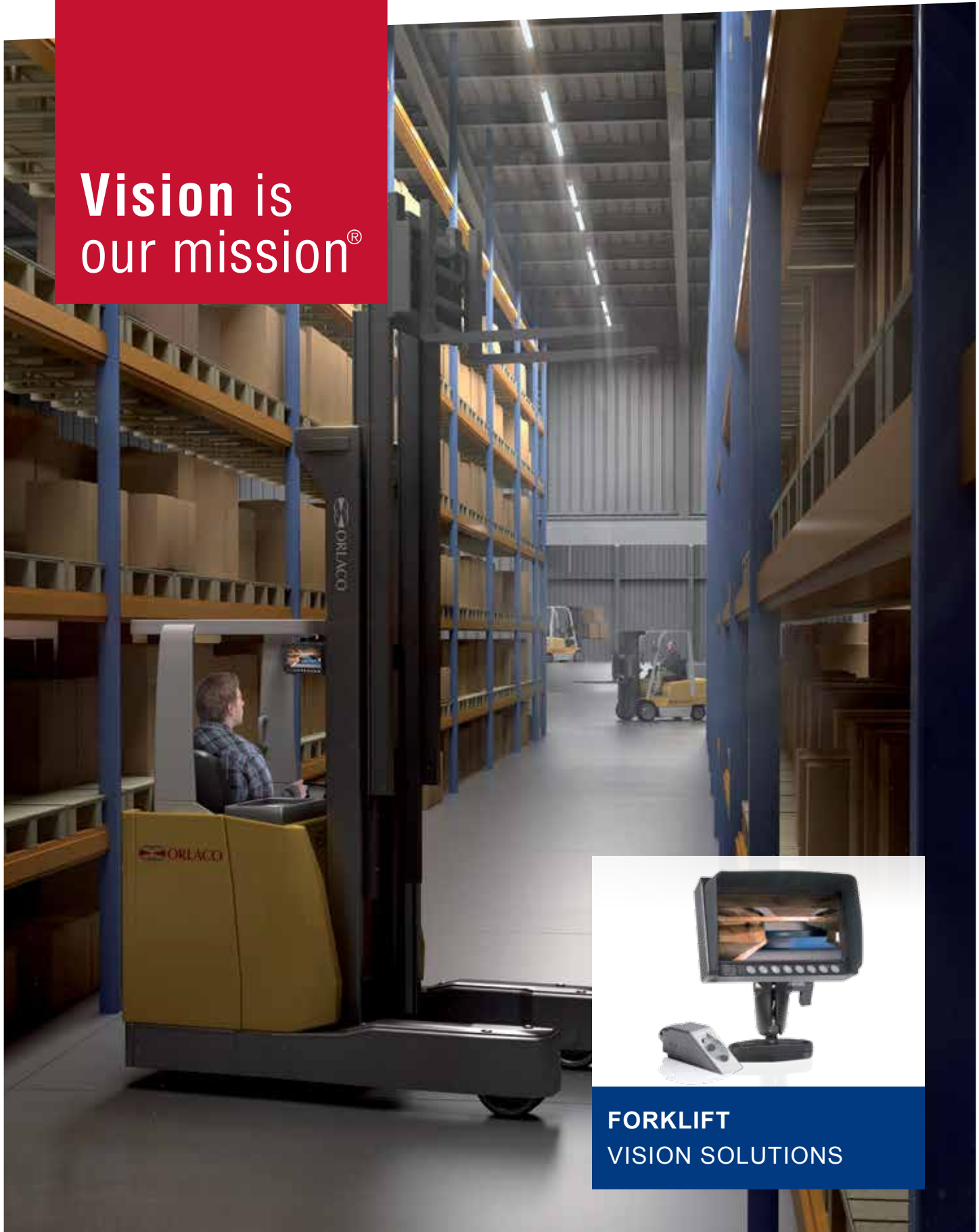


**Vision is
our mission®**



**FORKLIFT
VISION SOLUTIONS**

See more
Work more



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Why Orlaco?

Welcome to the Orlaco product catalogue. We are personally committed to bringing you the best camera and monitor solutions possible. To help create safer and more secure workplaces around the world. Our professional team has spent over twenty five years designing and manufacturing a variety of certified, reliable and complete camera display solutions that effectively eliminate the blind spots around vehicles, machinery and vessels. We are confident that the options offered in this catalogue will not only help you to improve the safety, security and efficiency of your fleet, but also to enhance the ergonomics and comfort for your operators. That is what Orlaco stands for. We invite you to share your ideas and experiences with us.

That's
why!

Let us **improve** your every day job



Improved Safety and Efficiency

Forklift and forklift truck working environments can get very hectic. Today's lifts extend higher, making it more difficult for the driver to see the position of the forks. And maneuvering between racks while moving pallets from place to place can prove challenging. Orlaco can help. Orlaco produces a line of vision systems for forklifts and forklift trucks. These cameras give the drivers a reliable, crystal-clear image of the forks and their surroundings. From up high to down low; the position of the forks, the load, and the surroundings. A better view increases the driver's awareness, improves safety and reduces risks. An ideal solution for a more productive day on the job.

Enhanced Ergonomics and Comfort

The repetition of looking quickly up and down, from side to side, can take its toll on a forklift driver's neck and back. Fatigue reduces concentration, precision, speed, and efficiency. The Orlaco vision system helps to improve a forklift driver's performance. Physical turning and twisting is no longer necessary with the Orlaco vision system. A quality system that allows the driver to see all that is required by simply looking at the mounted dashboard monitor in front of them. A system that supports a correct, more comfortable driving posture.

Certified Quality

At Orlaco, quality is never taken lightly. We keep a clear and persistent focus on customer satisfaction. A focus that is maintained throughout the manufacturing process of our quality products, which are custom designed in various formats. We are able to uphold our level of quality by providing detailed servicing. To top it all off, we have secured the highest achievable automotive certification: TS16949. At Orlaco, we invest in continuous improvement in order to secure a long term, satisfied customer base. We believe that compatibility in products, systems, and operations is the key element to creating reliable partnerships. All our products are controlled and clearly documented to give our customers a zero-defect product with operation that works right, every time.



Forklift sight solutions

YouTube

[Check our video on the Orlaco YouTube channel.](#)



Forkview



PAGE 18-21

On the monitor the **Forkview** system shows the operator the view along the fork. This allows correct positioning of the fork. Shoulder- and neck muscles need not be strained anymore. Also correct positioning of loads reduces damages.

The **Forkview** system has a camera mounted at the inside of the right-hand side fork. The robust monitor comes with a fully adjustable clamp bracket that is mounted on the reach trucks guardrail.

Important

Drilling holes in the fork is only allowed with formal permission of the fork manufacturer. To mount the camera with M6 bolts, holes of 11mm deep are drilled, resulting in 9mm effective thread. This is 1.5 times the length of a M6 bolt and is sufficient to hold the M6 bolt.

Orlaco can not be held responsible for any damage to the forks or damage resulting from malfunctioning forks.



Mid-mastview



PAGE 21

The **Mid-mastview** system shows the driver on the monitor the view along the fork after the freelif stage. This allows correct positioning. Also, this configuration provides a view on the racking when non-Euro pallets are used

With a **Mid-mastview** system the camera is mounted (mostly on an additional bracket) on the cross member of the inner mast stage. The robust monitor comes with a fully adjustable clamp bracket that is mounted on the reach truck's guardrail.



Information

Telescopic forks allow flexibility when moving pallets of different sizes. The long forks allow for double-deep storage of pallets. The greater reach of the truck requires the driver to pay even closer attention. The area that needs to be scrutinized is even larger. This is simplified with an Orlaco camera mounted in the fork carriage. In cooperation with the supplier of the telescopic forks, the camera may also be integrated on the fork.



View-on-forks



PAGE 20-21

The **View-on-forks** system allows the driver to see on the monitor an optimal view along the fork. This allows correct positioning, without making the fork wider.

With the **View-on-forks** system, the camera is mounted under the fork carriage. The robust monitor comes with a fully adjustable clamp bracket that is mounted on the reach trucks guardrail.



Orlaco systems are suitable for 12...60V power supply




Rearview



PAGE 21

The **Rearview** system allows the driver to see the area behind the truck on the monitor. This enables the driver to see what is happening behind the truck, as well as in the aisle when backing out of the racking. This helps to reduce risks for goods and personnel.

With a **Rearview** system, the camera is mounted on the back of the mast on one of the cross members. The robust monitor comes with a fully adjustable clamp bracket that is mounted on the cabin roof, or inside the cabin.

 Orlaco systems are suitable for **12...60V** power supply



Frontview



PAGE 23

The **Frontview** system allows the driver to see the area directly in front of the truck on the monitor. When the cabin is raised the driver maintains a direct view of the aisle below. This helps to reduce risks for goods and personnel.

The **Frontview** system has a camera mounted at the bottom of the chassis. The robust monitor comes with a fully adjustable clamp bracket that is mounted on the cabin roof, or inside the cabin.





Frontview



The **Frontview** system allows the driver to see the area in front of the forklift truck. Even with a load on the forks, the driver maintains a view of what happens in front. This helps to reduce risks for goods and personnel.

With a **Frontview** system the camera is mounted on the mast's fixed outer stage. The robust monitor comes with a fully adjustable clamp bracket that is mounted in the truck's cabin.



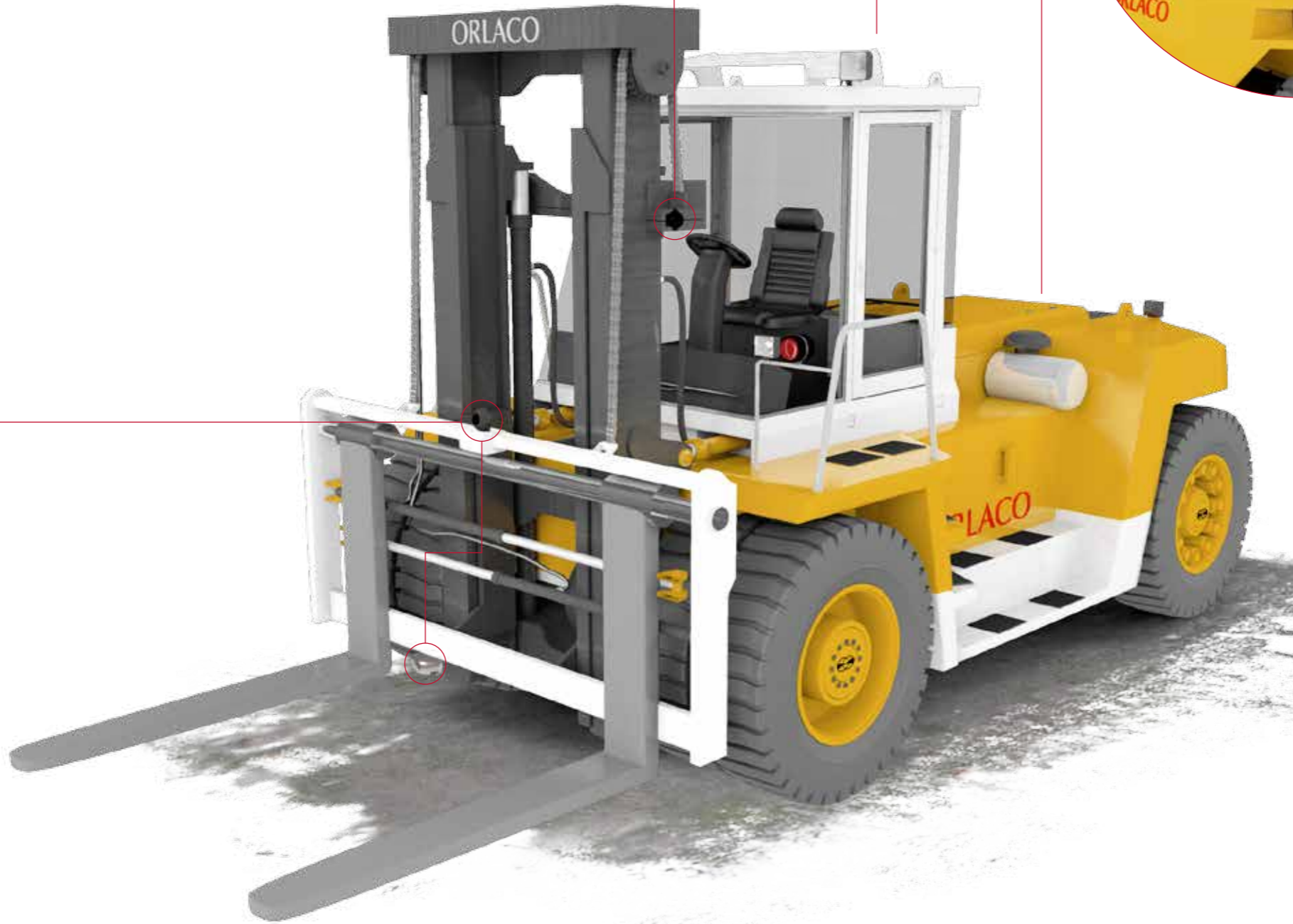
View-on-forks



PAGE 20-21

Loading and unloading of trucks often requires the forks to be at a height where the view of the forks is blocked by the fork carriage. The **View-on-forks** system allows the driver to maintain a view of the forks.

With a **View-on-forks** system the camera is mounted in or under the fork carriage so that the driver gets a complete overview of the area around the forks. The robust monitor comes with a fully adjustable clamp bracket that is mounted on the reach truck's guardrail.



Rearview & RadarEye



PAGE 22, 25

In confined areas or unclear situations it is often difficult to estimate the space behind the forklift truck accurately. Also, frequent driving in reverse causes strain on the driver's neck- and shoulder muscles. The **Rearview + RadarEye** system ensures a safe environment in which the physical strain for the driver is minimal.

With a **Rearview** system the camera is mounted on the back of the truck. An active warning system is created through the combination with **RadarEye**. The operator is actively warned in an acoustic and visual manner if objects and people are detected in the driving direction. The robust monitor comes with a fully adjustable clamp bracket that is mounted in the truck's cabin.



 Orlaco systems are suitable for 12...60V power supply

Topview



The **Topview** system allows the driver to see the area in front of the container. When a container has been picked up, the driver maintains a view of what happens in front. This helps to reduce risks for goods and personnel.

With a **Topview** system the camera is mounted at the top of the boom. The camera is aimed so that the monitor shows an image of the area in front of the reach stacker. The installation of the cable on the boom depends on the configuration of the Reach Stacker.



YouTube

[Check our video on the Orlaco YouTube channel.](#)



View-on-twistlocks



PAGE 22

When picking up containers the correct positioning can be difficult. The **View-on-twistlocks** system can assist the driver and simplify this task.

With a **View-on-twistlocks** system a camera is mounted on each side of the spreader, aimed at the twist locks. Each camera's image is shown on its own monitor.



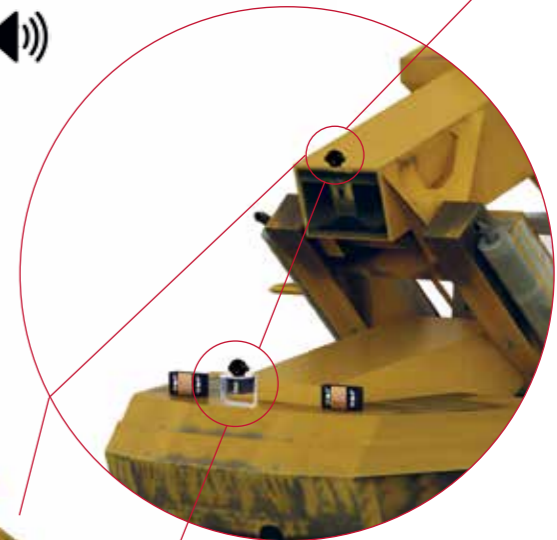
Rearview & RadarEye



PAGE 24

When maneuvering with a reach stacker it is often difficult to estimate the space behind the vehicle accurately.

With a **Rearview** system the camera is mounted on the back of the Reach stacker. An active warning system is created through the combination with **RadarEye**. The operator is actively warned in an acoustic and visual manner if objects and people are detected in the driving direction. The robust monitor comes with a fully adjustable clamp bracket that is mounted in the cabin.



Orlaco systems are suitable for 12...60V power supply

Combined sets

The **View-on-twistlocks** or **Topview** system is often extended with an extra camera for **Rearview**. By using the truck's driving direction signal, the image from the **Rearview** camera can automatically be shown when the truck is put in reverse.



Rearview & RadarEye



PAGE 23, 25

When maneuvering with an ECH it is often difficult to estimate the space behind the vehicle accurately. Due to the frequency of driving in reverse the operators neck and shoulder muscles are under strain. The **Rearview** system ensures a safe environment in which the physical strain for the driver is minimal.

With a **Rearview** system the camera is mounted on the back of the Empty Container Handler. An active warning system is created through the combination with **RadarEye**. The operator is actively warned in an acoustic and visual manner if objects and people are detected in the driving direction.




View-on-twistlocks

PAGE 22



Empty containers are stacked to save space. When picking up containers the correct positioning of the spreader can be difficult. The **View-on-twistlocks** system can assist the driver and simplify this task.

With a **View-on-twistlocks** system a camera is mounted on each side of the spreader, aimed at the hooks. Each camera's image is shown on its own monitor.

 [Check our video on the Orlaco YouTube channel.](#)

 **Orlaco systems are suitable for 12...60V power supply**

Combined sets

The **View-on-twistlocks** system is often extended with an extra camera for **Rearview**. By using the truck's driving direction signal, the image from the **Rearview** camera can automatically be shown when the truck is put in reverse.

Frontview / Rearview

PAGE 23



In confined areas or unclear situations it is often difficult to estimate the space in front of the forklift truck accurately. Using a **Frontview / Rearview** system ensures a safe environment. The driver can see on the monitor what is happening around the sideloader which enables correct and safe maneuvering.

View-on-forks



With a **View-on-forks** system the camera is mounted on the end of the boom. This allows the driver to see the attachment on the monitor which enables optimal positioning.

The robust monitor comes with a fully adjustable clamp bracket that is mounted in the truck's cabin. The installation of the cable on the boom depends on the configuration of the telehandler.



Forkview / View-on-forks



PAGE 18-21

When handling loads with a sideloader it is often not possible for the driver to see the forks. Using a **Forkview** or **View-on-forks** system allows the driver to see on the monitor where the forks are to be positioned. This helps to reduce risks for goods and equipment.

The **Forkview** system has a camera mounted at the inside of the right hand side fork. The camera of the **View-on-forks** system is mounted in or under the fork carriage. The robust monitor comes with a fully adjustable clamp bracket that is mounted in the truck's cabin.



Rearview



PAGE 23

In confined areas or unclear situations it is often difficult to estimate the space behind the telehandler accurately. The **Rearview** system ensures a safe and concise environment in which the physical strain of the driver is minimal.

With a **Rearview** system the camera is mounted at the back of the telehandler. The robust monitor comes with a fully adjustable clamp bracket that is mounted in the cabin.

 Orlaco systems are suitable for 12...60V power supply

Set **Forkview** reach truck (0401422) generic

Suitable for:

Toyota RRE-H

Jungheinrich ETV series

Unicarriers Tergo

Still FM-X

and many others.

Hyster R-series

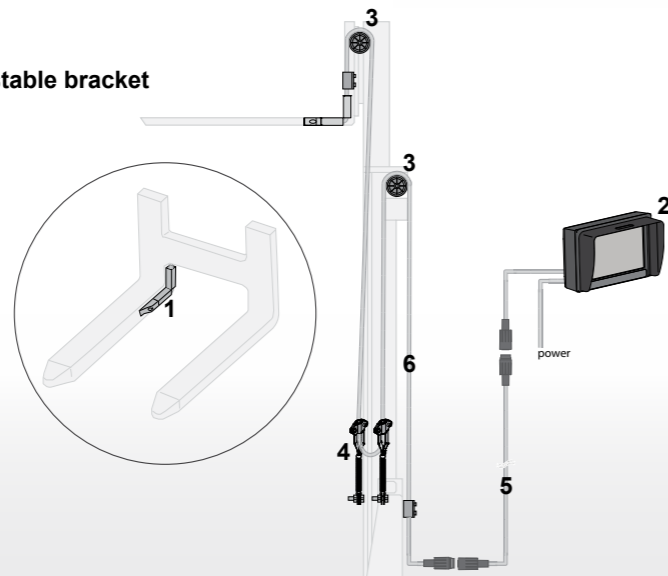
Yale MR-series

Mitsubishi Sensia

Caterpillar NR-N2 series



- 1. Camera AMOS CFMC 51°
0198710 - page 28
- 2. Monitor 7" RLED, incl. adjustable bracket
0208902 - page 31
- 3. Pulley (2x)
0403330 - page 36
- 4. Springset (2x)
0403340 - page 36
- 5. Dynamic cable 5m
0304341 - page 29
- 6. Dynamic cable 15m
0301731 - page 29

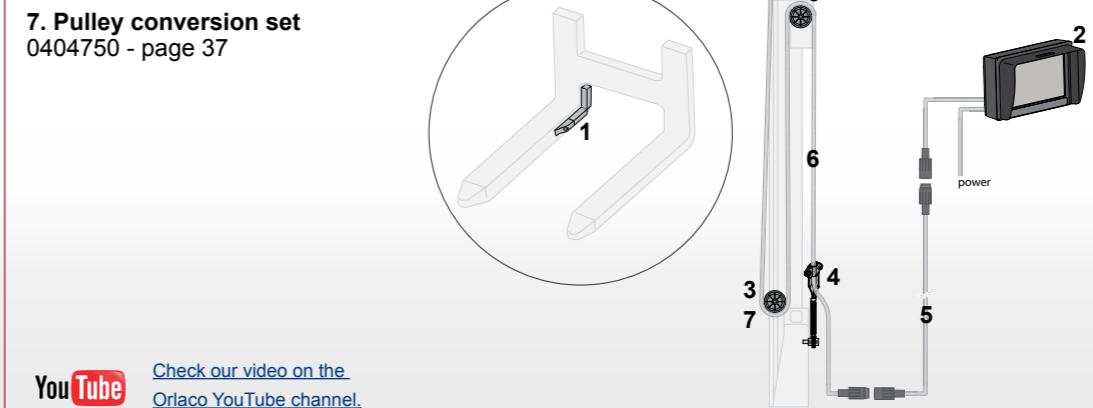


YouTube [Check our video on the Orlaco YouTube channel.](#)

Set **Forkview** reach truck (0401432)

Suitable for: **Linde 1120, mast type 1500 & 1502**

- 1. Camera AMOS CFMC 51°
0198710 - page 28
- 2. Monitor 7" RLED, incl. adjustable bracket
0208902 - page 31
- 3. Pulley (3x)
0403330 - page 36
- 4. Springset (1x)
0403340 - page 36
- 5. Dynamic cable 5m
0304341 - page 29
- 6. Dynamic cable 15m
0301731 - page 29
- 7. Pulley conversion set
0404750 - page 37

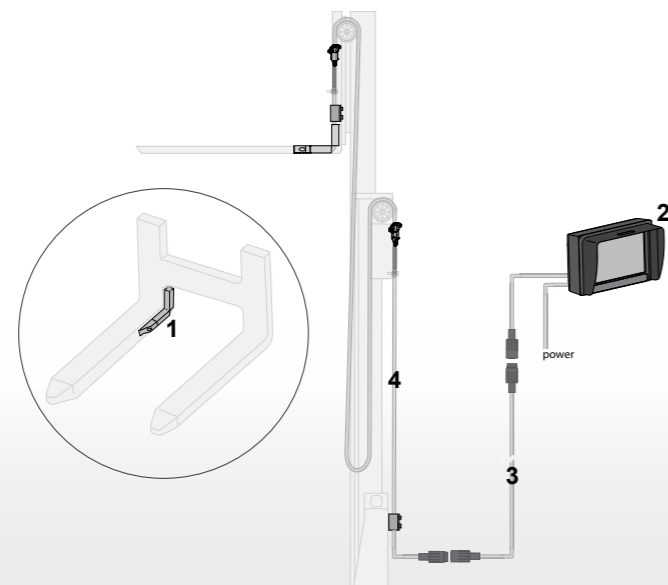


YouTube [Check our video on the Orlaco YouTube channel.](#)

Set **Forkview** reach truck

Suitable for: **Crown ESR5000 series**

- 1. Camera AMOS CFMC 51°
0198710 - page 28
- 2. Monitor 7" RLED, incl. adjustable bracket
0208902 - page 31
- 3. Dynamic cable 5m
0304341 - page 29
- 4. Cable 15m Crown ESR5000
0301740 - page 37



YouTube [Check our video on the Orlaco YouTube channel.](#)

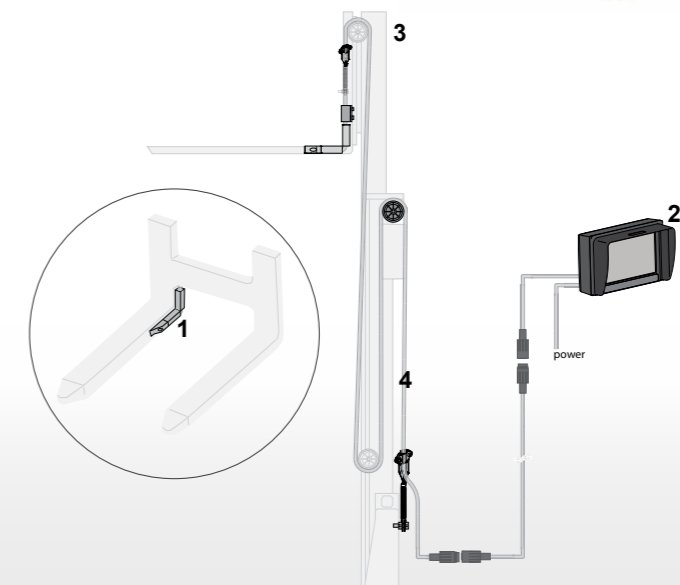
Set **Forkview** reach truck

Suitable for: **Linde 1120, mast type 1501 Triplex**

- 1. Camera AMOS CFMC 51°
0198710 - page 28
- 2. Monitor 7" RLED, incl. adjustable bracket
0208902 - page 31
- 3. Bracket 1501 mast*
Special
- 4. Pulley
0403330 - page 36
- 5. Springset
0403340 - page 36
- 6. Dynamic cable 5m
0304341 - page 29
- 7. Dynamic cable 15m
0301731 - page 29



* Please contact Orlaco for mounting instructions.



YouTube [Check our video on the Orlaco YouTube channel.](#)

Set **Forkview** reach truck (0401442)Suitable for: **BT (Toyota) RRE series**

1. Camera AMOS CFMC 51°
0198710 - page 28
2. Monitor 7" RLED, incl. adjustable bracket
0208902 - page 31
3. Dynamic cable 5m
0304341 - page 29
4. Cable 15m BT (Toyota) RRE
0305970 - page 37



You Tube [Check our video on the Orlaco YouTube channel.](#)

Set **View-on-forks** forklift truck (Generic 2-stage mast) (0401512)

Also suitable for Rearview on Man-up truck.

1. Camera FAMOS 102°
0171020 - page 27
2. Monitor 7" RLED, incl. adjustable bracket
0208672 - page 31
3. Dynamic cable 11m
0301811 - page 29
4. Pulley
0403330 - page 36
5. Springset
0403340 - page 36
6. Rubber mounts Compact Camera
0403310 - page 38



You Tube [Check our video on the Orlaco YouTube channel.](#)

Set **Mid-mastview** reach truck (0401571)

1. Camera AMOS CPH 51°
0199700 - page 28
2. Monitor 7" RLED, incl. adjustable bracket
0208902 - page 31
3. Dynamic cable 11m
0301811 - page 29
4. Pulley
0403330 - page 36
5. Springset
0403340 - page 36

Note: The camera bracket needs to be added locally. For some truck models, specific dedicated sets are available. Contact Orlaco for further information.

Set **View-on-forks** forklift truck (Generic 3-stage mast) (0401502)

1. Camera AMOS CPH 51°
0199700 - page 28
2. Monitor 7" RLED, incl. adjustable bracket
0208672 - page 31
3. Dynamic cable 11m
0301811 - page 29
4. Pulley (2x)
0403330 - page 36
5. Springset (2x)
0403340 - page 36



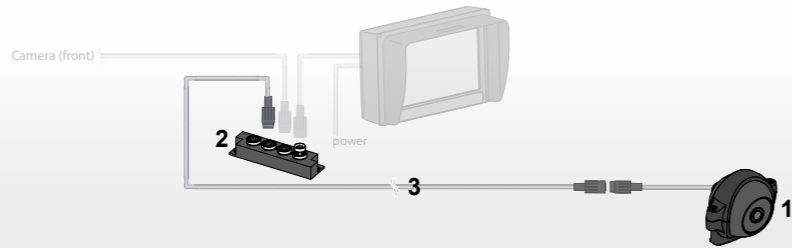
You Tube [Check our video on the Orlaco YouTube channel.](#)

Set Camera expansion (0401451)

The Orlaco camera monitor system offers a variety of possibilities. Besides offering a view on the situation in front of the truck an Orlaco system can simply be extended with a second or even a third camera for a complete overview around the forklift. The driver can have the camera images shown on the monitor as desired, there are numerous possibilities. To name one, the monitor can show the Rearview camera's image automatically when reversing.



- 1. Camera FAMOS 118°
0171010 - page 27
- 2. Switcher UNI
0404040 - page 36
- 3. Multi cable 5m
0301880 - page 29



Set Rearview counter balance truck (0401552)

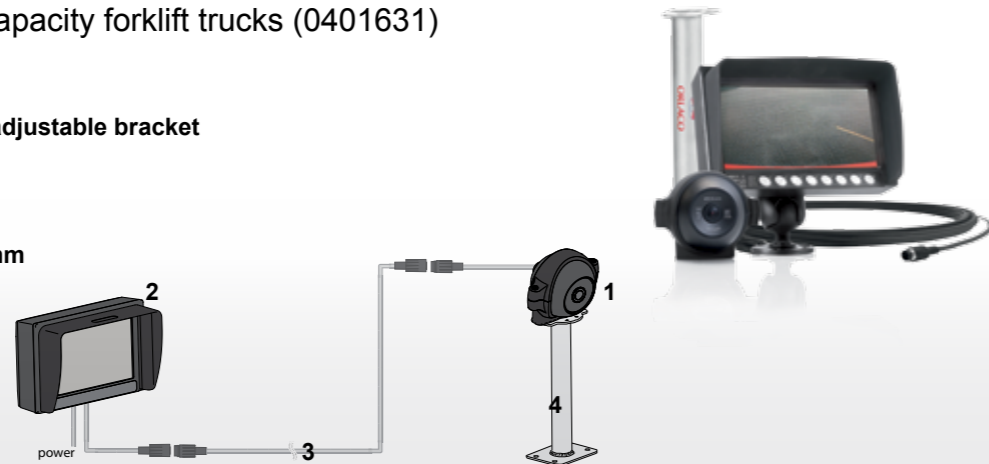
- 1. Camera FAMOS 118°
0171010 - page 27
- 2. Monitor 7" RLED, incl. adjustable bracket
0208672 - page 31
- 3. Multi cable 5m
0301880 - page 29



[YouTube](#) [Check our video on the Orlaco YouTube channel.](#)

Set Rearview high capacity forklift trucks (0401631)

- 1. Camera FAMOS 118°
0171010 - page 27
- 2. Monitor 7" RLED, incl. adjustable bracket
0208672 - page 31
- 3. Dynamic cable 10m
0304441 - page 29
- 4. Camera extension 250mm
0402270 - page 38



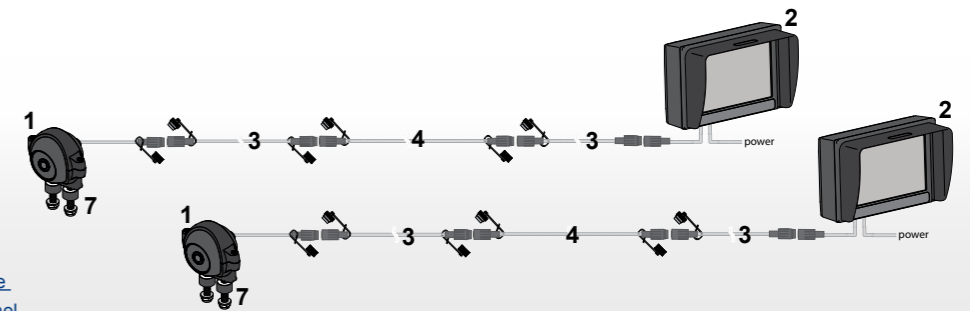
Set View-on-twistlocks reach stacker

- 1. Camera FAMOS 102° (2x)
0171020 - page 27
- 2. Monitor 7" RLED, incl. adjustable bracket (2x)
0208672 - page 31
- 3. Dynamic cable 11m* (4x)
0301811 - page 29
- 4. Dynamic cable 20m* (2x)
0301831 - page 29
- 5. Protection cap male (6x)
1350200 - page 34
- 6. Protection cap female (6x)
1350300 - page 34
- 7. Rubber mounts Compact Camera (2x)
0403310 - page 38



* Typical example - cable lengths are to be checked!

Note: It is assumed that the cabling within the spreader is installed by the spreader manufacturer.



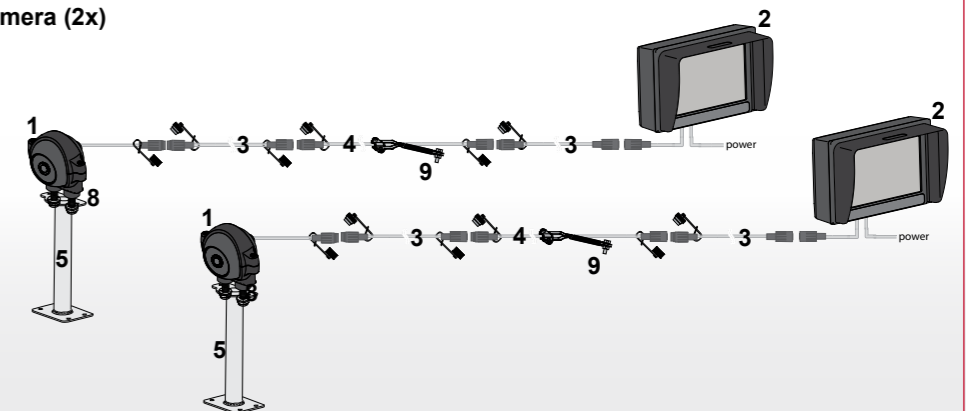
[YouTube](#) [Check our video on the Orlaco YouTube channel.](#)

Set View-on-twistlocks empty container handler

- 1. Camera FAMOS 80° (2x)
0171030 - page 27
- 2. Monitor 7" RLED, incl. adjustable bracket (2x)
0208672 - page 31
- 3. Dynamic cable 10m* (4x)
0304441 - page 29
- 4. Dynamic cable 20m* (2x)
0301831 - page 29
- 5. Camera extension 250mm (2x)
0402270 - page 38
- 6. Protection cap male (6x)
1350200 - page 34
- 7. Protection cap female (6x)
1350300 - page 34
- 8. Rubber mounts Compact Camera (2x)
0403310 - page 38
- 9. Springset (2x)
0403340 - page 36



* Typical example - cable lengths are to be checked!



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Set **Rearview** reach stackers (0401601)

1. Camera FAMOS 118°
0171010 - page 27
2. Monitor 7" RLED, incl. adjustable bracket
0208672 - page 31
3. Dynamic cable 5m
0304341 - page 29
4. Dynamic cable 11m
0301811 - page 29
5. Camera extension 250mm
0402270 - page 38
6. Protection cap male (2x)
1350200 - page 34
7. Protection cap female (2x)
1350300 - page 34

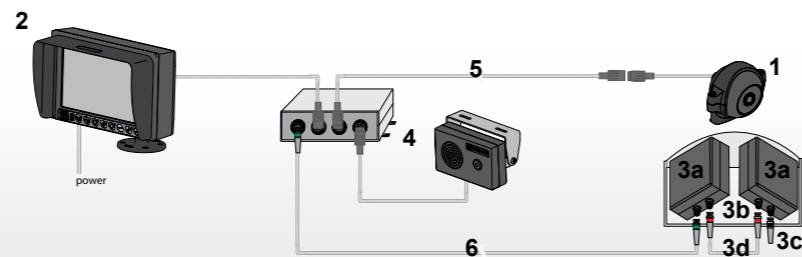


YouTube [Check our video on the Orlaco YouTube channel.](#)

Set **RadarEye center rear** reach stackers

Suitable for reach stackers with a sliding cabin.

1. Camera FAMOS 118°
0171010 - page 27
2. Monitor 7" RLED CAN SRD, incl. adjustable bracket
0208871 - page 31
3. RadarEye set center rear
0403100 - page 32
 - a. SRD sensors (2x)
 - b. RadarEye center bracket
 - c. RadarEye Terminator
 - d. RadarEye cable M12 Master-Slave Red 0,25m
4. RadarEye Interface box with ext. speaker
0504820 - page 33
5. Dynamic cable 10m
0304441 - page 29
6. RadarEye cable M12 Green 10m
0301060 - page 33

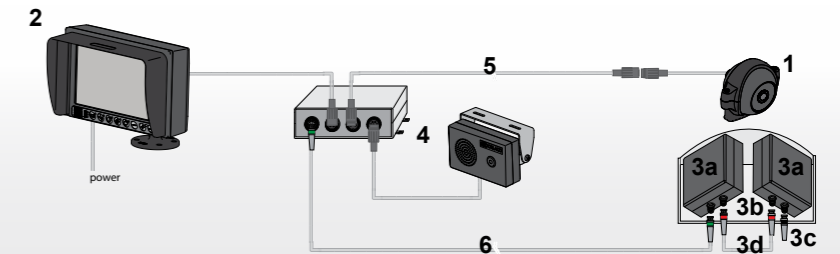


YouTube [Check our video on the Orlaco YouTube channel.](#)

Set **RadarEye center rear**

Suitable for counterbalance forklifts

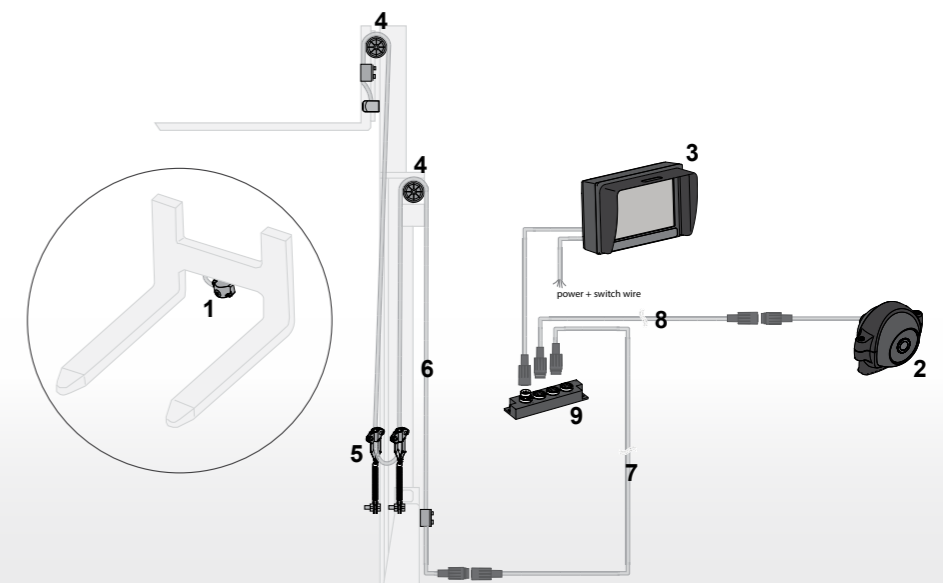
1. Camera FAMOS 118°
0171010 - page 27
2. Monitor 7" RLED CAN SRD, incl. adjustable bracket
0208871 - page 31
3. RadarEye set center rear
0403100 - page 32
 - a. SRD sensors (2x)
 - b. RadarEye center bracket
 - c. RadarEye Terminator
 - d. RadarEye cable M12 Master-Slave Red 0,25m
4. RadarEye Interface box with ext. speaker
0504820 - page 33
5. Multi cable 5m
0301880 - page 29
6. RadarEye cable M12 Green 5m
0301050 - page 33



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Set **View-on-forks in combination with Rearview**

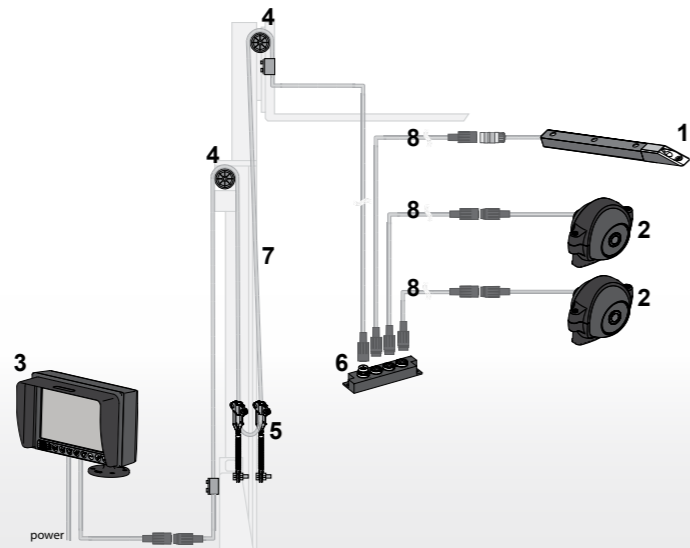
1. Camera AMOS CPH 51°
0199700 - page 28
2. Camera FAMOS 118°
0171010 - page 27
3. Monitor 7" RLED, incl. adjustable bracket
0208672 - page 31
4. Pulley (2x)
0403330 - page 36
5. Springset (2x)
0403340 - page 36
6. Dynamic cable 11m
0301811 - page 29
7. Dynamic cable 5m
0304341 - page 29
8. Multi cable 5m
0301880 - page 29
9. Switcher UNI
0404040 - page 36



YouTube [Check our video on the Orlaco YouTube channel.](#)

Set Three cameras on fork (carriage)

1. Camera AMOS CFMC 51°
0198710 - page 28
2. Camera FAMOS 80° (2x)
0171030 - page 27
3. Monitor 7" RLED, incl. adjustable bracket
0208902 - page 31
4. Pulley (2x)
0403330 - page 36
5. Springset (2x)
0403340 - page 36
6. Switcher UNI
0404040 - page 36
7. Dynamic cable 15m
0301731 - page 29
8. Dynamic cable 5m (3x)
0304341 - page 29



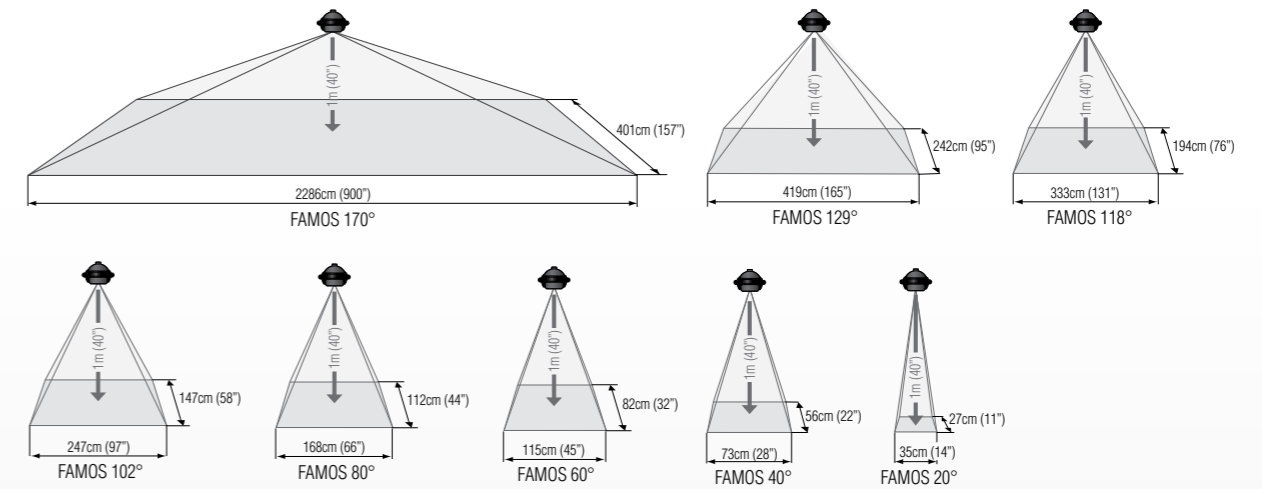
Or design your system yourself

- Step 1: Select your camera
 Step 2: Select your desired cable
 Step 3: Select your monitor
 Step 4: Select the required options
- It is also possible to configure your system online on our website: www.oralco.com

Whatever you select, the system can be easily installed and is plug-and-play.
Note: For two or more cameras a switcher, 4Cam RLED Monitor or MultiView Box and additional cables are required. Contact us for support.

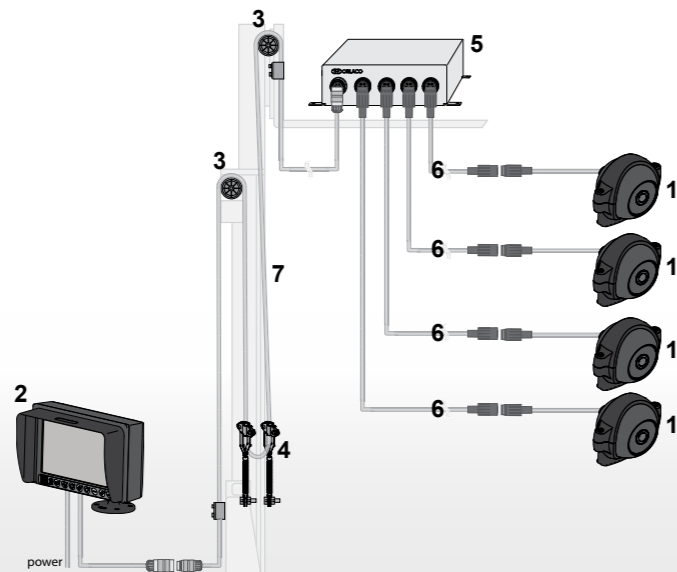
The qualifications of our FAMOS Compact Cameras

- Next generation CMOS sensor
- Light sensitivity 0.05 lux
- Integrated Safety ticker to show that camera is running and active
- Chemically hardened lens
- Automotive molding-filled housing, watertight IP69K according to DIN 40050-9
- Improved EMC-standards
- Optimized impact- and vibration-resistance
- Impact and vibration proof
- Operating temperature between -40°C to +85°C
- Heated lens glass, therefore no problems with condensation or frost
- Fixed lens
- IP68 dust- and waterproof according to IEC 60529
- The camera has a 0,5m cable including a waterproof molded 4p connector male



Set Four cameras on fork (carriage)

1. Camera FAMOS 102° (4x)
0171020 - page 27
2. Monitor 7" RLED Serial, incl. adjustable bracket
0208632 - page 31
3. Pulley (2x)
0403330 - page 36
4. Springset (2x)
0403340 - page 36
5. MultiView Box II
0405100 - page 35
6. Multi cable 5m (4x)
0301880 - page 29
7. Dynamic cable 17m
0304590 - page 29



Cameras FAMOS

Type	Art. no. PAL	Art. no. NTSC
20°	0171060	0171160
40°	0171050	0171150
60°	0171040	0171140
80°	0171030	0171130
102°	0171020	0171120
118°	0171010	0171110
129°	0171000	0171100
170°	0171070	0171170

Camera FAMOS Barcode

Camera with special focus set on 600mm with the possibility to read barcodes.

Type	Art. no. PAL	Art. no. NTSC
20° Barcode	0171270	-



Cameras FAMOS IR LED

Day-night camera including 4 High Power Infrared LEDs 850nm. The IR LED's are automatically activated. Based on the output of the CMOS sensor the IR illumination value is set to ensure the best possible image.



Type	Art. no. PAL	Art. no. NTSC
80°	0171610	0171630
118°	0171600	0171620
118° MIRROR	0171900	0171910

- UV-transparent front cover

The qualifications of our AMOS CFMC and CPH cameras

- Next generation CMOS sensor
- Light sensitivity 0.05 Lux
- Operating temperature -40°C to +85°C
- Waterproof camera IP69K according to DIN 40050-9
- Heated lens glass, therefore no problems with condensation or frost
- High resolution
- Fixed lens, angle of aperture: 51°
- Impact and vibration proof

Camera AMOS CFMC

Camera for mounting at the inside of the right-hand side fork.

0198710 Camera AMOS CFMC 51° (PAL)

- Including 1m multi cable 4p connectors



Camera AMOS CFMC + LEDs

Camera with two integrated high bright LEDs.

0198700 Camera AMOS CFMC 51° + LEDs (PAL)

- Including 1m multi cable 4p connectors



Camera AMOS CPH

Extremely robust small camera for mounting on a vulnerable position.

Type	Art. no. PAL	Art. no. NTSC
51°, 0,2m cable	0199710	0199740
51°, 0,6m cable	0199700	0199730



The advantages of Orlaco cables

- All cables are specially developed by Orlaco
- Special cables are available for various circumstances
- Resistant to oil and petrol
- Watertight cable connectors
- Operating temperature -40°C to +85°C

Dynamic cable (Mast cable)

Designed for dynamic use as mast cable.

- Soft cover with small bend radius

Including 4p molded connectors:

0304371	0,5m	0304281	1m
0305391	3,2m	0305341	3,5m
0304341	5m	0304381	6m
0304391	8m	0304431	9m
0304441	10m	0305250	10,4m
0305240	10,5m	0301811	11,2m
0304451	12m	0305351	13,7m
0301731	15m	0301831	20m

Including 7p molded connectors

0304460	3m	0304470	4m
0304480	5m	0304490	8m
0304560	9m	0304570	10m
0304580	11m	0304590	17m



Multi cable standard

This standard cable can be used if no special requirements like mechanical protection or dynamic movement of the cable is needed.

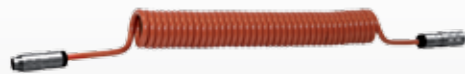
Including 4p molded connectors:

0301960	1m	0301870	2m
0301890	3m	0301880	5m
0301910	7,5m	0301930	8m
0301950	9m	0301900	11m
0301920	16m	0301940	21m
0301990	40m		

Including 7p molded connectors:

0304420	0,6m	0302820	1m
0304260	2m	0304410	6m
0304610	11m	0304620	16m
0305030	21m		





Spiral cable 4p

- Operating temperature -40°C to +85°C

0303560 4,5m (max stretched)

0303570 6,5m (max stretched)



Shielded spiral cable 4p (forklift)

0303700 3,5m (max stretched)

- Operating temperature -20°C to +80°C



Cable drum

0710240

- Holds the cable tight
- 7m cable (1220150) and 12m cable (1220600)
- Watertight connector straight (1310850 & 1312001)
- Operating temperature 0°C to +75°C

0710280

- Specification identical to 0710240 except for: operating temperature -40°C to +75°C

Cable per meter (connectors not included)

Any required connectors can be ordered separately (page 34).

1220600 Dynamic cable per meter

For moving applications.

- 1 x coax + 5 x wires
- Diameter 9mm

1221000 Dynamic cable per meter

For moving applications.

- 1 x coax + 11 x wires
- Diameter 9mm

1221100 Dynamic cable per meter

For moving applications.

- 1 x coax + 14 x wires
- Diameter 9mm

1220110 Multi cable per meter

For non moving applications.

- 1 x coax + 3 x wires
- Diameter 6mm

1220170 Multi cable per meter

For non moving applications.

- 1 x coax + 5 x wires
- Diameter 6mm

The possibilities offered by Orlaco LED monitors

- Automotive 7inch TFT liquid crystal display module, LED backlight
- Operating temperature between -40°C to +85°C
- Impact and vibration resistance meet the stringent requirements
- Power protected against:
 - Induction voltages
 - Load dumps
 - Over- and undervoltage
- Mirror image setting
- High resolution pixel WVGA 800xRGBx480
- Brightness automatically adjusts to the ambient light
- Option of a marker line per camera

- on the screen for the optimum determination of distance
- Integrated sun visor
- IP67 according to IEC 60529
- Full On-Screen-Display (OSD) in 15 languages
- Watertight molded connectors

Monitors

0208672 Monitor 7" RLED R 4 CS

- 4m multi cable (power) open wired, 4m multi cable (video) with 4p female connector
- User-adjustable 132mm mounting bracket
- Input Voltage 12...60V/DC +/-10%
- Suitable for (open) cold store applications

0208632 Monitor 7" RLED Serial R 6

- 6m multi cable (power) open wired, 6m multi cable (video) with 7p female connector
- User-adjustable 132mm mounting bracket
- Input Voltage 18...30V/DC +/-10%
- To be used in combination with MultiView box (see page 36)

0208871 Monitor 7" RLED CAN SRD 6

- 6m multi cable (power) open wired, 6m multi cable (video) with 7p female connector
- User-adjustable 132mm mounting bracket
- Input Voltage 18...30V/DC +/-10%
- Specially designed for RadarEye systems (see page 32-33)

0208902 Monitor 7" RLED RC 4 CS

- 4m multi cable (power) open wired, 4m multi cable (video) with 4p female connector
- User-adjustable 190mm mounting bracket with clamp
- Input Voltage 12...60V/DC +/-10%
- Suitable for (open) cold store applications

0411000 Monitor 12" RLED R 4

- 4m multi cable (power) open wired, 4m multi cable (video) with 4p female connector
- User-adjustable 190mm mounting bracket
- Input Voltage 12...30V/DC +/-10%

0411130 Monitor 12" RLED Serial R 6

- 6m multi cable (power) open wired, 6m multi cable (video) with 7p female connector
- User-adjustable 190mm mounting bracket
- Input Voltage 18...30V/DC +/-10%
- To be used in combination with MultiView box (see page 36)

0411300 Monitor 12" RLED CAN SRD 6

- 6m multi cable (power) open wired, 6m multi cable (video) with 7p female connector
- User-adjustable 190mm mounting bracket
- Input Voltage 18...30V/DC +/-10%
- Specially designed for RadarEye systems (see page 32-33)



RLED 7" (Incl. User-adjustable 132mm mounting bracket)



RLED 7" (Incl. User-adjustable 190mm mounting bracket with clamp)



RLED 12" (Incl. User-adjustable 190mm mounting bracket)

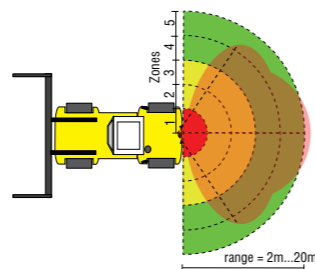
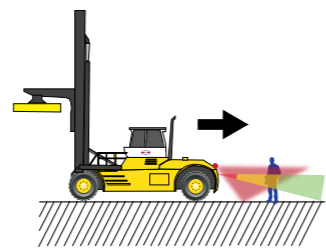
RadarEye unites visibility and active detection




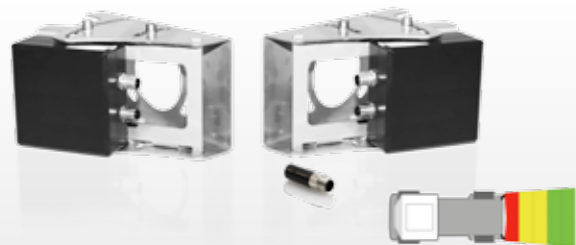
Orlaco has developed this radar unit in addition to the camera-monitor systems. By combining the vision solution with an active signaling system, RadarEye offers additional safety and efficiency.

RadarEye is an integrated active view system designed to detect and see objects in zones obscured from the driver's view. The radar system detects stationary as well as moving objects in a designated coverage area. With this view system the driver is actively warned with audible tones that increase in rate as objects come closer. When an object is detected it can be seen on the monitor and the driver can respond immediately. This prevents damage to the drivers truck and any other equipment he may reverse into. The radar units have a rugged design, are shockproof, waterproof and is not influenced by the environment, such as snow, rain, mud and or temperature changes.

- RadarEye can be used on various machines
- RadarEye is capable of visualizing the radar-zones on the display. As soon as an object enters the zone it will activate colored dots (default setting) or a transparent visualization (standard/custom preset settings) to make the driver aware of the potential danger
- 2...20m detection area, divided in 5 equally sized segments
- Separation distance: 1-4m (configurable)
- Antenna beam horizontal: 70°(typ.), vertical: 11°(typ.)
- Operating temperature between -40°C to +85°C
- Obstacle reaction delay 50ms
- Orlaco Monitor CAN SRD is required (see page 31)
- RadarEye can be extended with multiple sensor and camera units for all around detection and visibility
- Please contact Orlaco for advice and installation
- See page 25 for an example of a RadarEye system



 [Check our demo RadarEye videos on the Orlaco YouTube channel.](#)

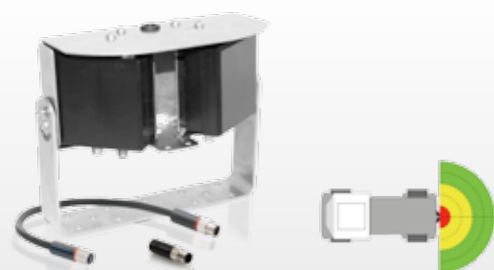


RadarEye Sets

0403120 Set SRD Corner Rear

Active Rearview system for corner mounting.

- Including SRD sensors, brackets and terminator
- Interface Box CAN/SRD/camera is required (0256010 or 0504820)
- Cables, camera and monitor CAN SRD are not included



0403100 Set SRD Center Rear

Active Rearview system for center mounting.

- Including SRD sensors, bracket, cable master-slave (0301080) and terminator
- Interface Box CAN/SRD/camera is required (0256010 or 0504820)
- Cables, camera and monitor CAN SRD are not included

RadarEye Interface boxes

0256010 Interface Box CAN/SRD/camera

The Interface Box is designed to connect SRD sensors to camera and CAN SRD monitor.

0504820 Interface Box with Ext. speaker CAN/SRD/camera

The Interface Box is designed to connect SRD sensors to a camera, CAN SRD monitor and external speaker.

- Set consists of: External speaker and Interface Box
- Sound pressure speaker: 85dB (+/-3dB) distance 1m



RadarEye Cables

Cable M12 Green

Connection cable between Interface box and master SRD sensor or connection cable between slave SRD sensor and next SRD sensor.

0301151	2m	0301051	5m
0301061	10m	0301071	15m
0301121	20m	0301131	25m
0301141	30m		

Cable M12 Master-Slave Red

Connection cable between master SRD sensor and slave SRD sensor.

0301081	0,25m	0301021	1m
0301031	4m	0301041	8m
0301091	16m		



RadarEye Brackets

0401330 Bracket SRD Sensor Corner Rear

Mounting bracket for SRD Sensor for corner mounting

- Stainless steel
- SRD sensor not included

0401320 Bracket SRD Sensor Center Rear

Mounting bracket for SRD Sensor for center mounting

- Stainless steel
- SRD sensors not included



RadarEye Parts

Please contact Orlaco for advice

0004310 SRD sensor CAN Horizontal

Short Range Detection (SRD) sensor for integration in active view system (RadarEye).

- Connectors position: Side

0004320 SRD sensor CAN Vertical

Short Range Detection (SRD) sensor for integration in active view system (RadarEye).

- Connectors position: Top / Bottom

0350111 M12 Terminator 120 Ohm

120 Ohm resistor for terminating CAN bus.





Connectors

1310841 Connector 4p female Gold
This connector is recommended for the multi cable 6mm.

1312001 Connector 4p male Gold
This connector is recommended for the multi cable 6mm.

1310850 Connector 4p female PG9 Gold
This connector is recommended for the dynamic cable 9mm.

1312050 Connector 4p male PG9 Gold
This connector is recommended for the dynamic cable 9mm.

1311250 Connector 7p female PG9 Gold
This connector is recommended for the dynamic cable 9mm.

1322450 Connector 7p male PG9 Gold
This connector is recommended for the dynamic cable 9mm.



Protection caps

1350200 Protection cap - male

1350300 Protection cap - female



Adapter plug

0357500 Adapter plug 4p male - 7p female
For use in combination of MultiView box and standard 4p monitor.

0357510 Adapter plug 7p male - 4p female



Adapter cables

0303860 Interface cable 4p female - BNC
To connect camera to third-party monitor.

0303770 Adapter cable 4p female - Cinch
To connect camera to third-party monitor.

Cable disconnection sets

• With caps

0351070 7p

0351130 13p

0351100 10p harting



Split cable (2m)

For connection 2 to 4 cameras (with Switcher)

0303783 Y-Split cable UNI RLED

• With two 4p female connectors (video) and open wire cable (power)

8976750 Y-Split cable RLED

• With 4p and 7p female connectors (video) and open wire cable (power)



Electrical transformers

0408070 FL DC/DC in 50...150V/DC-24V 5A

- Galvanically isolated
- Input voltage: 50 to 150 V/DC
- Output voltage: 24V 5A
- Including fuses and screw connections



Pulley

0403330 Pulley for dynamic cable

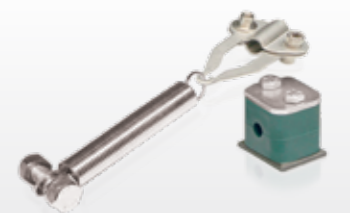
- Diameter: 80mm
- Stainless steel brackets and anodized aluminum pulley
- Suitable for: -50°C ... +150°C



Spring set

0403340 Spring set for dynamic cable

For pre-tensioning mast cable.



Push button

8975760 Push button yellow

For manually switching between cameras.





Digital video recorder

Digital video recorder with one camera input and one video output

0000300 DVR one channel

- Can be used with a compact camera (4p) or serial camera (7p)
- Video loop function
- Automatic timestamp
- Including 32GB SDHC-card for max 72 hours of storage and SD-card reader



0000250 DVR Multi view

Digital video recorder with four camera inputs and one video output with multiview options.

- Suitable for compact cameras (4p)
- Automatic timestamp
- Including 128GB 80 MB/s SDXC-card for max 72 hours of storage



Multiview split

The Multiview box is an advanced video imaging system for up to 4 cameras. There are many possibilities of different split views in 5 selectable video channels.

- Stainless steel housing
- Serial Orlaco Monitor needed (A regular non Serial Orlaco monitor can be connected to the Multiview box via a 7-to-4-pin adapter plug (0357500), please contact your dealer for further advice)



0405100 MultiView box II

- 4 camera inputs (4x Compact Camera)

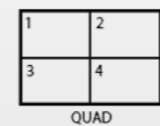
0405200 MultiView box II dual mode

- Pre-programmed splitscreen
- Including adapter plug 4p male - 7p female (0357500)

Preset view options for channel 1-4:



Default channel 5:



Switchers

0404300 Switcher 4Cam

This video switcher for third party monitors has 4 video inputs and 1 video output

- Connect up to 4 cameras (PAL or NTSC) to a third party monitor (only applicable for third party monitors)
- Including 3,85m power cable

Inputs and power supply for two or three cameras and in combination with a Y-split cable: four cameras.

- 4p output for monitor
- Cameras can be switched over automatically or manually

0404040 Switcher UNI

- Waterproof IP54 according to IEC 60529

0404080 Switcher UNI IP67

- Waterproof IP67 according to IEC 60529



Brand specific components

0404750 Pulley conversion set

- Linde 115 Series / OM Pimespo Thesi Series



Truck specific mast cables

- Including Orlaco connectors for connecting the camera system
- Provided with clamps for the original springs
- Dynamic cable with a small bending diameter 1221100
- Operating temperature -40°C to + 80°C
- Suitable for use in cold storage: max -40°C

0305970 Cable 15m BT (Toyota) RRE

0309100 Cable 17m BT (Toyota) RRE

- Including BT connectors X40 and X37 to connect to the reach truck



0301740 Cable 15m Crown ESR5000

0309110 Cable 17m Crown ESR5000

- Including Deutsch connectors DT06 and DT04-12S-12P for connection to the reach truck



0303151 Cable CFMC (Jungheinrich)

For connecting the Orlaco camera to the Jungheinrich mast cable.



Mounting means

0403310 Rubber mounts for Compact Cameras
For installation on positions where the Compact Camera can suffer impact.

Camera extension brackets
Specially designed for the Compact Camera. Matches the hole pattern of the Compact Camera bracket.

- Stainless steel

0402250 Camera extension 155mm

0402270 Camera extension 250mm

0402320 Protective cover
Cover specially designed for the Compact Camera.

- Stainless steel housing



Mounting brackets

2015500 Adjustable mounting bracket
• Length 132mm

2015600 Adjustable mounting bracket
• Length 190mm

2015950 Clamp with ball coupling

2015510 Arm component 90mm

2015800 Arm component 144mm

2015750 Ball joint with connection plate

2015710 Ball joint 3/8" thread

2015900 Ball joint double



ISO Certifications

All Orlaco products are manufactured according to the latest *Quality Management System Standards*:

ISO/TS 16949 : 2009
ISO 9001 : 2008

Additionally, all Orlaco products are manufactured according to the latest *Environmental Management System Standard*:

ISO 14001 : 2004



Type-Approval Certifications

Regulations 10 and 46 are used to determine the Type-Approval for **EMC** and **Indirect Vision** (Mirror Directive). **R46** describes mirror specifications for truck compliancy. Orlaco Frontview systems meet all these requirements. **R10** describes the **EMC** behavior of the Orlaco Camera and Monitor systems.

TÜV Automotive Certifications

The *European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)* demands additional equipment. Orlaco Camera and Monitor systems and connection cables comply with these regulations.

Compliance

Our Camera and Monitor systems are produced entirely in line with the **CE-marking** and the most recent applicable directives and product standards (e.g. **EMC, FCC, Machinery, R&TTE**). Orlaco products are compliant with **RoHS** and **REACH**.





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dealer:

It is Orlaco's viewpoint that optimal vision around every vehicle and vessel should be the norm. It provides safety, less damage, comfort and efficiency. *Vision is our mission*®. A revealing mission. We develop professional vision solutions for every situation:



HEAVY EQUIPMENT



ON ROAD TRUCKS



CRANES



FORKLIFTS



MARITIME



EMERGENCY VEHICLES



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