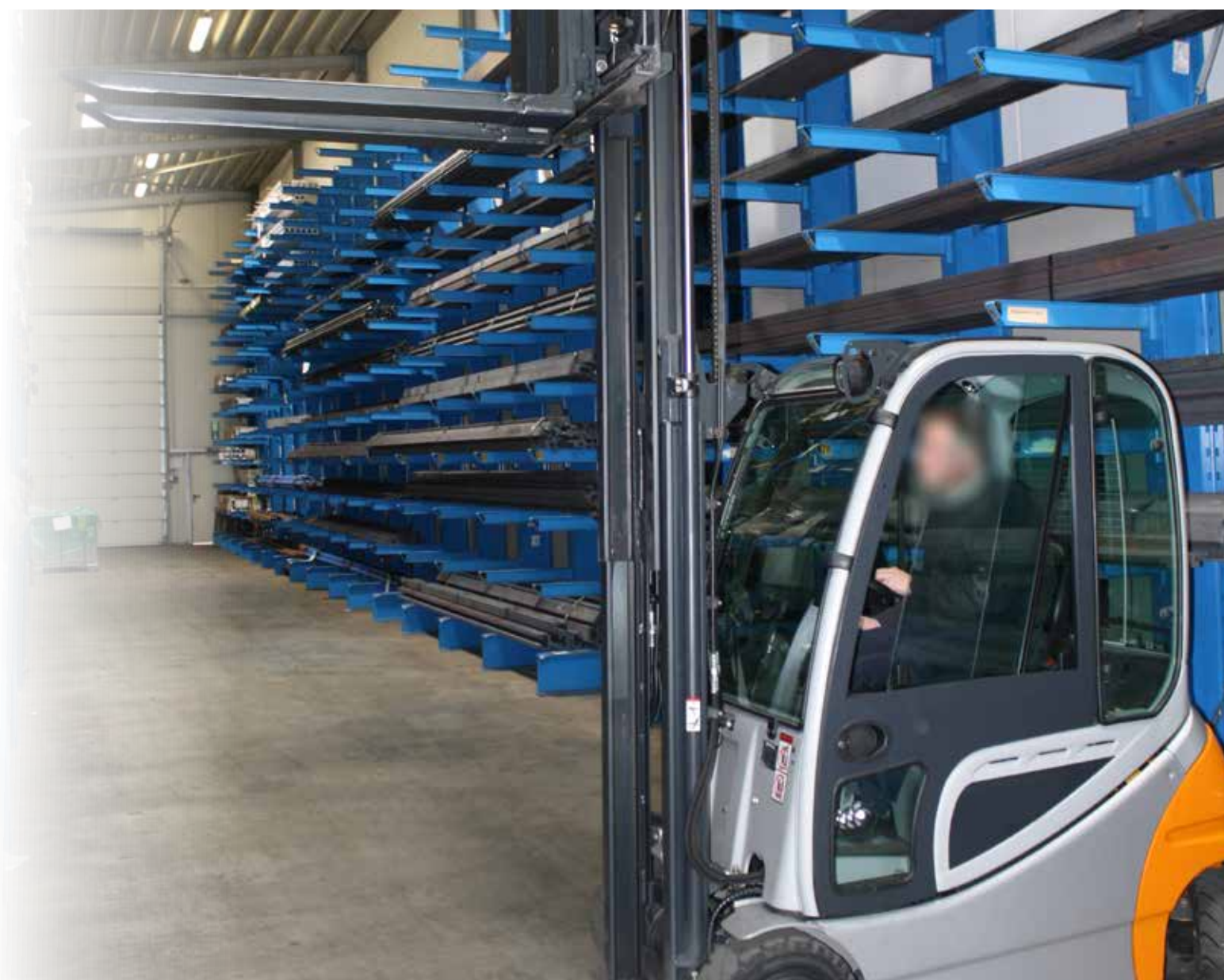
HANDLING OF PALLETS

Attached to the inside of the telescopic fork, the camera is well protected and always at the level of the lift truck fork. Due to the 50° angle of view, the driver has a secure view of both the forks and the void entry points of the pallets.

Motec cameras are designed to increase the safety during loading and unloading of goods. Thanks to the LED power light, the safe loading and unloading is assured even under poor light conditions.



MC9150B on telescopic forks.

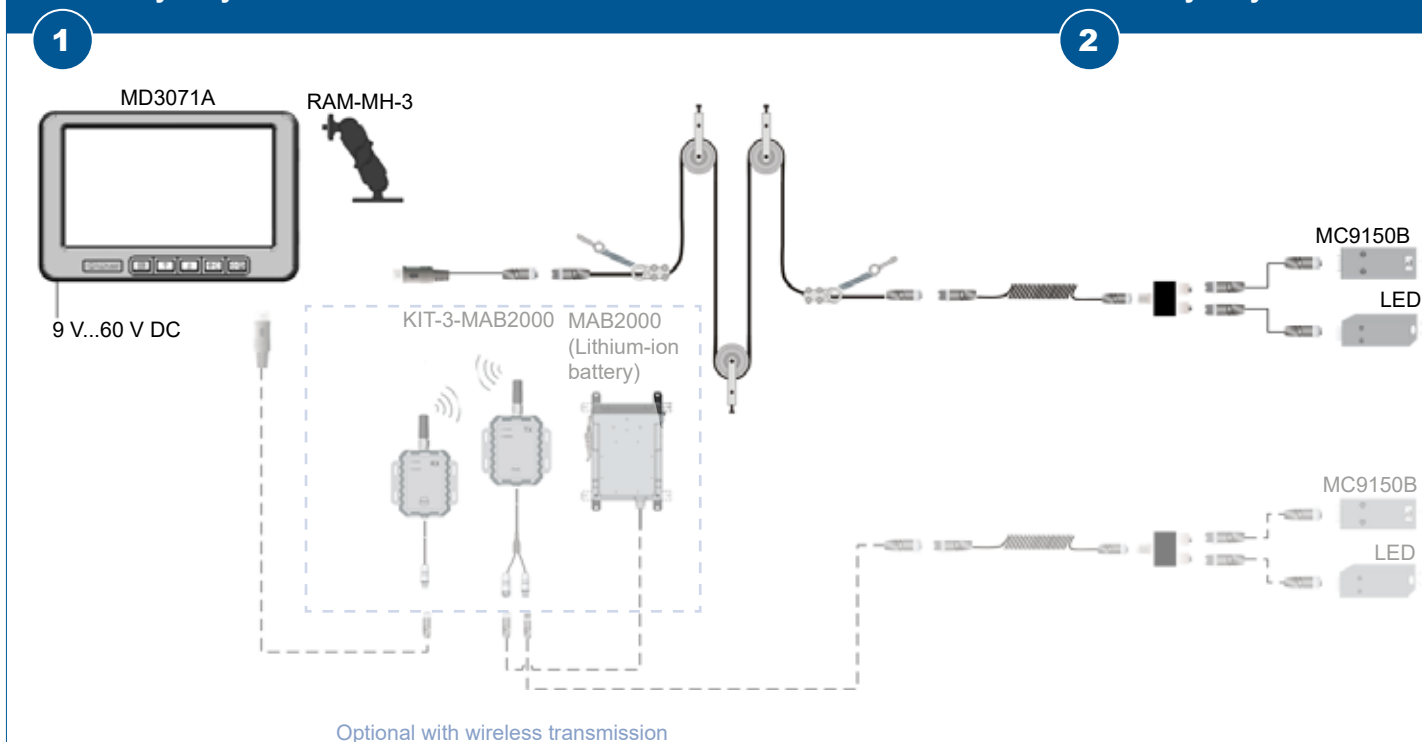


EXAMPLE

MD3071A
Heavy-duty 7" monitor

MK554
Mast cable

MC9150B
Heavy-duty camera



Four way sideloader

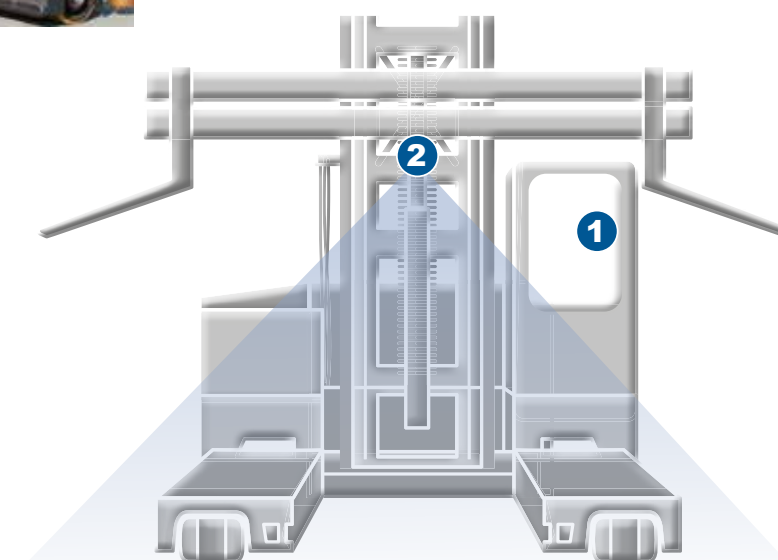
MAST OR FORK CARRIER CAMERA SYSTEM

Four way sideloaders are used as conventional counterbalance trucks or especially for the transport of extremely long and deep loads in narrow storage aisles. Here, the material handling requires the utmost precision and attention from the lift truck operator.

A fork carrier or mast camera facilitates the loading and unloading of goods, providing a direct view onto the load or the forks.



Motec mast or fork carrier camera – always level with the load.

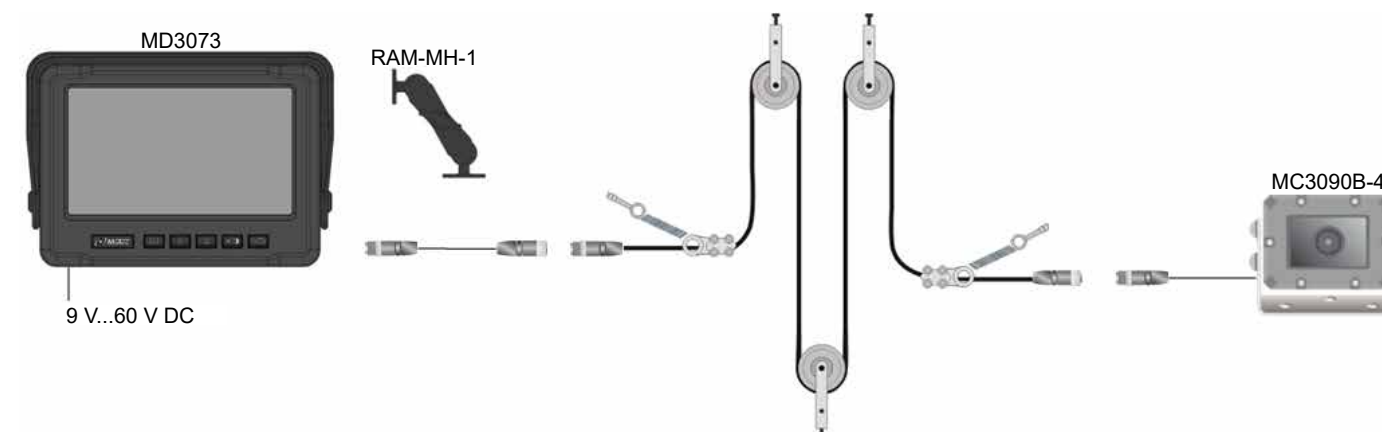


EXAMPLE

MD3073
Heavy-duty 7" monitor

MK554
Mast cable

MC3000B
Heavy-duty camera



Side loader

LATERAL AND REAR VIEW MONITORING FOR MORE SAFETY

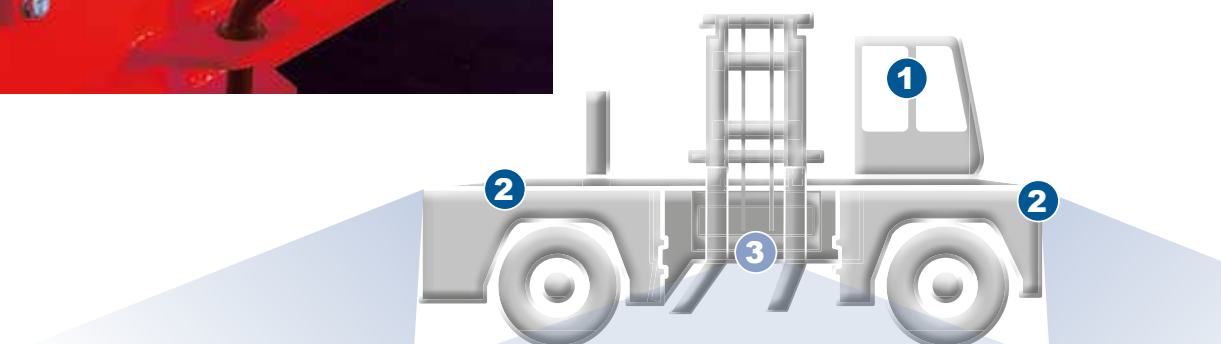
When used under heavy-duty conditions, side loaders enable safe and fast transport of long, bulky loads, even in narrow aisles or passages.

Rear and side cameras open the driver's view in all directions and increase safety while on the move. People and obstacles around the side loader are recognised well in time.

An optional fork carrier camera facilitates the loading and unloading of goods, providing a direct view of the load or the forks.



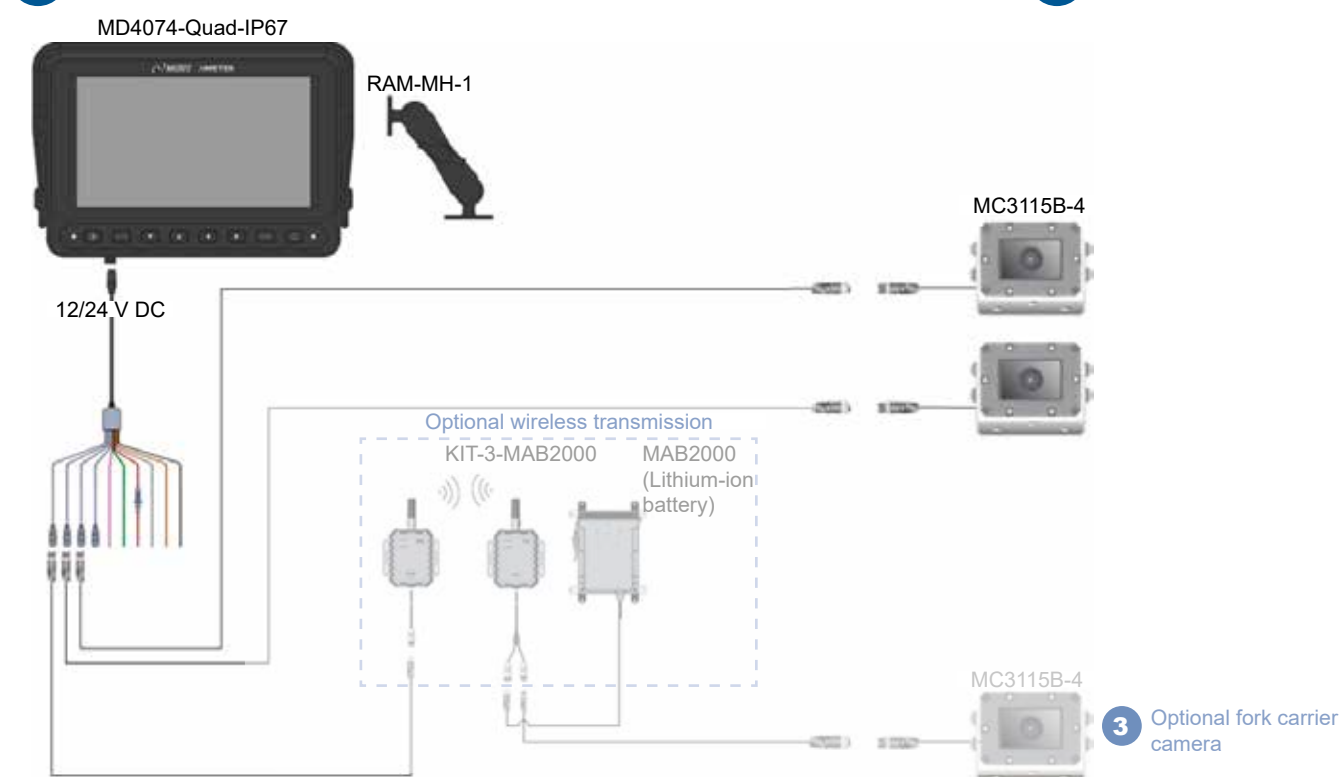
Reversing camera for more safety while on the move.



EXAMPLE

MD4074-Quad-IP67
Heavy-duty monitor

MC3000B
Heavy-duty camera



Telescopic loader

WIRELESS SOLUTION

Cameras on the retrieval of the telescopic handler enable the driver to view the unloading area. They facilitate the handling of pallets and material or the attachments and work platforms.

Due to various lifting heights and a wide range of payloads, wireless data transmission should be preferably used.

The system can be extended by a camera that is automatically activated when reversing the vehicle.



Telehandler with add-on device.



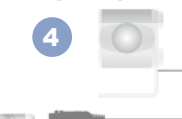
EXAMPLE

1 MD3071A
Heavy-duty 7" monitor



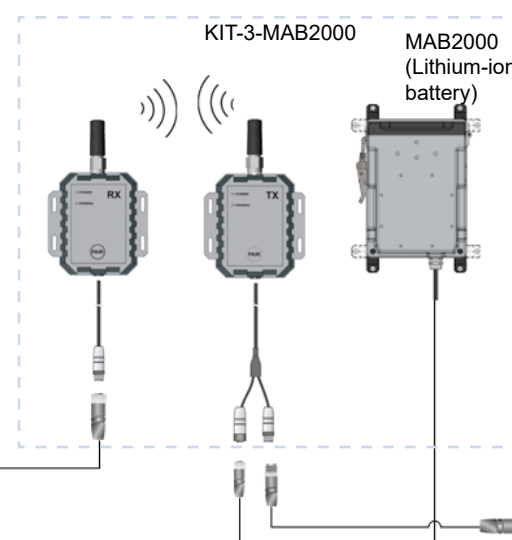
9 V...60 V DC

MC7112C-4A-E



Optional rear view monitoring

2 KIT-3-MAB2000
Digital wireless system



3 MC7000C
Heavy-duty camera

MC7112C-4A-E



Log stacker

EFFICIENT MATERIAL HANDLING DUE TO RADIO SYSTEMS

Log stackers are used for mobile wood handling. When loading logs, a camera mounted above the conveyor belt transmits the images via radio to the monitor of the log stacker.

The driver always has the conveying process or the filling level in view. He can therefore detect material jams or foreign objects at an early stage and thus reduce idle times.

The system can be extended by a camera that is automatically activated when reversing the vehicle.



MC3000B for monitoring the filling level of a wood container.

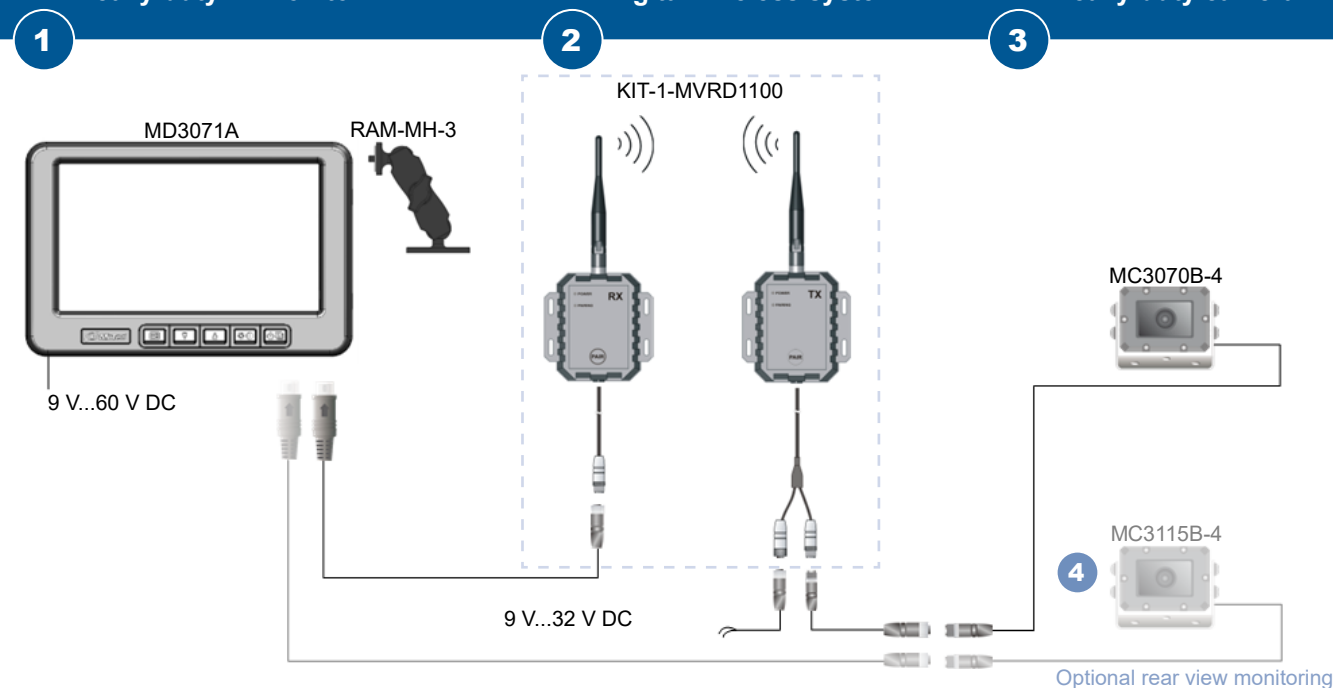


EXAMPLE

MD3071A
Heavy-duty 7" monitor

KIT-1-MVRD1100
Digital wireless system

MC3000B
Heavy-duty camera



Empty container handler

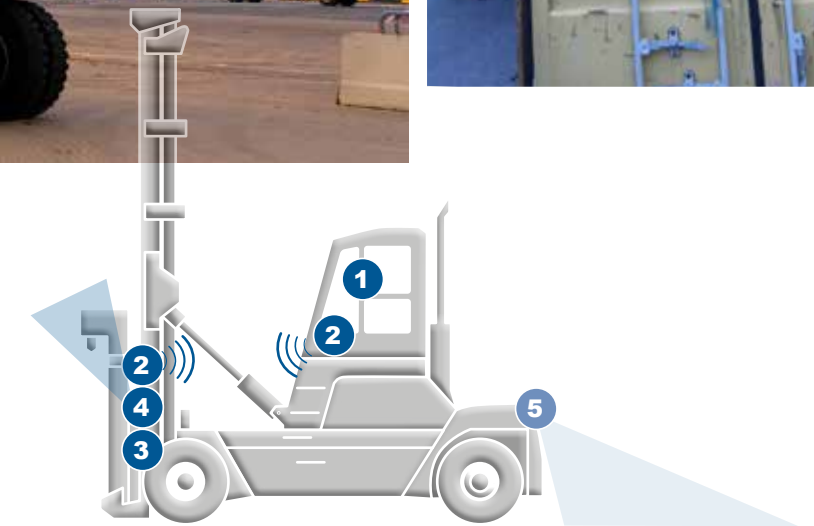
CONTAINER HANDLING

The cameras support the driver when loading containers. The monitoring of the twistlocks enables a faster and more secure positioning.

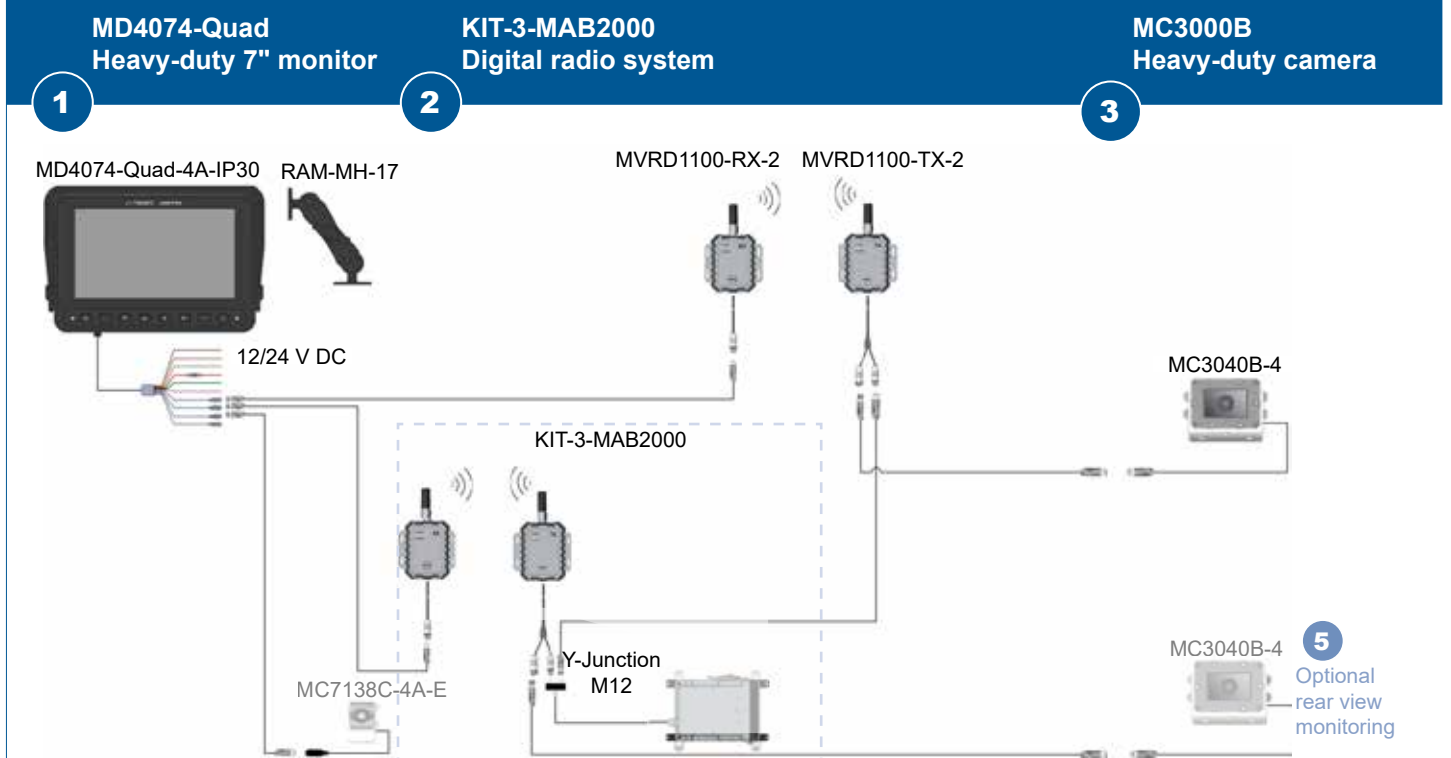
The system can be extended by an automatically activated 180° rear view camera, which significantly facilitates manoeuvring processes.



Twistlock camera for safe container handling.



EXAMPLE



Straddle carrier

SAFE AND FAST HANDLING OF CONTAINERS

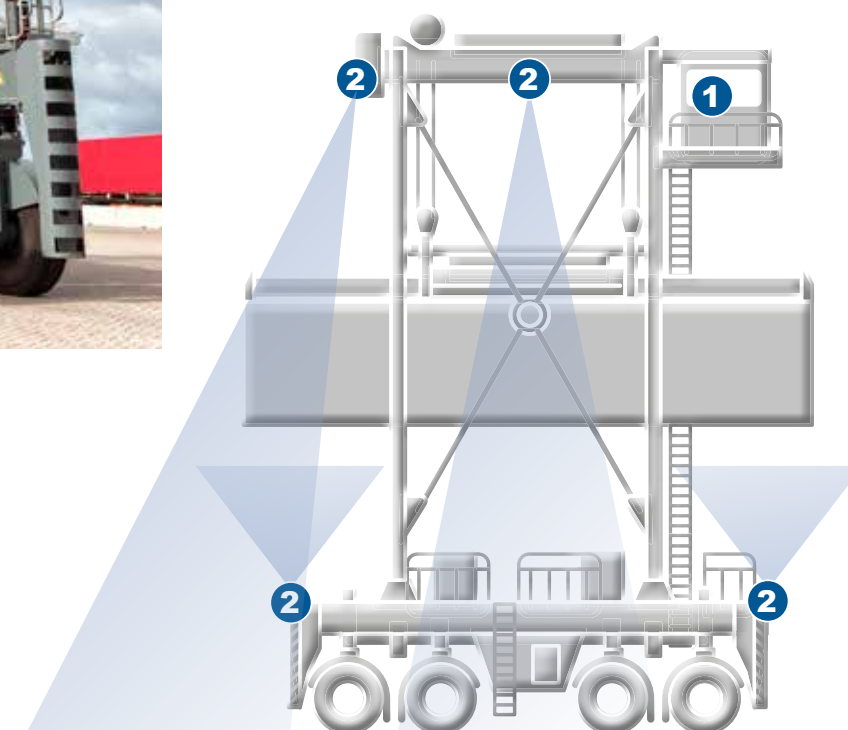
At a height of up to 15 meters, the drivers have the best view forward and into the loading zone. However, the rear view is difficult and the mast cannot be positioned precisely from that height.

Motec cameras help the driver to see the rear and lateral area. The cameras help to assess distances and recognise persons or obstacles in the danger area well in time. 2 additional cameras provide an optimal view of the twistlocks.

The images are transferred to 2 monitors so that the driver can position the containers in a millimetre-accurate manner and can safely move around.



Lateral monitoring from great heights with Motec camera monitor systems.



EXAMPLE

MD4074-Quad-IP30
Heavy-duty 7" monitor

1

MC3000B
Heavy-duty camera

2

MD4074-Quad-4A-IP30



12/24 V DC

MD4074-Quad-4A-IP30



12/24 V DC

MC3xxxB-4



Side



Space behind the vehicle



Twistlock



Twistlock

Reach stacker

PIGGYBACK SPREADER

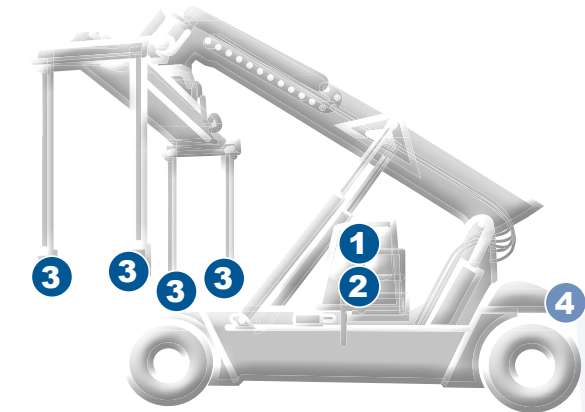
With the piggyback spreader, a reach stacker picks up the entire semi-trailer, which considerably simplifies the transport change between rail and road.

The cameras support the driver when recording the trailers. By monitoring the twistlocks, a faster and safer positioning is possible.

The system can be extended with an automatically activated reversing camera, which makes maneuvering much easier.



The cameras are mounted at the bottom of the 4 foldable lift legs. When gripping the swap bodies they allow an optimal view.

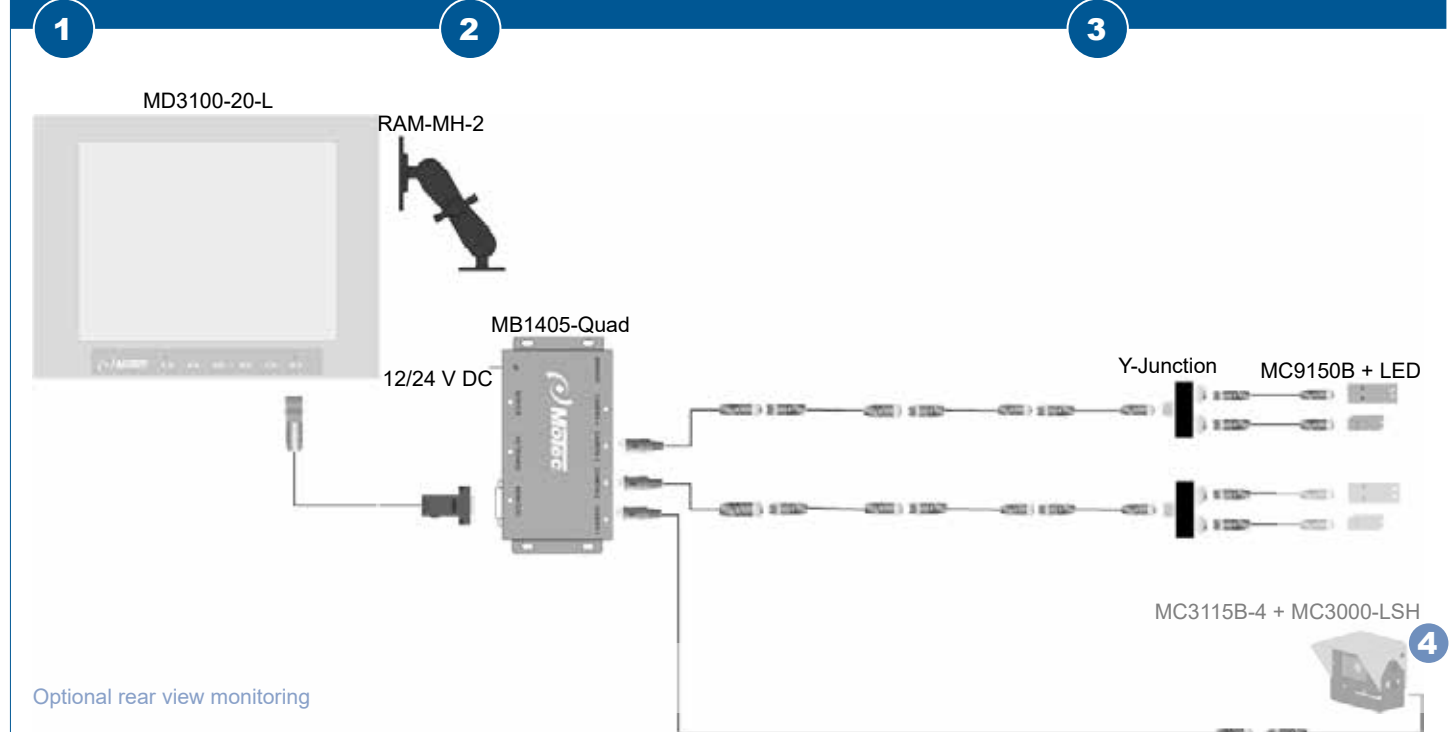


EXAMPLE

MD3100
Heavy-duty 10,2" monitor

MB1405-Quad
Video control unit

MC9150B
camera with LED



Optional rear view monitoring

Container bridge

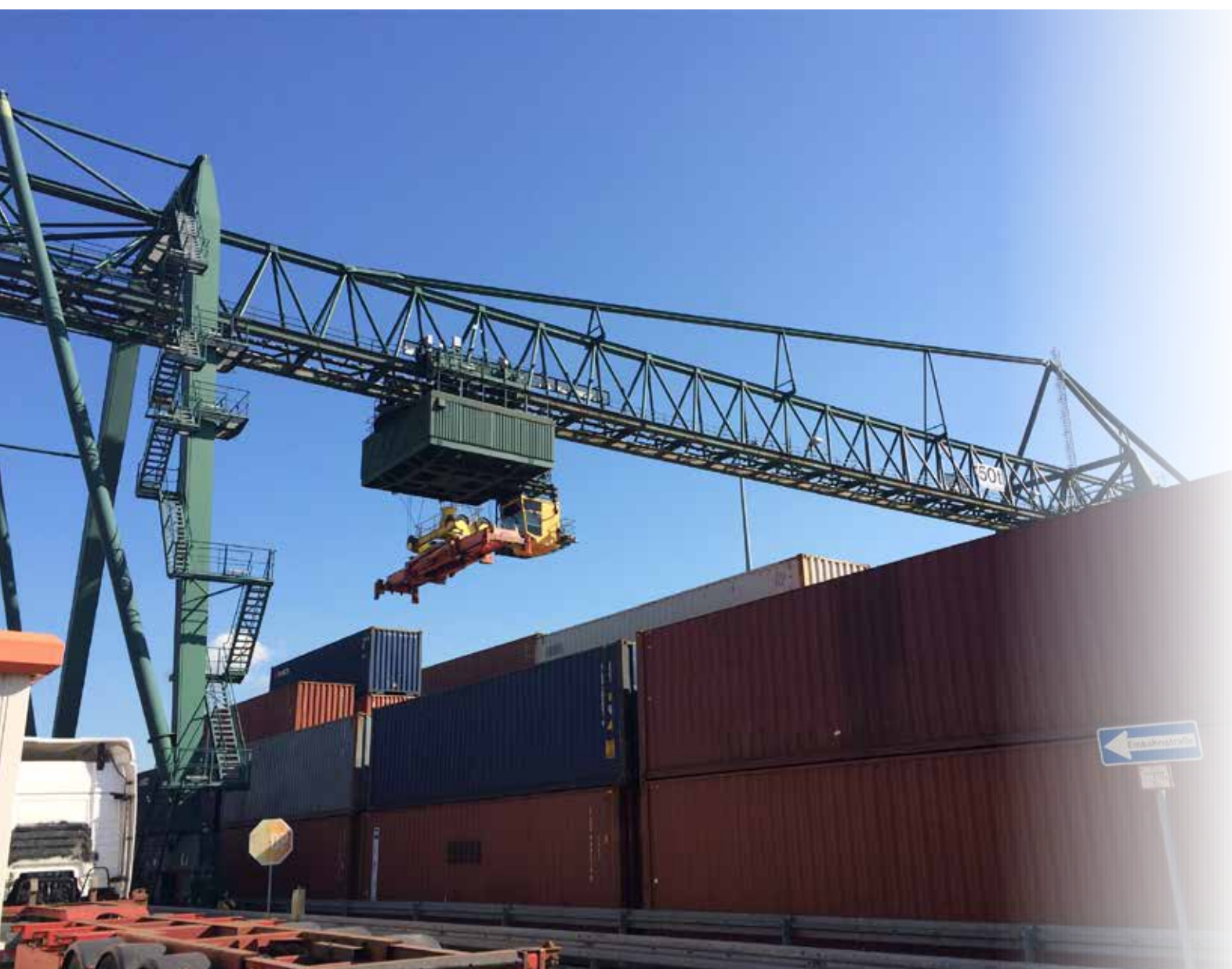
CONTAINER HANDLING

Due to the design, the driver has only limited visibility to the rear and front of the vehicle. The risk of a collision with people, trucks or other obstacles is very high. An intelligent camera monitor system surveys the travel path in all directions and simultaneously displays up to 4 camera images on a single monitor. The image is transmitted via digital radio signals.

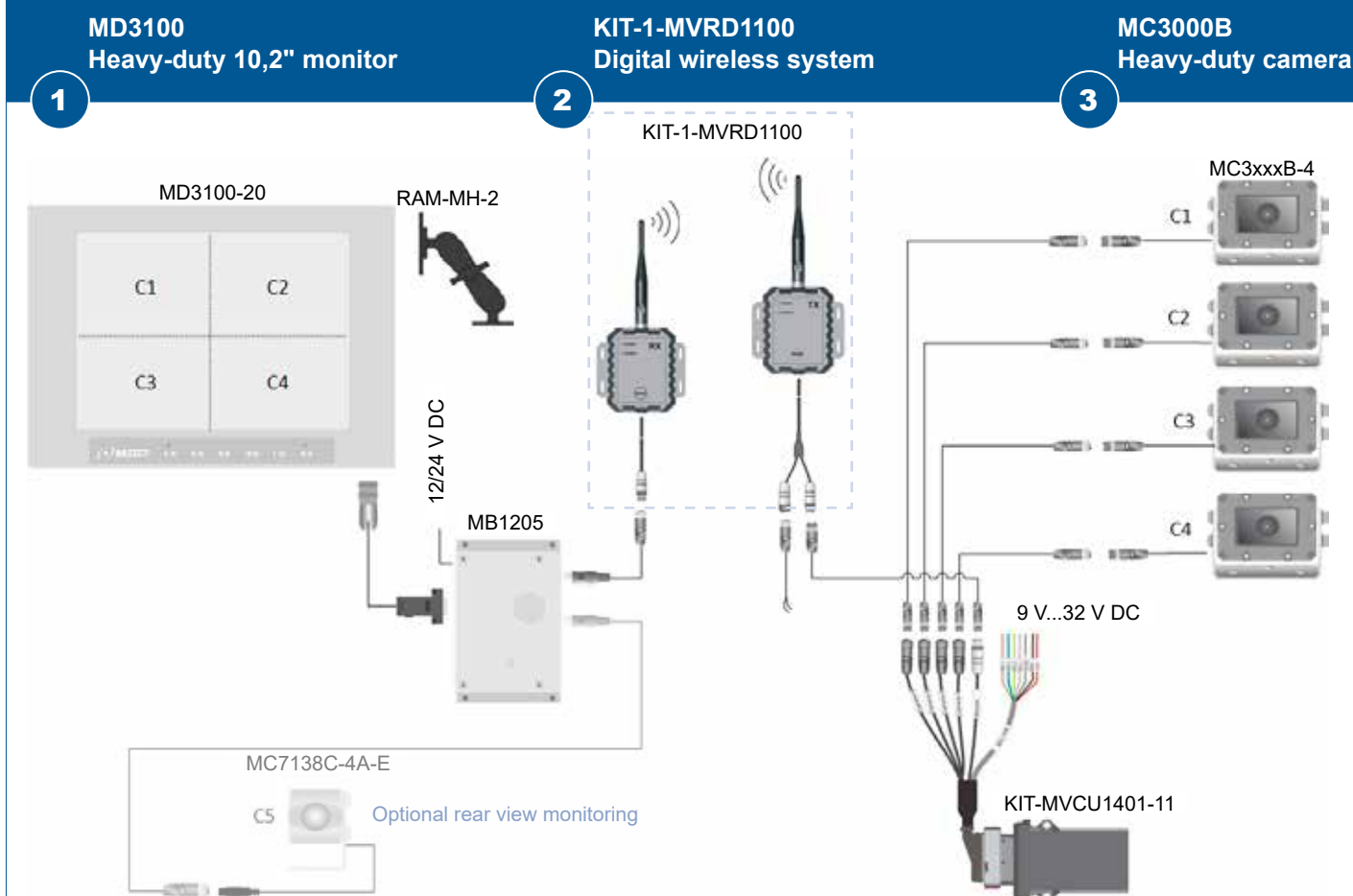
It is possible to switch the camera automatically between the front/rear area and the twistlocks.



Twistlock camera in use during container handling.



EXAMPLE



Optional image transmission via fibre optic cable (FOC) or twisted-pair converter.

Digital cameras

FORK CARRIAGE | REAR VIEW AND WORKSPACE MONITORING



MCDE7000A
Ethernet camera

The MCDE7000A digital camera is a very compact 100 Mbit/s Ethernet camera suitable for mobile use in IEEE 802.3 (LAN) networks. Equipped with a wide range of image angles, configurable resolution up to Full HD and wide dynamic range (HDR), it is used in a variety of applications, such as integration into existing video surveillance systems or video streaming over long distances.



MCDB7000A
BroadR-Reach camera

The MCDB7000A is a BroadR-Reach camera suitable for mobile use. It can be utilised in networks compliant with IEEE 802.3 (LAN). Fitted with a high optical dynamic range (HDR) it is used in a variety of applications. For example, it can be integrated into existing video monitoring systems or used for video streaming across large distances.



MCDL7000-FullHD
LVDS camera

The MCDL7000A is a compact 2.3 megapixel camera for mobile use. The LVDS interface transmits uncompressed raw data at speeds up to 3 Gbit/s without quality loss. LVDS cameras are used in OEM applications that require high-speed serial transmission, such as video streaming, 360° panoramic systems, stereo cameras or AI applications.



MCDE3000-FullHD-PoE
Rugged Ethernet camera

The MCDE3000-FullHD-PoE is a FullHD Ethernet camera suitable for mobile use. It can be utilised in networks compliant with IEEE 802.3 (LAN). Fitted with intelligent image processing, a high optical dynamic range (HDR) and dynamic overlays, it functions as a smart sensor in a variety of applications. For example, it can be integrated into existing video monitoring systems or used for video streaming across large distances.



MCDB9000-FullHD
BroadR Reach camera

The MCDB9000-FullHD is a mobile, very compact BroadR-Reach-Camera operating in networks according to IEEE 802.3 (LAN). Equipped with Full-HD resolution, a large dynamic range (HDR) and adjustable overlays it acts as a smart sensor in a variety of applications, such as integration into existing video surveillance systems or video streaming over long distances. The videostream can be configured via customer-specific control protocols.

Digital monitors

MULTIFUNCTIONAL MONITORS FROM 7" TO 12"



MDDE1072
7" digital monitor

The MDDE1072 is a 7" digital monitor used in IEEE 802.3 (LAN) networks on mobile machines as well as in industrial environments. Due to its robust electrical and mechanical design, the MDDE1072 is specially designed for use in harsh environments with high mechanical loads or environmental influences.



MDDE1102
10" digital monitor

The MDDE1102 is a 7" digital monitor used in IEEE 802.3 (LAN) networks on mobile machines as well as in industrial environments. Due to its robust electrical and mechanical design, the MDDE1102 is specially designed for use in harsh environments with high mechanical loads or environmental influences.



MDDE1122
12" digital monitor

The MDDE1122 is a 7" digital monitor used in IEEE 802.3 (LAN) networks on mobile machines as well as in industrial environments. Due to its robust electrical and mechanical design, the MDDE1122 is specially designed for use in harsh environments with high mechanical loads or environmental influences.



MDDE3084
8" Smart Display

The MDDE3084 8" Smart Display with Advanced Driver Assistance Systems (ADAS) is designed to revolutionize your vehicle's interface. This innovative smart display seamlessly consolidates machine monitoring, camera functions, and ADAS into a single, cohesive unit, offering a streamlined and efficient solution for modern mobile machinery.



MDDE3124
Smart 12,3" Instrumenten Cluster

The MDDE3124 12.3" Smart Instrument Cluster with Advanced Driver Assistance Systems (ADAS) is designed to revolutionize your vehicle's interface. This innovative instrument cluster seamlessly consolidates machine monitoring, camera functions, and ADAS into a single, cohesive unit, offering a streamlined and efficient solution for modern mobile machinery.

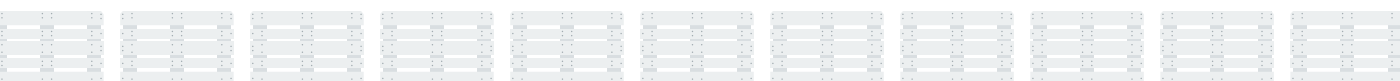
TVI cameras & monitors

FORK CARRIAGE | REAR VIEW AND WORKSPACE MONITORING



MCT7180-34-MH2 TVI wide angle camera

The MCT7180-34-MH2 is an HD-TVI wide-angle camera for heavy-duty 270°/360° surround view applications. The 190° angle of view and the small design allow it to be adapted to a wide variety of vehicles and visibility problems. The TVI camera is also ideally suited for heavy-duty use as a standalone camera thanks to its high-pressure cleanerproof housing.



MDT4070 7" TVI monitor

The MDT4070 is a robust mobile TVI monitor for heavy-duty applications. Thanks to HD-TVI technology, the monitor delivers brilliant images in HD quality. The screen can be operated in 5 different languages.



MDT4071-IP30 7" TVI monitor

The MDT4071-IP30 monitor is a mobile TVI monitor for heavy-duty applications. Thanks to HD-TVI technology, it delivers brilliant images in HD quality. An integrated loudspeaker transmits warning tones, e.g. from a connected assistance system. The monitor can be operated in 5 different languages.



MDT4101-IP30 10" TVI monitor

The MDT4101-IP30 monitor is a mobile TVI monitor for heavy-duty applications. Thanks to HD-TVI technology, it delivers brilliant images in HD quality. An integrated loudspeaker transmits warning tones, e.g. from a connected assistance system. The monitor can be operated in 5 different languages.

AI cameras & monitors

CAMERAS AND MONITORS FOR PERSON DETECTION SYSTEMS



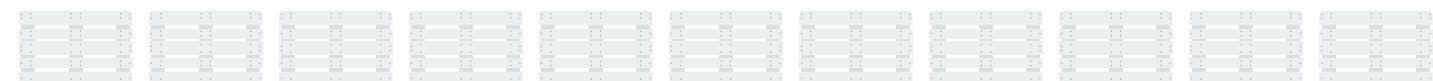
MCT3158-AI-4A TVI AI wide angle camera

The MCT3158-AI-4A is an intelligent camera based on AI with HD-TVI image quality. The compact camera is designed and manufactured as an object detection camera to recognise various objects such as people, motorbikes, bicycles/buses, trucks, etc. Its compact shape is perfect for use in large heavy-duty vehicles.



MCT3158-AI-4A-LED TVI AI LED w/a camera

The MCT3158-AI-4A-LED is an intelligent camera based on AI with HD-TVI image quality. The LED's are available in infrared or white light. The compact camera is designed and manufactured as an object detection camera to recognise various objects such as people, motorbikes, bicycles/ buses, trucks, etc. Its compact shape is perfect for use in large heavy-duty vehicles.



MDT4074-AI 7" TVI AI monitor

The TVI system monitor is a rugged, high performance HD monitor for applications that use artificial intelligence, such as person detection systems. Different image modes can be displayed on the screen and up to 4 camera images can be displayed simultaneously, including interval controlled image switching.



MDT4104-AI 10" TVI AI monitor

The TVI MDT4104-AI is a rugged, heavy-duty, HD resolution monitor designed for artificial intelligence applications such as people detection systems. Different image modes can be displayed on the screen and up to 4 camera images can be displayed simultaneously, including interval controlled image switching.

Analog cameras

FORK | FORK CARRIAGE



MC9000B Fork-mounted camera

The MC9050B fork camera is designed especially for forklift trucks and is mounted to the inside of the fork. This places the camera at the eye level of the pallet. Based on its pinhole size opening in the housing, the lens is protected from damage that may be caused by lattice boxes or pallets



MC9150B Pinhole camera

The MC9150B is designed for mounting on the fork carriage, fork bend and spreader. The 50° viewing angle makes it possible to observe both forks. Based on its pinhole size opening in the housing, the lens is protected from damage that may be caused by lattice boxes or pallets. The camera has a very high shock and permanently shock resistant up to 100 g.



MC9350B Pinhole camera

The MC9350B is fitted in the front of the fork, meaning it is always at the same level as the pallet. A safe immersion of the fork in the pallet and a fast and safe settling of the pallet in the high rack is thus ensured. The pinhole lens and the associated pin-prick sized opening in the casing reduced the risk of wire mesh crates or pallets damaging the lens.

Analog cameras

FORK CARRIAGE | REAR VIEW AND WORKSPACE MONITORING



MC7000B-MH1 | MH2 Megapixel camera

The MC7000B-MH1 and MC7000B-MH2 are mobile megapixel cameras with a 1.3 megapixel wide dynamic range CMOS sensor. The high resolution produces an even sharper image than conventional standard analog cameras. The cameras can be used as a rear view camera, workstation camera or perimeter surveillance camera. The separate adjustment of the lens allows it to be mounted horizontally or overhead.



MC7000C-E Heavy-duty camera

Based on its small design, the MC7000C-E is perfectly suitable for the installation on mobile machines with limited space available. The individually adjustable lens makes it possible to install the camera vertically, horizontally, at an angle, or overhead. The stainless steel housing guarantees a high level of durability to prevent corrosion and resist acids.



MC7000C-GH Heavy-duty camera

Due to its small size, the MC7000C-GH is suitable for mounting on mobile machines where space is limited. Separate adjustment of the lens allows it to be mounted vertically, horizontally, at an angle or overhead. The housing material has a high elastomer content which elastically deforms under tensile and compressive loads and then returns to its original shape.



MC3000B Heavy-duty camera

The rugged MC3000B reliably solves vision problems in heavy-duty applications. With its anodised and coated aluminium housing, it can withstand extreme weather and environmental conditions. A wide range of fields of view and connectors are available to suit a variety of applications in commercial vehicles and mobile machinery.



MC3000C-IR/-WL Night vision camera

The MC3000C-IR/WL is a heavy-duty night vision camera with integrated infrared/white light LEDs. The camera automatically switches to LED mode when darkness falls. It provides a crystal clear colour image both day and night. LED cameras are used on machines where it is not possible or desirable to install additional headlights.

Analog monitors

MULTIFUNCTIONAL MONITORS FROM 7" TO 17"



MD3071A
7" monitor

Due to its compact and versatile design and its integrated functions, the tough heavy-duty MD3071A monitor offers a wide range of applications, for example the horizontal and vertical version in the 360° bird's eye view system (MVS). The software update option ensures that the MD3071A is always up to date and thereby future-proof.



MD3073
7" monitor

The waterproof and dustproof monitor MD3073 is used in the forklift and logistics area (cold store operation). Furthermore, the robust monitor is used on construction and agricultural machinery as well as foundry vehicles. Especially its use in alternating operation in cold and warm temperatures are its strengths. It fulfills the protection class IP67.

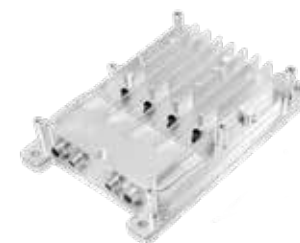


MD3100
10" monitor

The MD3100A has a 10" screen and thereby is suitable to simultaneously display multiple camera images. For industrial use it was equipped with a powder coated metal housing, which fulfills the protection class IP54 on the front side.

Intelligent video control units

MULTI-CAMERA VIDEO CONTROL UNITS



MVCD2000
Digital video controller

The MVCD2000 is a state-of-the-art digital video control unit for highly complex camera-monitor applications. Designed, manufactured and programmed in Germany, future-proof through software updates and equipped with a host of intelligent features, the MVCD2000 offers a wide range of heavy-duty applications in a variety of industries and sectors.



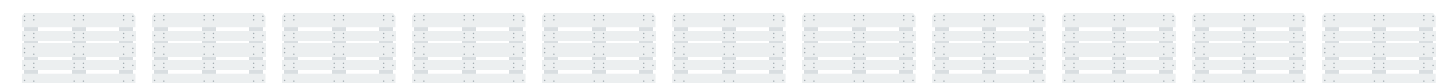
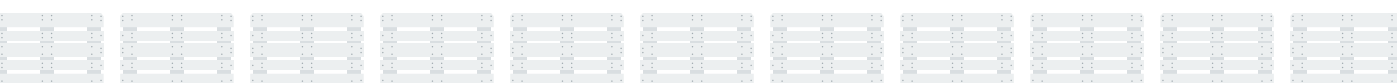
MVCT1104
TVI video controller

The MVCT1104 is a mobile video controller for 270/360° bird's eye view applications. Equipped with a number of intelligent functions, the video control unit offers a wide range of heavy-duty applications in a variety of sectors.



MVCU1400
Video control unit

The MVCU1400 is an intelligent, CAN-controlled heavy-duty multi-camera video control unit that processes up to 4 camera images and displays them on up to 2 monitors in various modes.



Data storage and transmission

DIGITAL VIDEO RECORDER | DIGITAL WIRELESS SYSTEM



DVR-980-4CH-WIFI
Digitalrekorder

The DVR-980-4CH-WIFI is a WLAN-enabled digital recorder for mobile use that can connect up to 4 high-performance cameras. Recording is done at the touch of a button, by event and time control and on motion detection in AVI format. Live viewing and recording are possible simultaneously, as are image quality and frame rate settings. GPS data can be displayed during recording. Lockable housing.



KIT-3-MAB2000
Digital wireless system

Digital wireless system for image transmission. Including video receiver, video transmitter, charger, battery box and 2 Li-ion batteries. Operating time > 28 hours thanks to automatic shutdown. Range up to 120 meters. 2.4 GHz.

Other ways of transmission

- FOC (fibre optic cable)
- Twisted pair converter
- Ethernet/BroadR-Reach



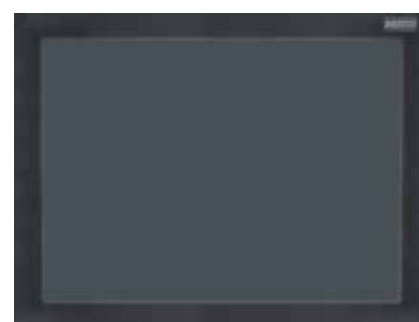
MD4074-Quad-IP30
7" monitor

The MD4074-Quad-IP30 is a rugged, heavy-duty monitor. Different image modes can be displayed on the screen and up to four camera images can be displayed simultaneously, including interval switching.



MD4074-Quad-IP67
7" monitor

The MD4074-Quad-IP67 is a rugged outdoor monitor suitable for cold stores. Different image modes can be displayed on the screen and up to four camera images can be displayed simultaneously, including interval switching.



LCD-Monitor
17" metal housing monitor

The 17" LCD monitor is a monitor for industrial applications and stationary use with powder-coated metal housing. The large screen size ensures the display of complex image combinations. The higher resolution provides sharp camera images that are true to the detail.

Cables and cable harnesses

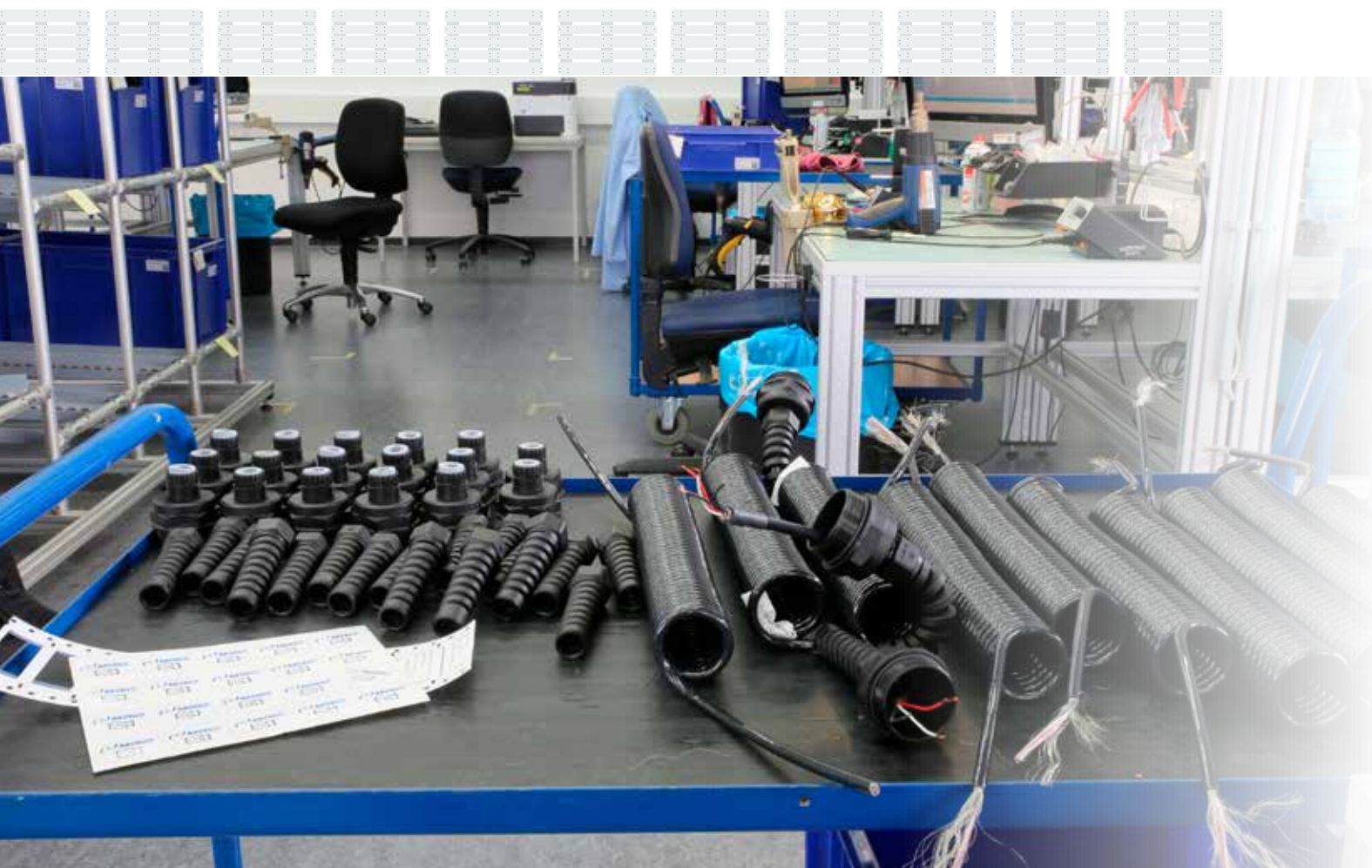
TAILOR-MADE SOLUTIONS

Motec GmbH has more than 30 years of experience in the field of customised cables. We currently offer around 1,000 different cables in various lengths and designs.

Our strength lies in customised solutions: We use all common connectors and also offer complex cable harnesses and cable sets. We use all types of wire and cable with diameters ranging from 0.013 mm² (AWG36) to 107.2 mm² (AWG 4/0), with no limit on the number of wires.

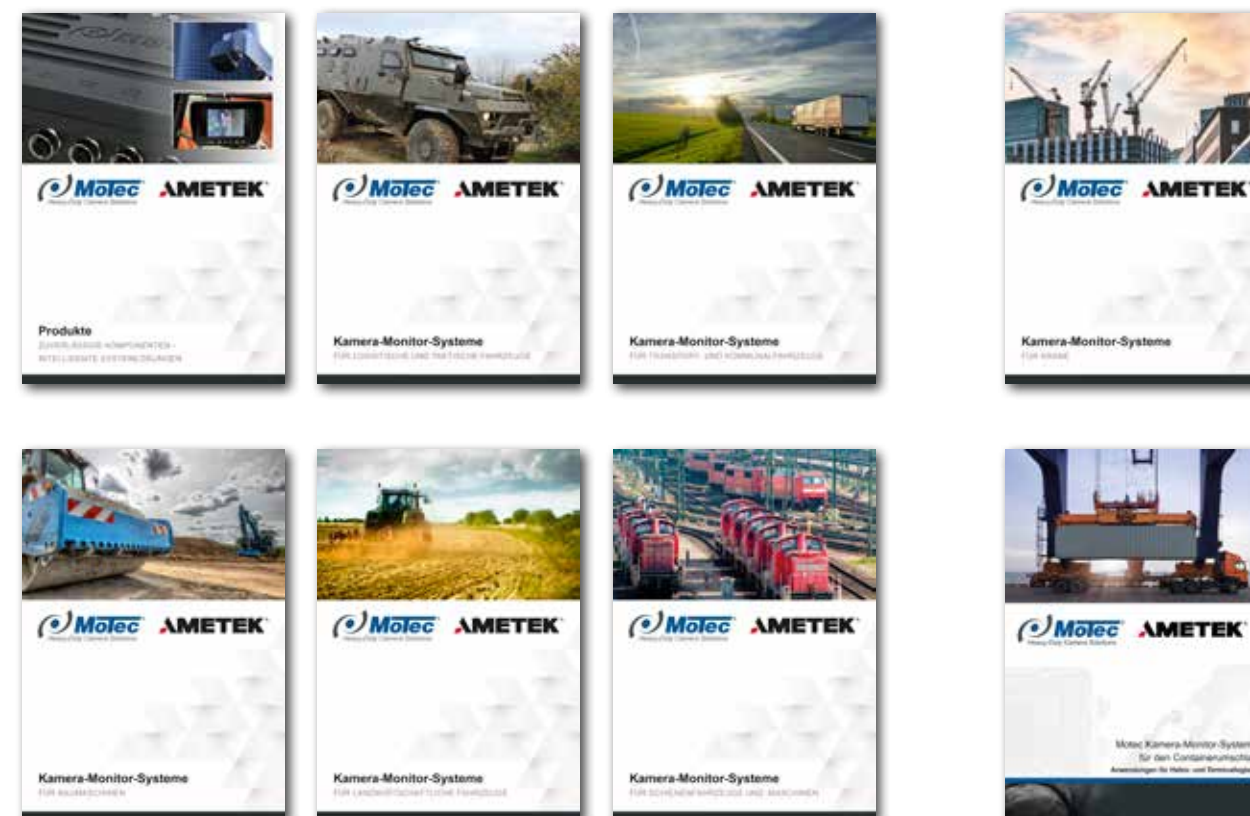
CERTIFIED QUALITY FOR HIGHEST DEMANDS

- Pull testing
- Micrograph laboratory
- Crimp height measuring
- Automatic crimping force monitoring
- 100 % semi-automatic, logged and functional end testing
- EDP-supported merchandise management and production planning and control systems
- Operational data recording via bar code
- 100 % traceability (via batch and serial numbers)



Systems solutions

FOR NUMEROUS OTHER INDUSTRIES



Catalogs

- Product programm
- Defense
- Commercial Vehicles
- Construction machines
- Agriculture machines
- Rail

Brochures

- Cranes
- Port and Terminal logistics

Motec is certified according to the quality standard ISO 9001:2015 and ISO14001:2015 for environmental management. For the development and manufacture of products for use in road traffic, the management system also has extended certification for approval-relevant requirements (ARR).

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