

Simplification of the annual inventory  
Data is read out without contact  
Collection of additional information

Filter by key information  
Lifetime and operating time of the products is known

Seamless material tracking in real time  
Locating the pallet  
Route optimisation

Flexibility during delivery due to access control  
Pre-commissioning and short standing times

Notification in case of incorrect loading  
Notification in case of missing materials

Autonomously operated lifting and tracking system  
Charging via 230V or 24V board voltage

Disposition and control in the shortest possible time  
Fast stocktaking and inventory maintenance

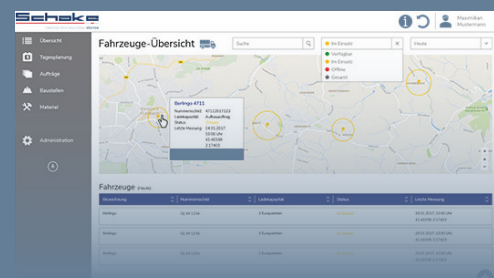
Data transfer to your own ERP system  
Reliable online application in real time  
Password protected software solution

Avoidance of manual input errors  
Personalised extraction  
Solving language barriers

Targeted procurement of new material  
Use of pre-provisioned material  
Retrofitting of existing material possible

Reduction of material shrinkage  
Security fencing with access control

Reliable bulk detection without visual contact  
Unique identification of all materials  
No manual data maintenance necessary



# 1 Data collection



1. unlocking the security fence by chip
2. folding down the ramp unlocks the fence
3. optional folding out of the side parts/roof
4. material can be loaded manually, by forklift or crane
5. loaded articles are automatically registered by the pallet.
- (Person XY has loaded material XY at location XY at time XY)
6. lashing the materials to the pallet

- Overview of parts to be loaded
- Message in case of incorrect loading/check of completeness

7. remove the lifting system from the compartments provided on the pallet.
8. attach the lifting system to the pallet to be unloaded
9. lift the empty pallet from the truck and set it down
10. the same lifting system can be attached to the pre-picked pallet
11. load the pallet to be moved

- Only one person needed to load and unload the truck
- Only one lifting system necessary
- Short downtimes of the truck
- Detection of the location of the two pallets

# 3 Locating



- 13 Unloading the pallet to be unloaded
14. remove the lifting system
- 15 Unlocking the ramp by chip
- 16 Unload material
17. unloaded items are automatically recorded by the pallet
- (Person XY has unloaded material XY at location XY at time XY)
18. check for missing materials

- Drivers are used efficiently
- Little space required for unloading
- No forklift or crane needed on site

# 2 Pre-commissioning



12. approaching the construction sites previously determined by the software

- Viewing + optimising previous routes
- Planning of future routes (where is unused material)
- Seamless tracking of material flows
- Prevention of wrong trips
- Battery of the RFID pallet charges during the journey

# 4 Unloading



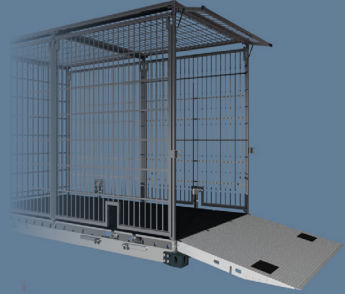
**RFID- PALLET**  
THE PATENTED  
TRACKING - SYSTEM FOR  
OPTIMAL MATERIAL TRACKING



# RAMP

## SAFE & ACCESSIBLE

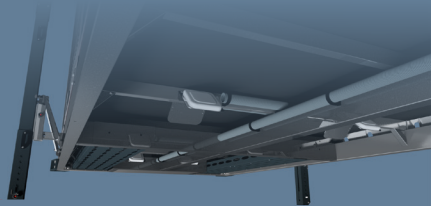
The ramp is locked with an electronic lock. The lock can be unlocked via an RFID reader. A forklift can be used to load and unload the pallet. Two additional antennas in the board wall support the detection of the products.



# RFID

## EASY DATA ACQUISITION

By means of antennas arranged over a wide area, all loaded products are automatically recorded in a pulse reading and passed on to the web software.



# MATERIAL

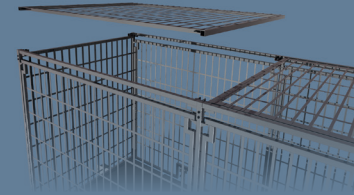
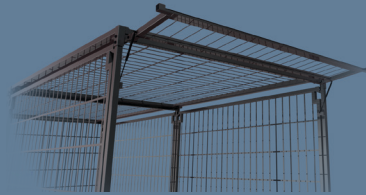
## WEATHERPROOF & ROBUST

For high weather resistance, the sturdy base frame is hot-dip galvanised. The fencing and the ramp are made of aluminium and thus ensure a low centre of gravity and a low overall weight.

# ROOF

## FAST & UNCOMPLICATED

Thanks to the roof, which can be removed from the inside without tools, products can also be removed by crane.



# CONTAINER CORNERS

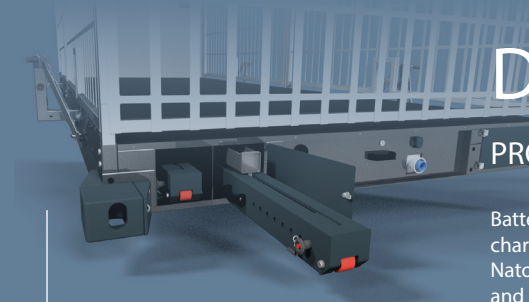
## FLEXIBLE IN USE

The removable container corners allow the pallet to be used on both flatbed and container vehicles.

# DRAWER

## PROTECTED & SELF-SUFFICIENT

Battery-operated system. The battery can be charged via a 230V CEE connection or a Nato plug with 24V. Central Control for hub and RFID system. One power source for both systems.



# STOWAGE BOX

## COMPACT

The lifting system can be securely closed in the pallet.

# ELECTRONIC

## POWER SUPPLY

- Charge controller + power supply units
- CEE plug
- Nato plug
- 2 batteries 12V 70Ah in series

## RFID- SYSTEM

- IoT Tracker
- GPS antenna
- GSM antenna
- RFID Reader
- 12 RFID antennas
- Multiplexer

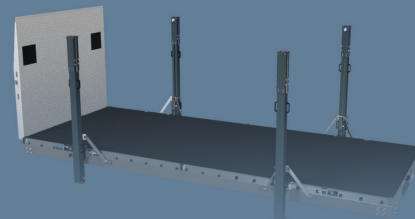
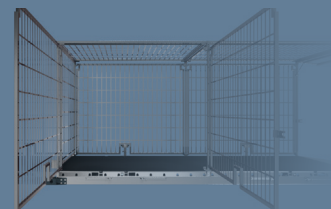
## LIFTING SYSTEM

- Manual control unit
- Ball screw drives
- 24V servo motors
- Motor controls
- Floor finding function
- Synchronisation
- Removable system

# FENCE

## PROTECTED PRODUCTS

By enclosing the pallet, the loaded products can be transported safely. After unlocking the ramp, the fences are also unlocked. Optionally configurable without fencing.



# LIFTING SYSTEM

## FAST & POWERFUL

Lowering of the pallet via lifting system, which can be easily removed and stored in the pallet. Uneven surfaces can be levelled by means of an intelligent control system with floor detection. One foot can be carried by one person or rolled by rollers integrated in the column. Through additional teleoperation, the system can also be used for extra high trucks. In addition, a rigid system can be attached. The lifting system can also be used on other pallets thanks to the control system integrated in the feet.

