



**FORKS**  
since  
**1964**  
VETTER est. 1889

 **SmartFork**<sup>®</sup>

**Fork assistance systems**

More safety, less accidents!

# More safety in logistics!

**19.758** fork truck accidents in 2022

**8** fork truck deaths annually

**51 %** of all accidents:  
the victim is hit by a forklift,  
crushed or run over

The accident statistics of the German Social Accident Insurance 2022 (DGUV)



## 7 reasons

Gut feeling out – professionalism in! Forks with integrated camera technology and sensors are the new level for modern logistics. Industrial-strength technology for reliable results.

- ✓ **Improve visibility:** Even with loaded cargo
- ✓ **Higher level of safety:** For staff and goods
- ✓ **Reduce damages:** Through improved visibility and intelligent sensor technology
- ✓ **Reduce costs:** Through less damage to goods
- ✓ **Easy handling:** Smart sensors integrated in the forks make your work easier
- ✓ **Save time:** Through safe navigation when transporting goods and faster workflows
- ✓ **Better ergonomics:** Full visibility without uncomfortable rotation of head and body



forks.com

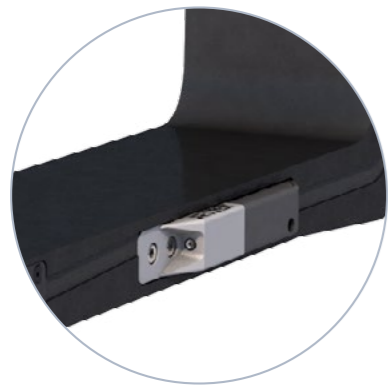


# SmartFork<sup>®</sup>

## Assistance systems

### Overview of VETTER SmartFork<sup>®</sup> assistance systems

Five individual features that can be integrated into the forks independently of each other. In combination, they become a complete solution for more safety and efficiency in logistics. (Assembly material and tools are not included in the scope of supply.)



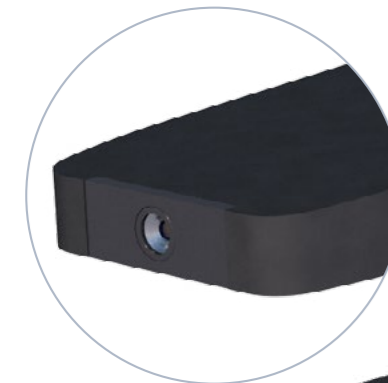
#### SideCam

Camera integrated in the fork blade.  
Aiming pallets along the forks.



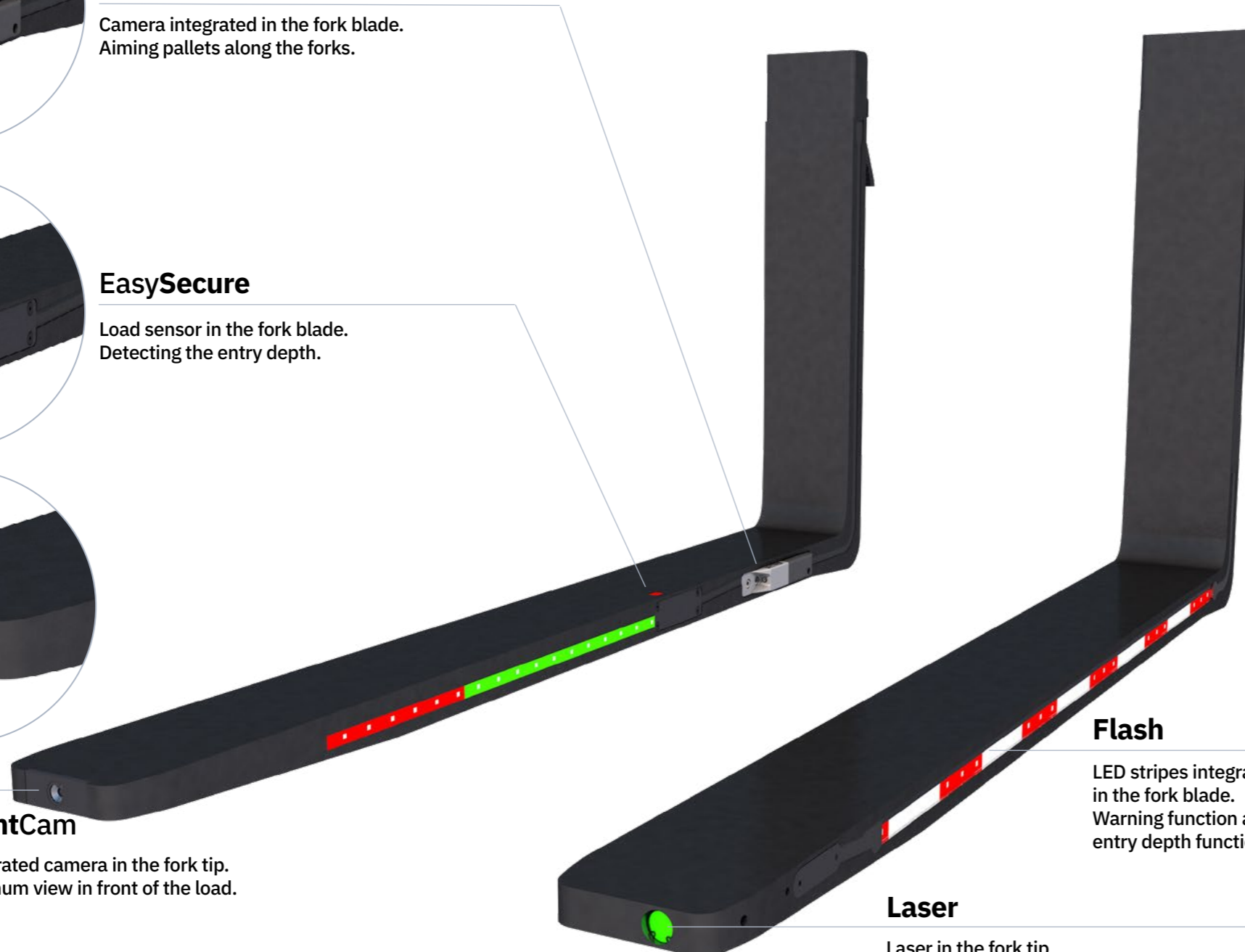
#### EasySecure

Load sensor in the fork blade.  
Detecting the entry depth.



#### FrontCam

Integrated camera in the fork tip.  
Optimum view in front of the load.



#### Flash

LED stripes integrated in the fork blade.  
Warning function and entry depth function.



#### Laser

Laser in the fork tip.  
Precise targeting of load carriers.



Video SmartFork<sup>®</sup>



# FrontCam

## View ahead the load

The integrated **FrontCam** in the fork tip offers the best views ahead the load. Obstacles are recognised immediately when the load is picked up, accidents and damages are prevented. In combination with the laser the load is precisely targeted and load pick-up is made easier.



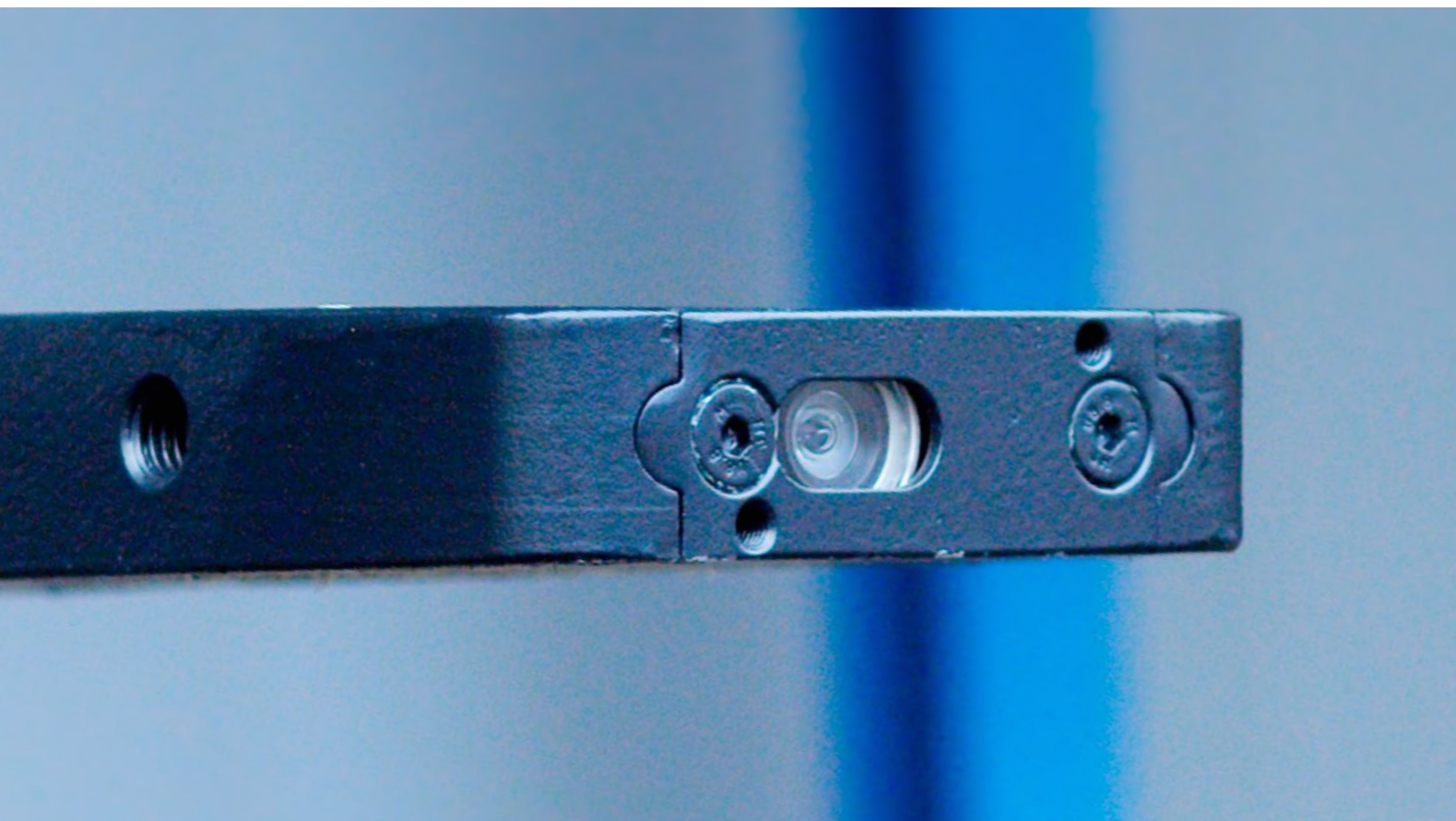
Field of view extension



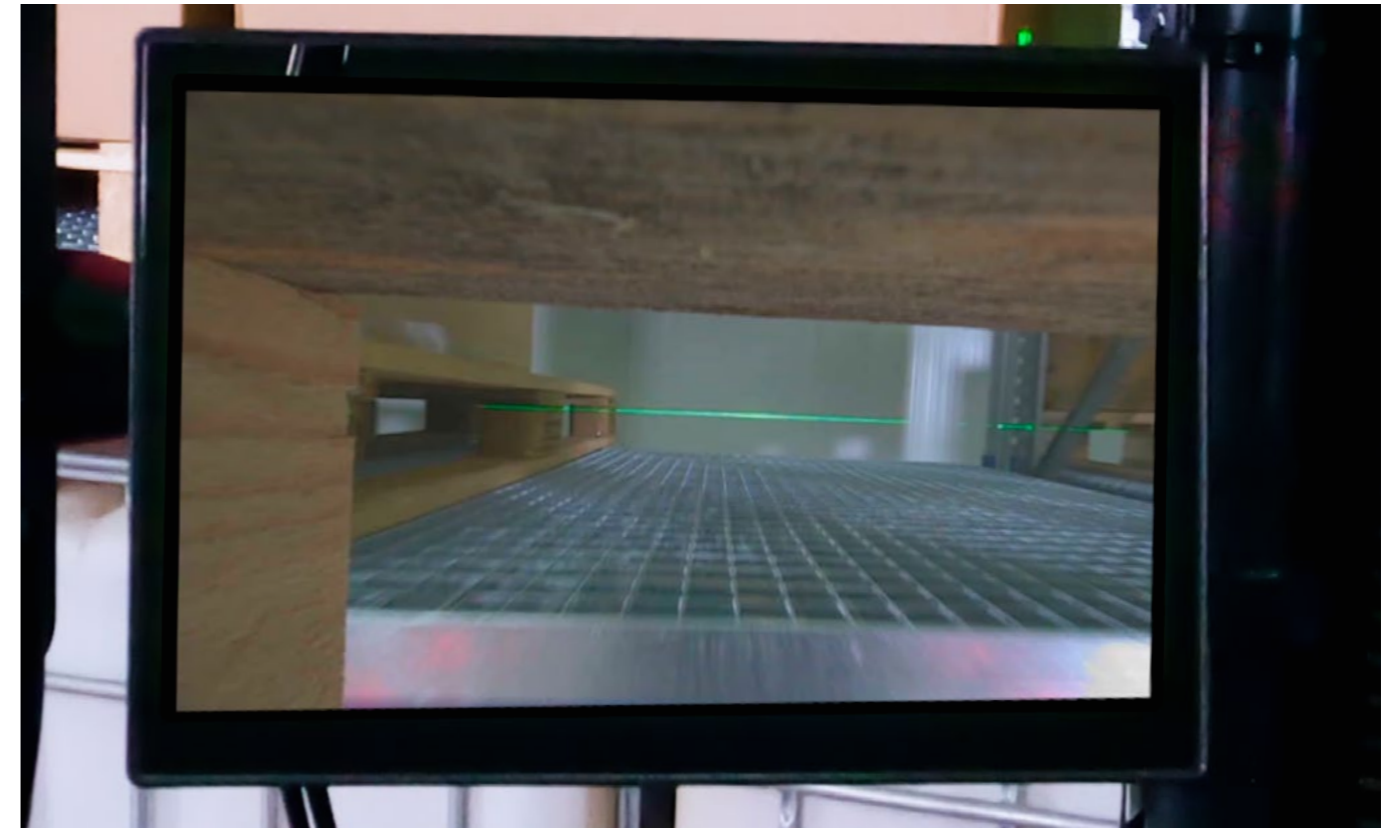
Precise targeting



Safe loading process



## Application FrontCam



Monitor view in the cab with a view ahead of the load. View through the pallet pocket with the pallet picked up.

## More safety...

... in combination with

✓ **SmartFork® Laser** (Page 10)



Video SmartFork® FrontCam



More information online



# SideCam

## Perfect view of the load

The **SideCam** laterally integrated in the the fork blade enables the forklift driver to target pallets along the forks and pick them up safely. Thanks to unique, semi-integrated camera installation the **SideCam** is optimally protected against damages during transport.



Both forks in the field of view



Aiming along the fork



Safe retraction in pallets



Reduced manoeuvring damages



# WOW

Robust and durable thanks to partially integrated camera installation and clever cable routing

## Application SideCam



Monitor view in the cab. Aiming along the fork.

## More safety...

... in combination with

- ✓ SmartFork® FrontCam (Page 6)
- ✓ SmartFork® Laser (Page 10)



Video SmartFork® SideCam



More information online

# Laser

## Precise targeting of load

The integrated SmartFork® Laser in the fork tip makes it easier to pick up loads. The laser appears as a green horizontal line on the load carrier so that the forklift driver can safely drive into the pallet pockets.



Simple load pick-up  
in the warehouse



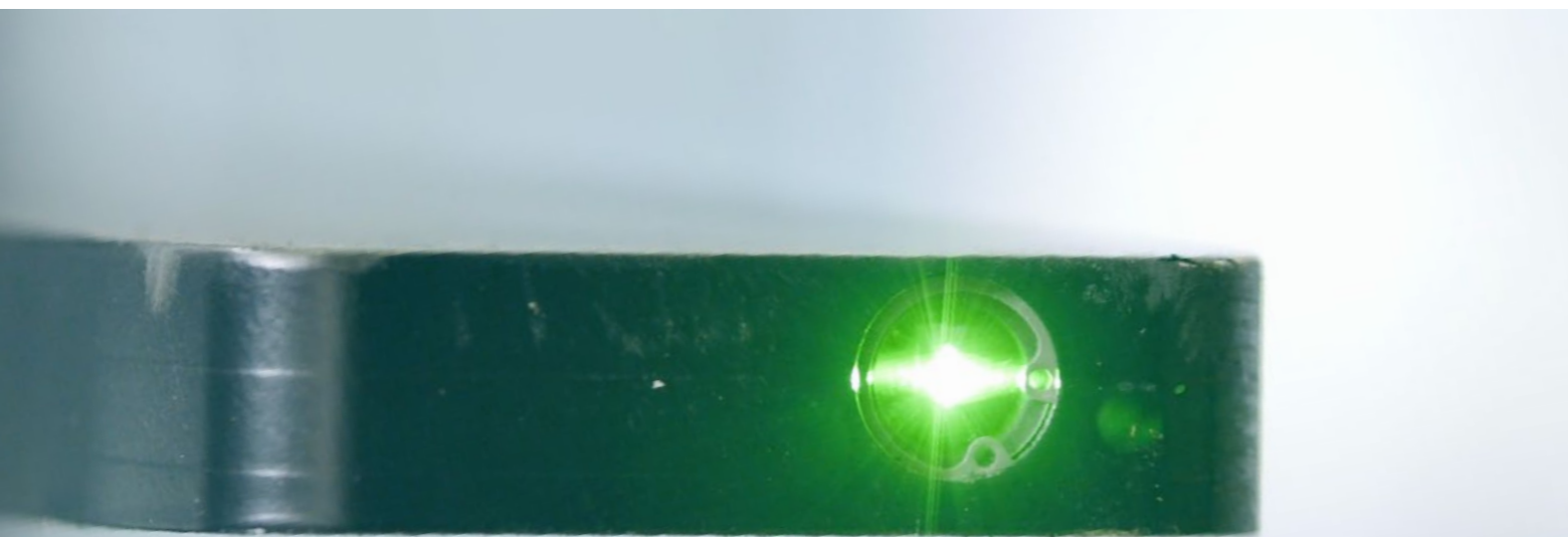
Precise targeting



Safe loading  
process



Reduced manoeuvring  
damages

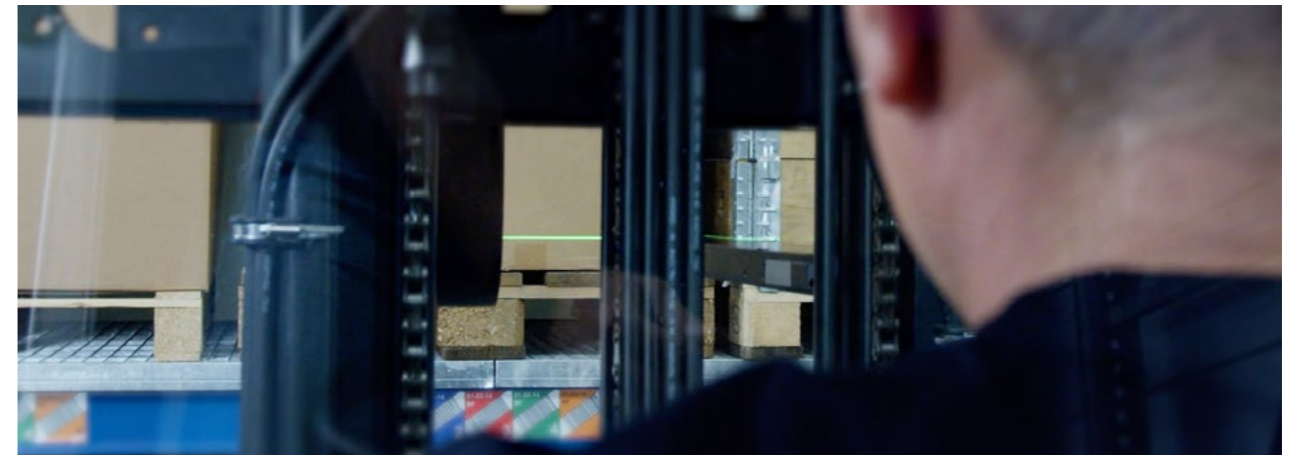


- ✓ Laser safety class 1M, no risk of eye injuries
- ✓ Laser available in green (Standard version) or in red

## Application Laser



**Precise targeting.** Green Laser in the fork tip.



**Laser targeting from the driver's view.**

## More safety...

... in combination with

- ✓ SmartFork® FrontCam (Page 6)
- ✓ SmartFork® SideCam (Page 8)



Video SmartFork® Laser



More information online



# EasySecure

## Precise entry depth detection

The integrated light sensor in the fork blade (at 800 mm from the fork tip) enables safe detection of Euro pallets stored lengthways or crossways when picking up goods. SmartFork® EasySecure can be individually adapted to up to 3 load carriers. For removing load in block storage, the light sensor variant in the fork tip offers safe handling so as not to damage or lift the pallet behind.



Determine the entry depth



Recognising pallets stored lengthways or crossways



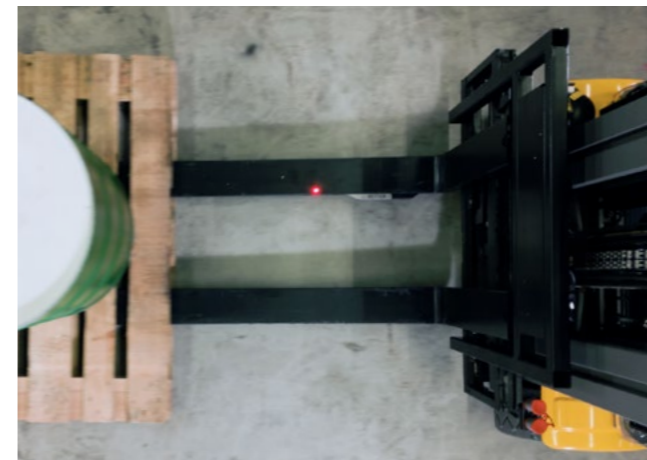
No damage to pallets behind



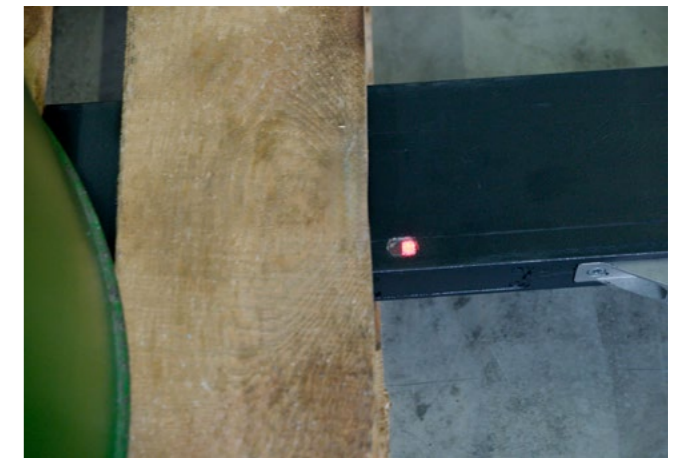
LED signal via display in the driver's cab



## Application EasySecure



**Detection of entry depth.** When the light sensor disappears under the pallet, the entry depth has been reached. Goods behind the pallet are not damaged or lifted.



**Close-up of SmartFork EasySecure.**



**LED-Display in driver's cab.** If the LED in the driver's cab lights up red, the entry depth is reached.

## More safety...

... in combination with

- ✓ SmartFork® FrontCam (Page 6)
- ✓ SmartFork® SideCam (Page 8)



Video SmartFork® EasySecure



More information online



# PremiumCam

## Always the right camera perspective

SmartFork<sup>®</sup> PremiumCam is a combination of **FrontCam**, **SideCam** and **EasySecure** in one fork pair. When loading and unloading goods, **EasySecure** automatically switches from the **FrontCam** to the **SideCam**. The forklift driver always has the best camera perspective in use.



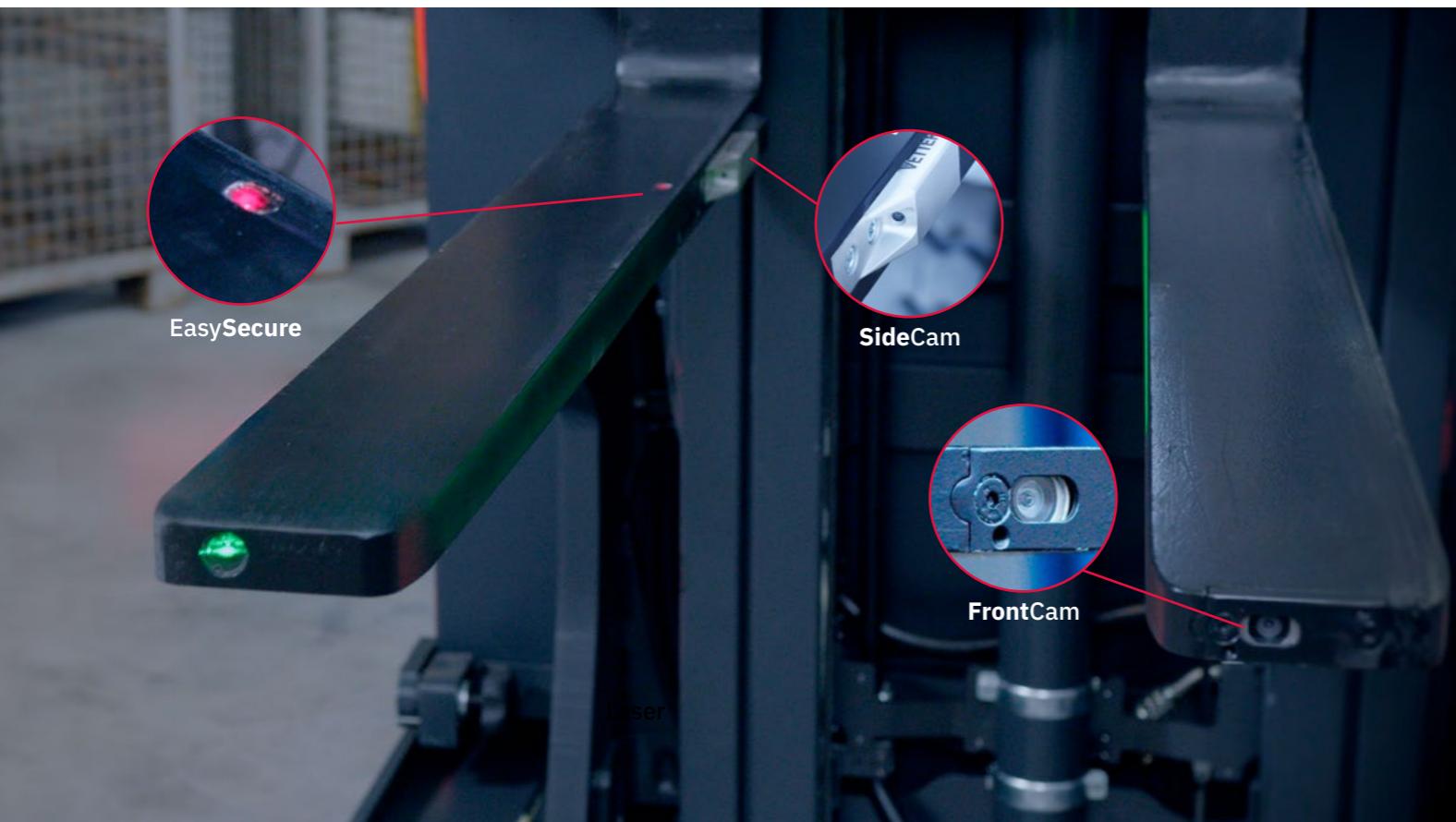
Automatic switching from **SideCam** to **FrontCam**



Reduced manoeuvring damages



Precise targeting



## Application PremiumCam

**Monitor view in the cab.** Automatic switching from **SideCam** to **FrontCam** as soon as the **EasySecure** sensor in the fork blade is occupied with the load.



**Monitor view SideCam.** Targeting at the load carriers along the forks.



**Monitor view FrontCam.** View ahead the load.

## More safety...

... in combination with

✓ **SmartFork<sup>®</sup> Laser** (Page 10)



Video SmartFork<sup>®</sup> PremiumCam



More information online



# Flash

## Entry depths and warning function

The LEDs integrated outside in the fork blade make the forklift visible from a distance – even in dark environments.

The LEDs inside the fork blade may be programmed and used to determine the entry depth in order to pick up load carriers safely and without causing damage.



Visibility in cluttered, dark environments



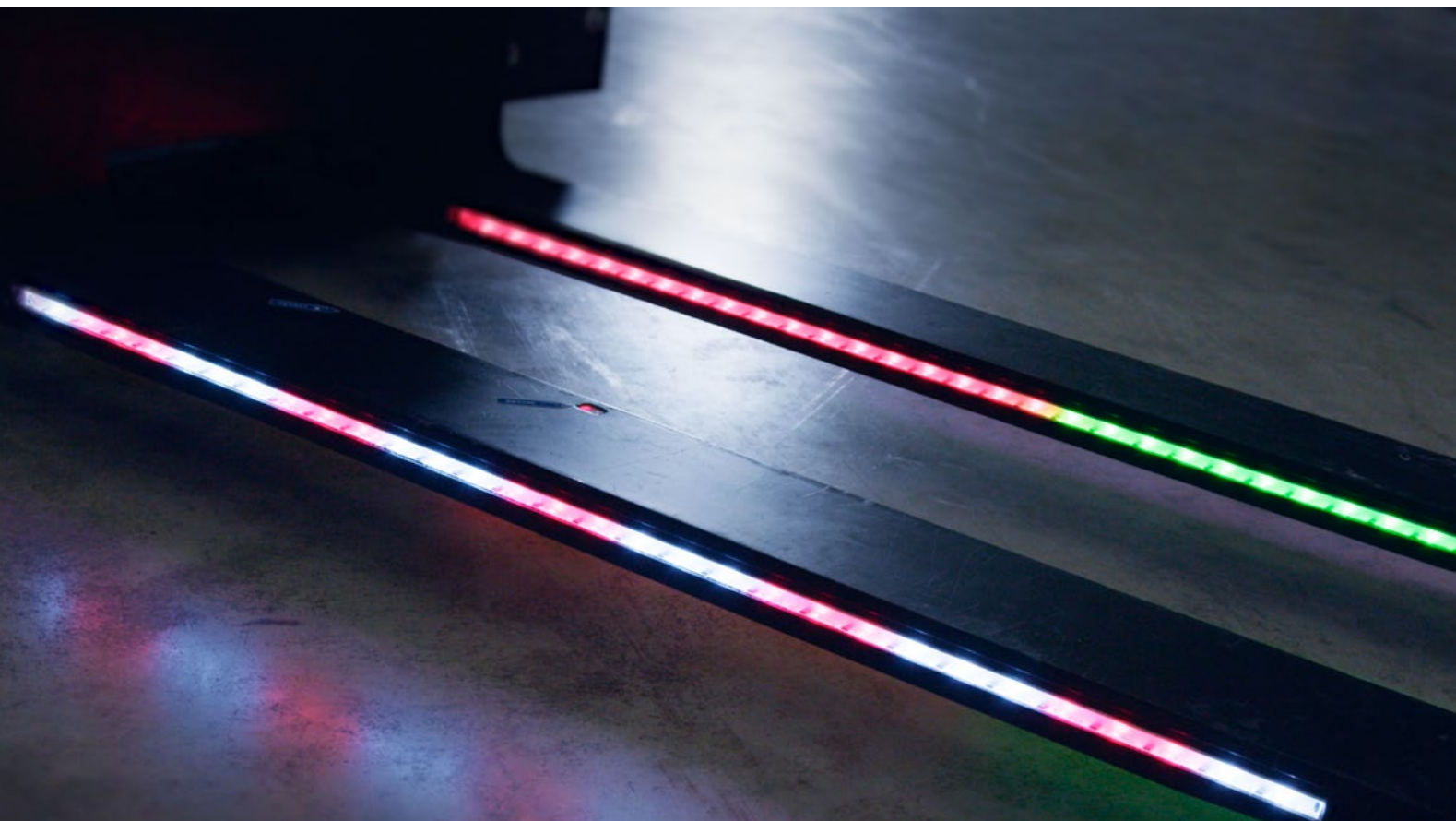
Improved occupational safety



Reduction of accidents



Safe loading of pallets standing in a row



## Application Flash



LEDs sideways integrated in the fork blade. Warning function in cluttered situations.



LEDs inside the fork blade. Freely programmable for determining the entry depth.



## More safety...

... in combination with

✓ SmartFork® EasySecure (Page 12)



Video SmartFork® Flash



More information online



# SmartFork<sup>®</sup> on tour

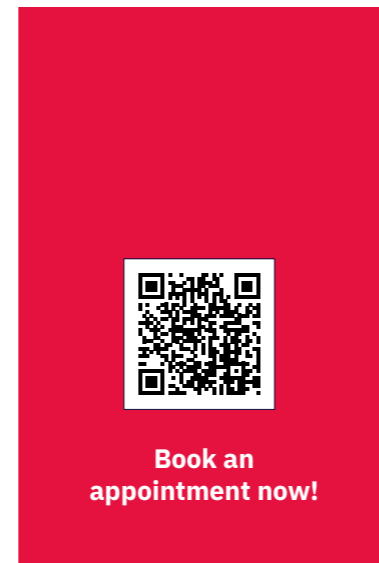
## Assistance systems live on site

The possible uses and designs of the SmartFork<sup>®</sup> are as varied as the applications for which it is used. VETTER offers you the opportunity to experience the SmartFork<sup>®</sup> live on site. Our service technician will fit the SmartFork<sup>®</sup> directly to your forklift truck so that you can immediately recognise the advantages of the SmartFork<sup>®</sup> in use.

✓ Testing SmartFork<sup>®</sup> under real conditions

✓ Combinations of different SmartFork<sup>®</sup> applications

✓ The right SmartFork<sup>®</sup> solution for your application



### Your SmartFork<sup>®</sup> team



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