



Highloader solutions for

**GROUND SUPPORT EQUIPMENT**

*Product range*

**A MAXIMUM OF SAFETY AS  
WELL AS OPERATOR AND  
MAINTENANCE FRIENDLI-  
NESS ARE OUR STANDARDS  
ALL OVER THE WORLD.**





**MADE IN  
GERMANY**

# OPTIMUM QUALITY FOR 140 YEARS

Founded in 1878, DOLL draws on almost 140 years of tradition in vehicle construction and has grown into an international technology leader for vehicles for the heavy haulage, timber transport and ground support equipment sectors.

With its headquarters in the Black Forest and a second location in Saxony, Germany, the company guarantees quality made in Germany: with field-based training for own employees, continuous enhancement of products by experienced engineers, the use of high-grade components and raw materials, and a willingness to constantly improve processes, serving to maintain a high standard for our services.

DOLL has been manufacturing airport ground support equipment for more than 20 years. Certification to provide support for the Airbus A380 aircraft serves as an affirmation of DOLL quality in ground support equipment. Very few manufacturers are approved to support the A380 worldwide. In addition to catering trucks, the range of scissor lift vehicles also includes cleaning trucks and medical lifts for passengers with reduced mobility.

Our location in Bridgeport, New Jersey, allows us to provide outstanding service and support to our North American customers and demonstrate our innovative strength, in-depth expertise and sophisticated know-how directly on the US market.



**GROUND SUPPORT EQUIPMENT**

## **TRUCKS WITH A LICENSE TO TAKE OFF**







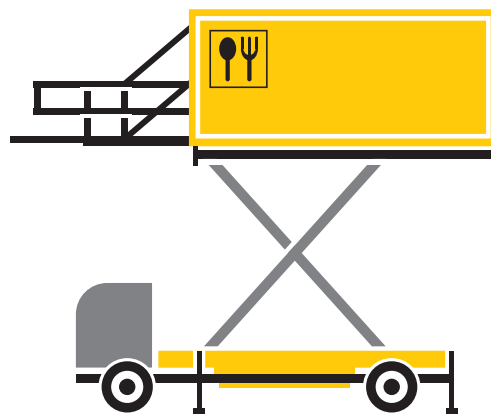
# SERIES

Apart from actually flying the planes, we've covered it all. Our highloaders can be found on the tarmac all over the world, making life on board more comfortable each time they service a plane. Their purpose in life: catering, cleaning, as well as supporting people with reduced mobility.

Our extensive portfolio of highloaders is available for covering sill heights between approximately 1.3 m to over 8 m.

Our ground support equipment can be used on most common truck chassis which makes them suitable not only for airport operations but also for public roads.

## CATERING X-CAT



DOLL is the leading manufacturer of catering highloaders throughout the world.

Resulting from our long-term experience in commercial vehicle manufacturing, DOLL is familiar with your requirements for modern catering highloaders.

The priority of our products is the safety of operators and aircrafts, as well as the loads.



## CLEANING X-CLEAN



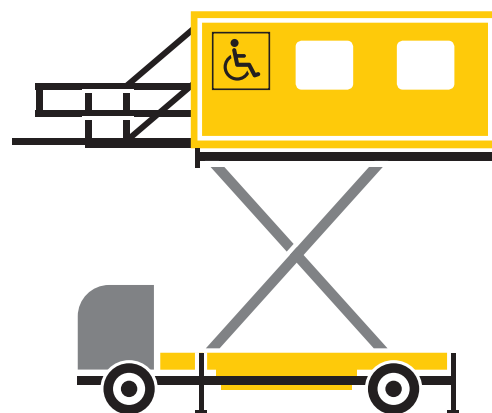
The variable DOLL cleaning highloaders assist cleaning crews in their work.

Our vehicles can hold the full equipment for aircraft cleaning. Moreover, they also provide all necessary connections for power and water.

The priority of our products is the safety of operators and aircrafts, as well as the loads.

DOLL's design ensures that the vehicle is positioned at an optimum height against the aircraft for the cleaning process.

## MEDICAL X-PRM



Our vehicles are an efficient solution for the safe transportation of passengers with reduced mobility.

The priority of our products is the safety of passengers and aircrafts, as well as the operators.

Passengers board from ground level using a tail gate which ensures a smooth, safe and comfortable transfer into the aircraft at all times.

DOLL medical lifts are suitable for a wide range of aircrafts with different sill heights. They can be equipped with variable interior and PRM packages.





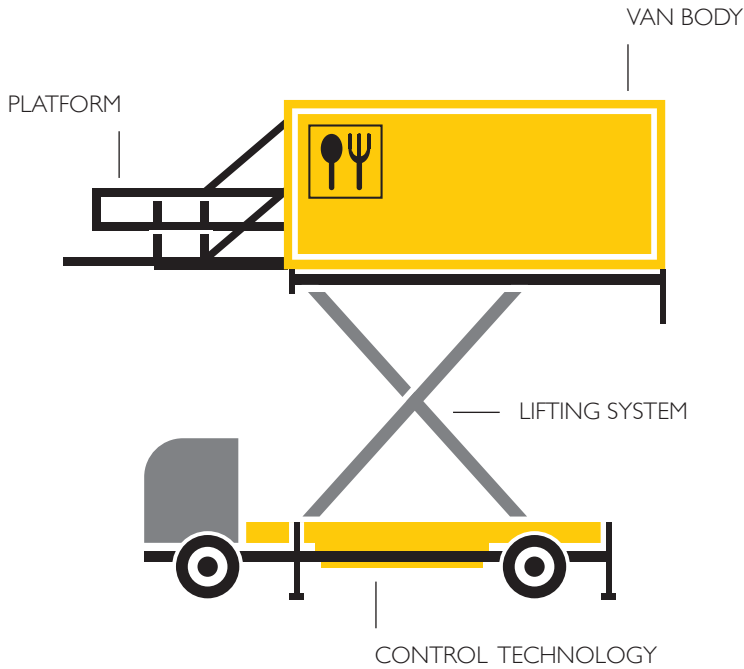


## CATERING

# THE INTUITIVE PERFORMER

Strong steel scissors gently raise the truck and the catering equipment up to more than 8 m. Safety devices ensure unconditional stability, with docking and transfer processes being controlled by sensors and monitored on a display. And the use of these vehicles is just as safe on public roads as it is on the airfield.

Because the environment matters to all of us, we focus on building energy-efficient catering highloaders. Highly insulated bodies and efficient cooling units ensure sustainability on the road to eco-friendliness.



### STANDARD BODY EQUIPMENT

- Intuitive operator panel with integrated user guidance and troubleshooting display
- Safety features for a high level of operator and aircraft protection
- Scuff and lashing rails
- Insulated roller shutters in different sizes
- Approved, high-level van body insulation







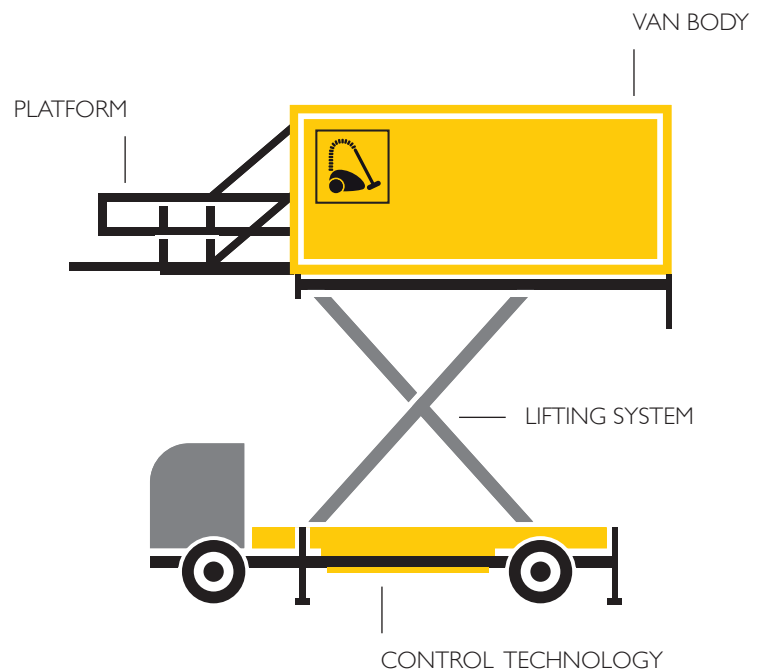


## CLEANING

# THE EFFICIENT HELPER

Our vehicles can hold the full equipment for aircraft cleaning. Moreover, they also provide all necessary connections for power and water. The interior can be equipped in a variety of versions to make it especially comfortable and efficient for your specific needs. All options come with the same level of safety for the loads, operators and aircrafts.

DOLL's design ensures that the vehicle is positioned at an optimum height against the aircraft for the cleaning process.



### STANDARD BODY EQUIPMENT

- Intuitive operator panel with integrated user guidance and troubleshooting display
- Safety features for a high level of operator and aircraft protection
- Scuff and lashing rails
- Roller shutters in different sizes
- High-quality van body







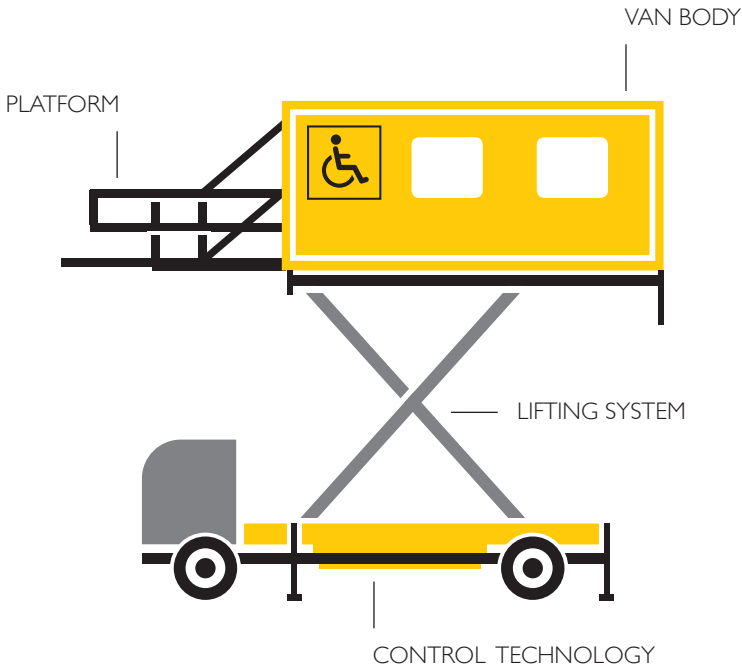


MEDICAL

# THE SAFE SUPPORTER

Our medical lifts are an efficient solution for the comfortable and safe transportation of passengers with reduced mobility to and from the aircraft. Passengers board from ground level using a tail gate which ensures a smooth, safe and comfortable transfer into the aircraft at all times.

The various advantages of DOLL medical lifts are rounded off by customer-specific option packages.



## STANDARD BODY EQUIPMENT

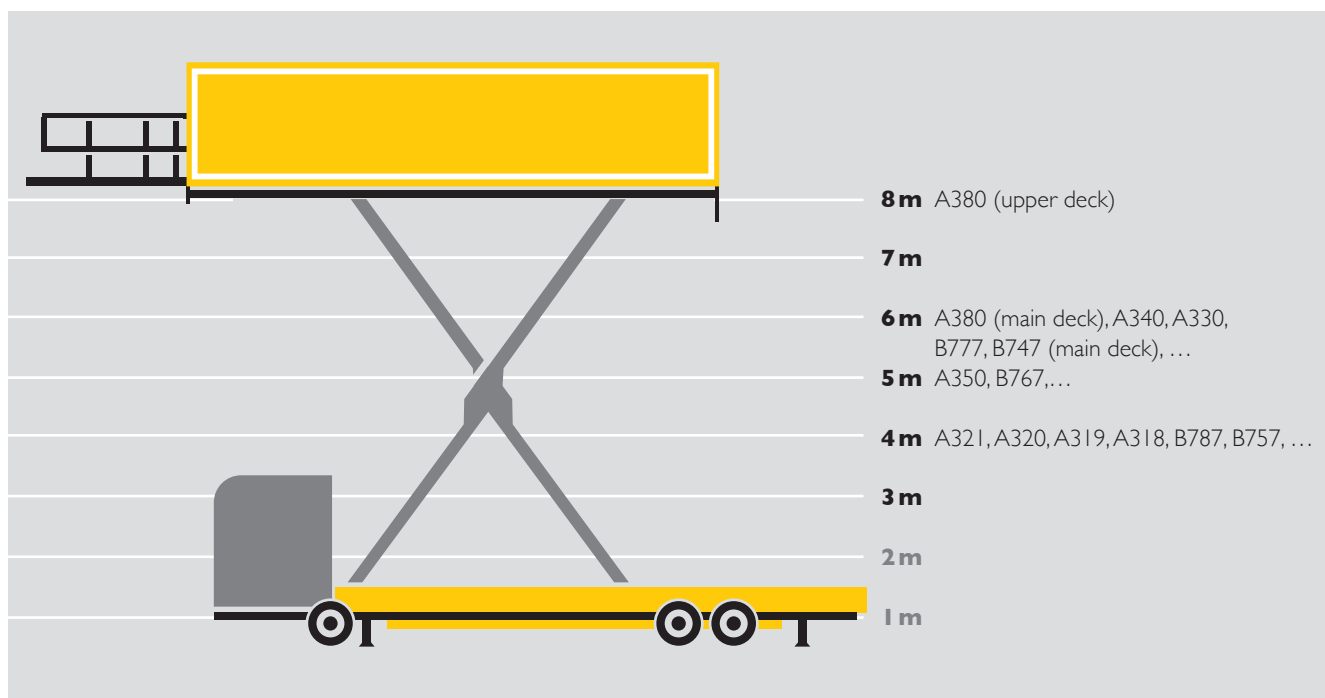
- Intuitive operator panel with integrated user guidance and troubleshooting display
- Safety features for a high level of operator and aircraft protection
- Roller shutters in different sizes
- High-quality van body with four large windows
- Tail gates with railing and roll-stop at the end of the platform
- Intercom systems
- Extensive PRM equipment (wheelchairs, stretchers, first aid kit, etc.)



## MODEL VERSIONS

# L-VERSION

The extensive portfolio of highloaders covers models in L, M and S-version. Their sill heights reach from approx. 1.3 m / 51 in to over 8 m / 326 in for the A380, covering payloads of approx. 1.5 to 5 t.



### DATA SHEET\*

DIMENSIONS OVERALL : **L = 11,000 mm, W = 2550 mm, H = 4000 mm**

DIMENSIONS BODY: **L = 7800 + 1200 mm, W = 2550 mm, H = 2400 mm**

GVW: **approx. 22,000 - 30,000 kg**

PAYLOAD: **up to 5000 kg**

SILL HEIGHT MIN.: **approx. 2900 mm**

SILL HEIGHT MAX.: **approx. 8300 mm**

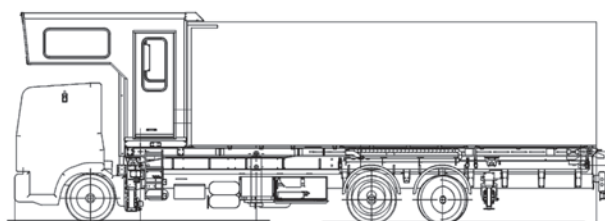
LOADING HEIGHT REAR: **approx. 1480 mm**

WIND STABILITY: **max. 52 - 78 knots**

OPERATING TEMPERATURE: **-25°C to +60°C**

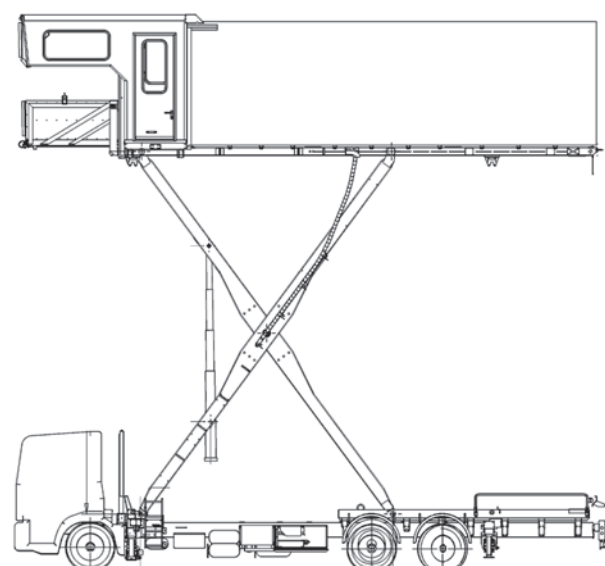
\*Measurements depending on model





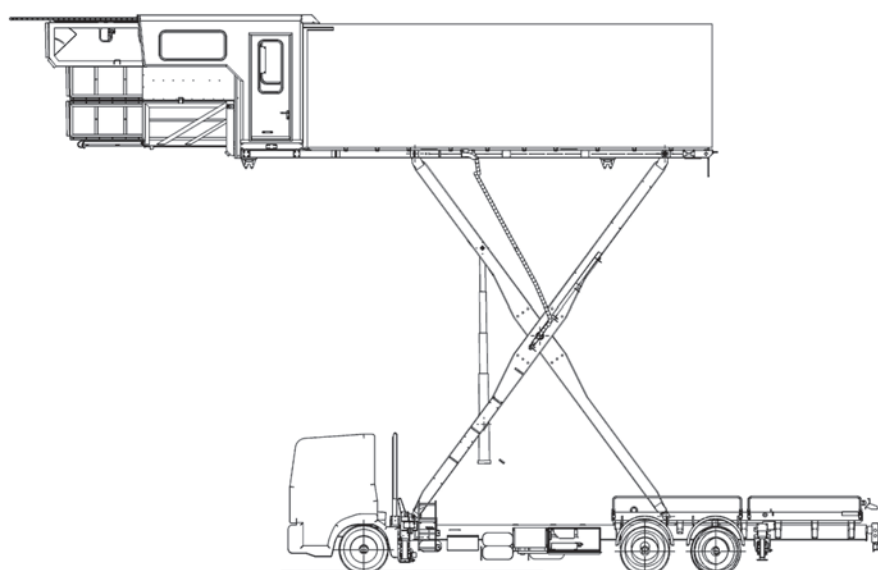
### **Drive position**

Normal ride attitude in running order for public roads or approaching the aircraft.



### **Lifting position**

In this position, the scissor lift can be extended.



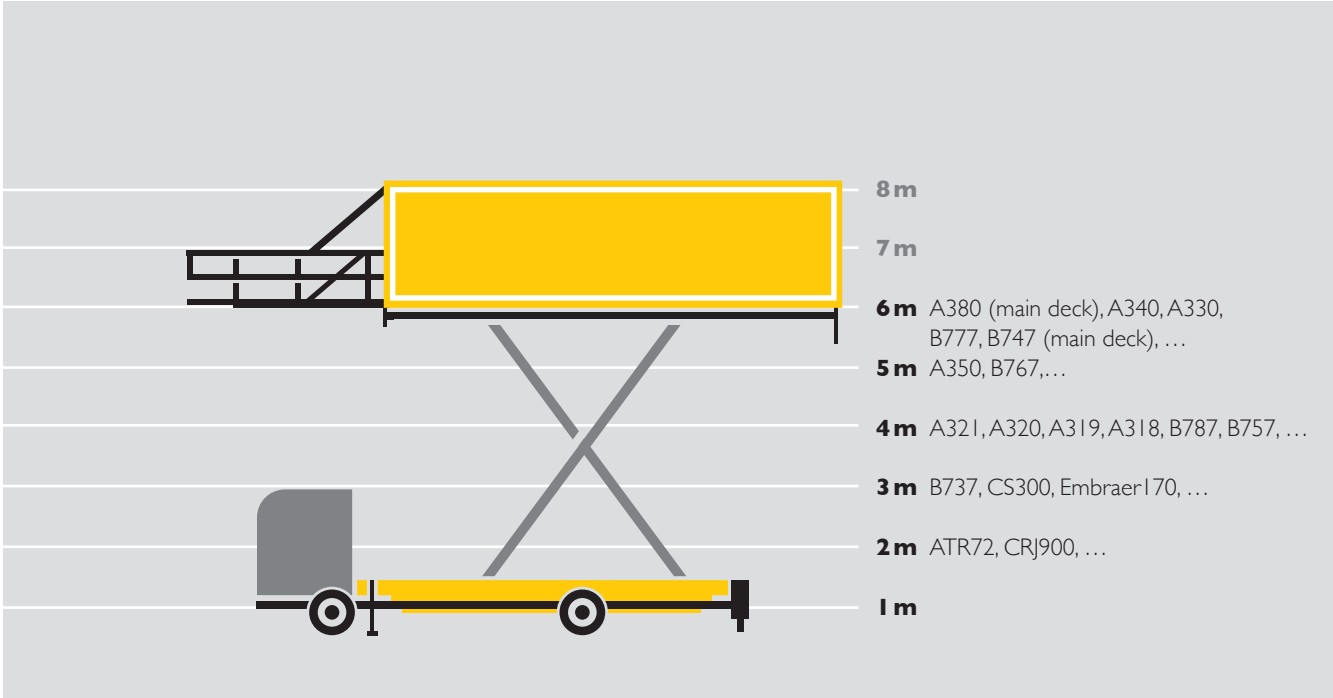
### **Service position**

Fully extended platform, bridge and side walls for a safe access to the aircraft.

MODEL VERSIONS

M-VERSION

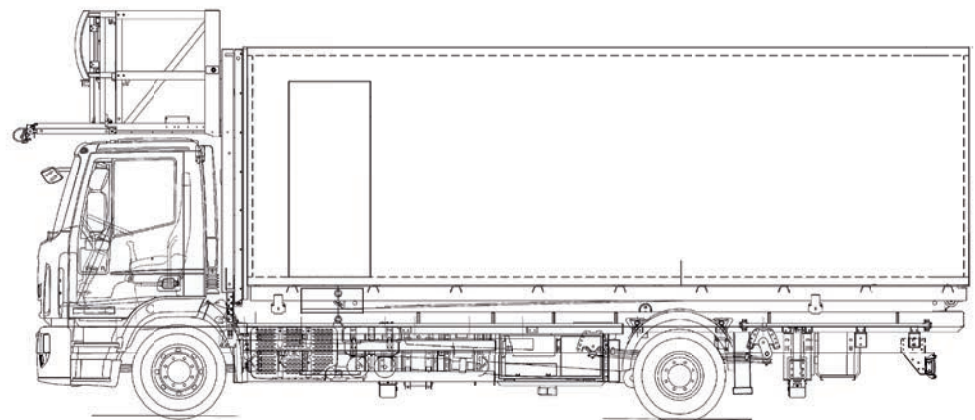
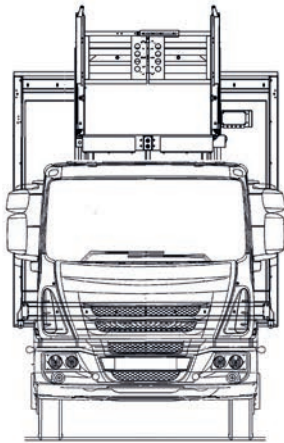
The extensive portfolio of highloaders covers models in L, M and S-version. Their sill heights reach from approx. 1.3 m / 51 in to over 8 m / 326 in for the A380, covering payloads of approx. 1.5 to 5 t.



DATA SHEET*	FULL SIZE	HALF SIZE
DIMENSIONS OVERALL:	<b>L = 9000, W = 2550, H = 3800 mm</b>	<b>L = 9000 mm, W = 2550 mm, H = 3700 mm</b>
DIMENSIONS BODY:	<b>L = 6200 - 7500 mm, W = 2550 mm, H = 2300 mm</b>	<b>L = 6200 - 7500 mm, W = 2550 mm, H = 2300 mm</b>
GVW:	<b>approx. 12,000 - 16,000 kg</b>	<b>approx. 12,000 - 16,000 kg</b>
PAYLOAD:	<b>up to 4500 kg</b>	<b>up to 4500 kg</b>
SILL HEIGHT MIN.:	<b>approx. 2750 mm</b>	<b>approx. 1400 mm</b>
SILL HEIGHT MAX.:	<b>approx. 6000 mm</b>	<b>approx. 6000 mm</b>
LOADING HEIGHT REAR:	<b>approx. 1450 mm</b>	<b>approx. 1450 mm</b>
WIND STABILITY:	<b>max. 52 - 78 knots</b>	<b>max. 52 knots</b>
OPERATING TEMPERATURE:	<b>-25°C to +60°C</b>	<b>-25°C to +60°C</b>

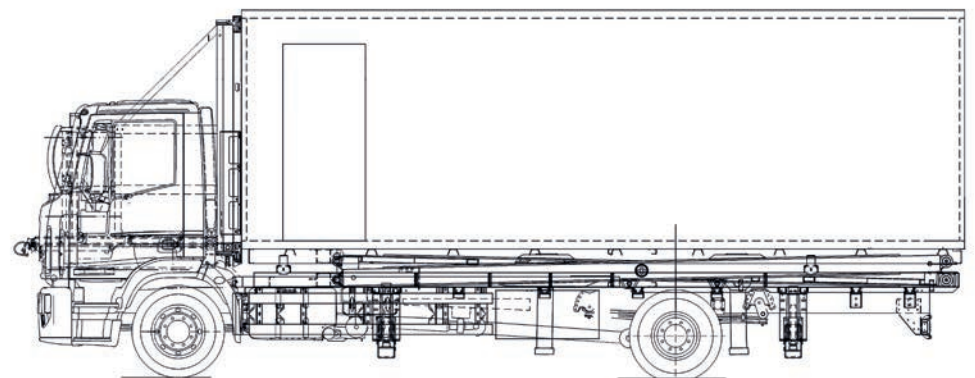
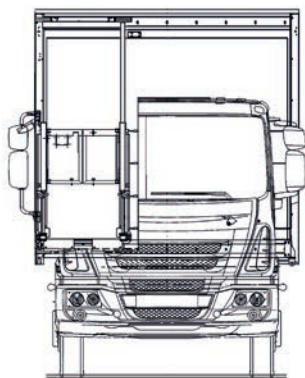
\*Measurements depending on model





### Full size

Standard full-size cab version with a minimum sill height of approx. 2750 mm.



### Half size

The half-size cab version can reach a minimum sill height of approx. 1400 mm.

MODEL VERSIONS

S-VERSION

The extensive portfolio of highloaders covers models in L, M and S-version. Their sill heights reach from approx. 1.3 m / 51 in to over 8 m / 326 in for the A380, covering payloads of approx. 1.5 to 5 t.



DATA SHEET\*

DIMENSIONS OVERALL: **L = 6900 mm, W = 2550 mm, H = 3500 mm**

DIMENSIONS BODY: **L = 4500 mm, W = 2550 mm, H = 2300 mm**

GVW: **approx. 7500 - 10,000 kg**

PAYLOAD: **up to 1500 kg**

SILL HEIGHT MIN.: **approx. 1300 mm**

SILL HEIGHT MAX.: **approx. 4300 mm**

LOADING HEIGHT REAR: **approx. 1200 mm**

WIND STABILITY: **max. 52 - 78 knots**

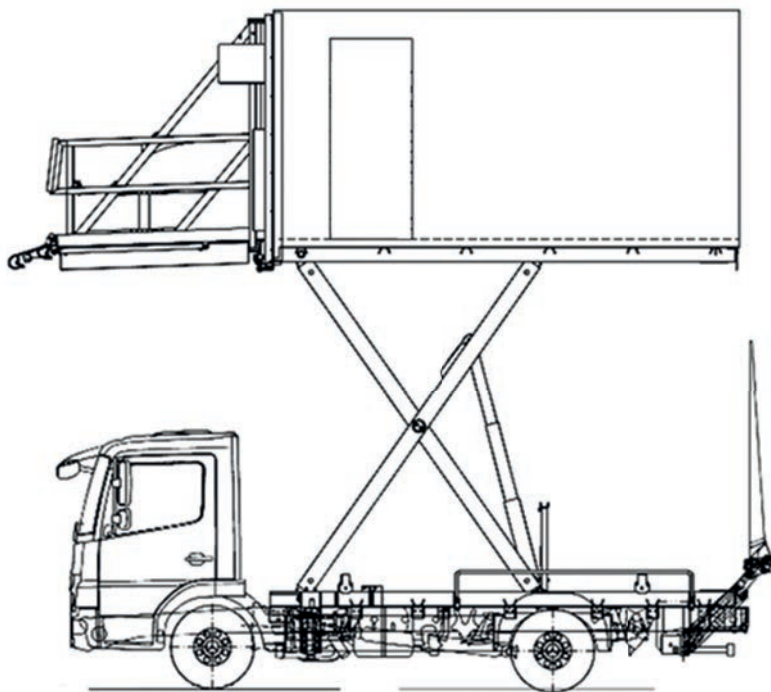
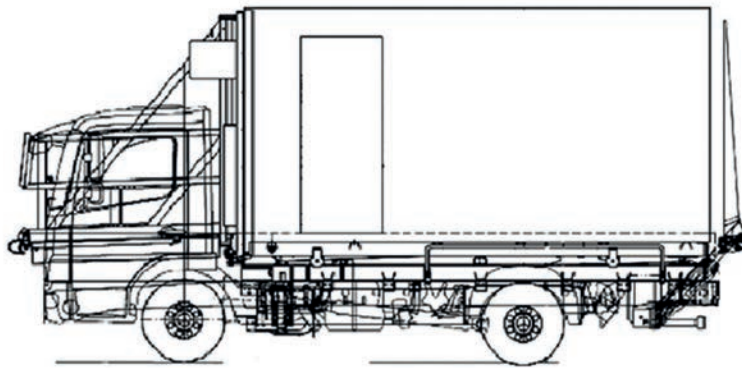
OPERATING TEMPERATURE: **-25°C to +60°C**

\*Measurements depending on model



### **S-version**

The X-CAT S is our smallest highloader with a minimum sill height of approx. 1300 mm for small and low aircrafts.



# OPTIONAL EQUIPMENT



## **VAN BODY**

- Different lengths
- Various insulations



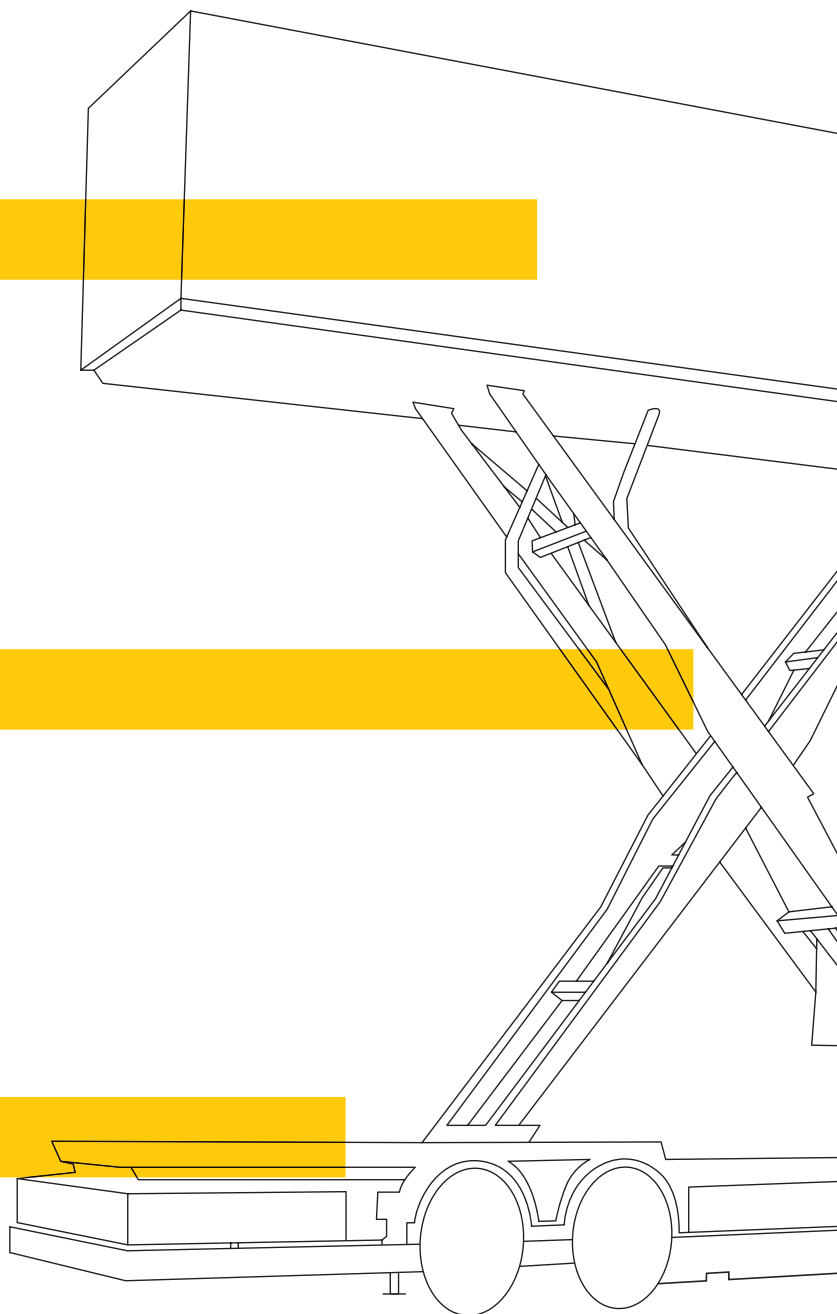
## **LIFTING SYSTEM**

- For different heights and loads

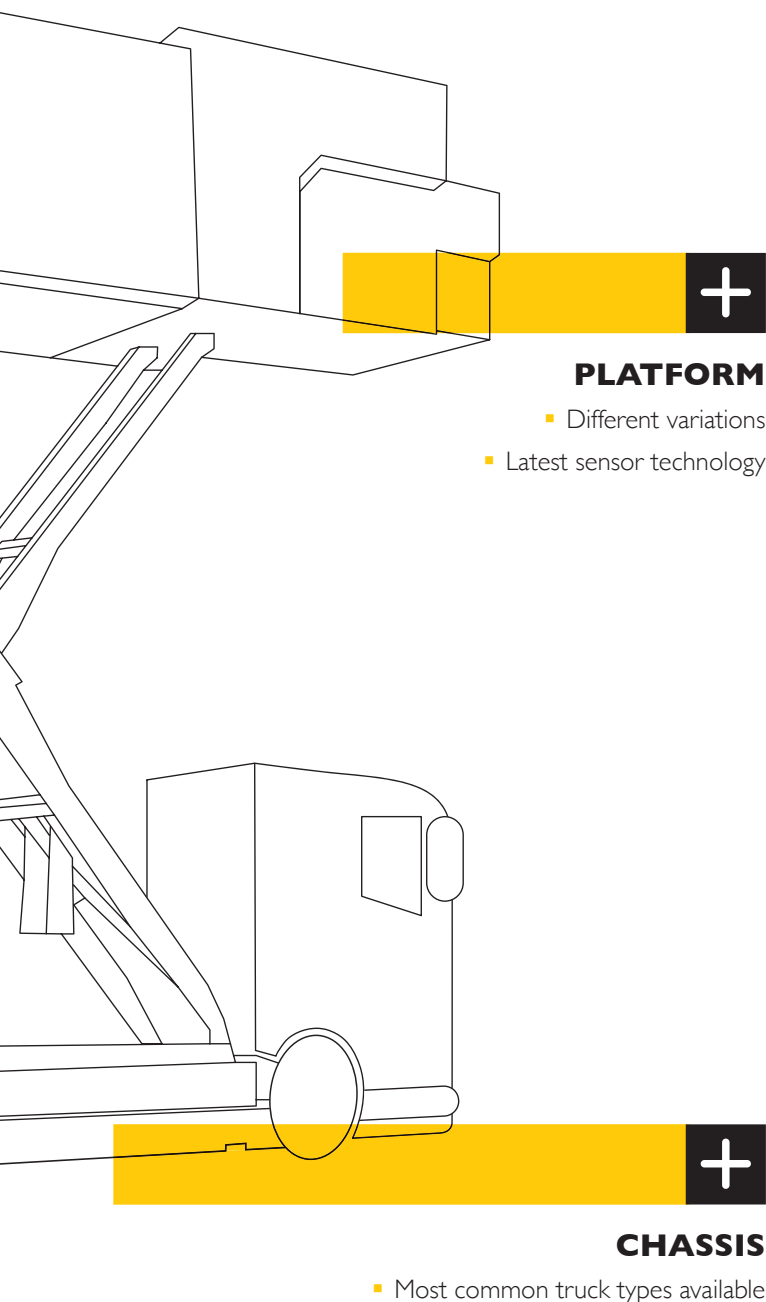


## **CONTROL TECHNOLOGY**

- Exactly configured to your requirements and needs







## PLATFORM

- Different variations
- Latest sensor technology

## CHASSIS

- Most common truck types available



## CATERING

### OPTIONS\*

- Various cooling systems
- Corporate logos and stickers
- Camera systems
- Insulated roller shutters in different sizes
- Tail gates, tail lifts, rear flaps
- Beacon light, working light
- Plus many more



## CLEANING

### OPTIONS\*

- Camera systems
- Different shelving systems
- Corporate logos and stickers
- Insulated roller shutters in different sizes
- Tail gates, tail lifts, rear flaps
- Beacon light, working light
- Plus many more



## MEDICAL

### OPTIONS\*

- Heating and air conditioning systems
- Camera systems
- Corporate logos and stickers
- Insulated roller shutters in different sizes
- Power door-lift systems
- Additional wheelchairs, stretchers, ...
- Aircraft wheelchairs
- Plus many more

\*Depending on model

# SAFETY FEATURES

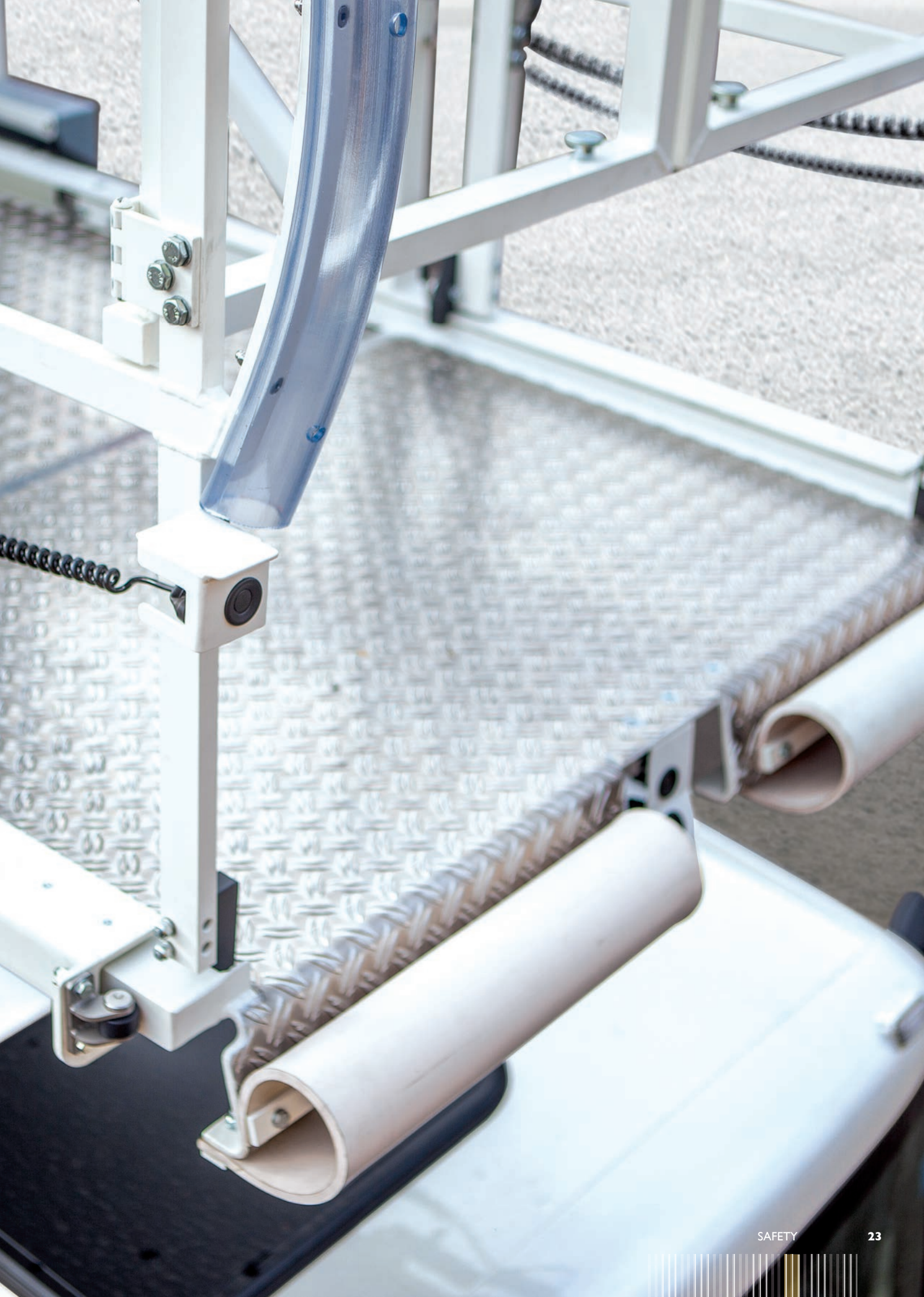
The number one priority of our products is the safety of operators, passengers, loads and aircrafts. Our safety standards are therefore second to none.

Our vehicles are constructed in accordance with the regulations for public roads, the applicable German occupational health and safety regulations (BGV), the law for safety of appliances and the IATA, ANSI and SAE regulations, as well as EN 12312-2.

- High quality sensor system to avoid potential operator and system errors
  - Motion-controlled cylinders for smooth lifting processes
  - Driving lock in case stabilisers are out and/or van body is not in the fully down position
  - Lifting system equipped with three check valves against uncontrolled lowering
  - Lifting of body up to the height of the loading ramp also possible without stabilisers
  - Lifting of body over ramp height only possible when side door is closed and stabilisers are extended
  - Side door locked when body is in lifted position
  - Signal in van body when stabilisers are lowering
  - Stabilisers can only be retracted when body is lowered
  - Safety shoe to monitor height level between the transfer platform and the aircraft
  - Platform completely covered with sensors to detect aircraft fuselage and to trigger signal to open barrier:
  - Robust steel scissor lift with two double stage cylinders
- The scissor lifts are equipped with three check valves and a safety prop for maintenance work.

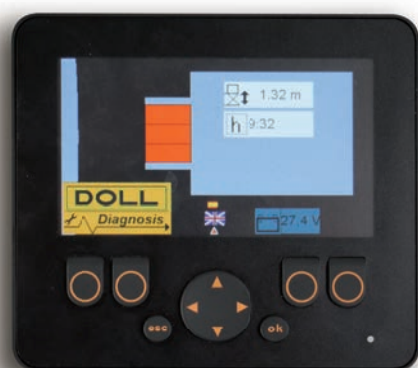






# OPERATOR-FRIENDLY

Our innovative system DOLL diagnosis is an information and diagnostic display which makes operating even easier and safer. The system permanently analyses the current position of the body and shows the operator which functions can be used. In addition, feedback messages on the screen help avoid foreseeable misuse.



## STATUS DISPLAY

The screen visualises the distance between platform and fuselage and displays the current height, battery status and other important data.



## USER FEEDBACK

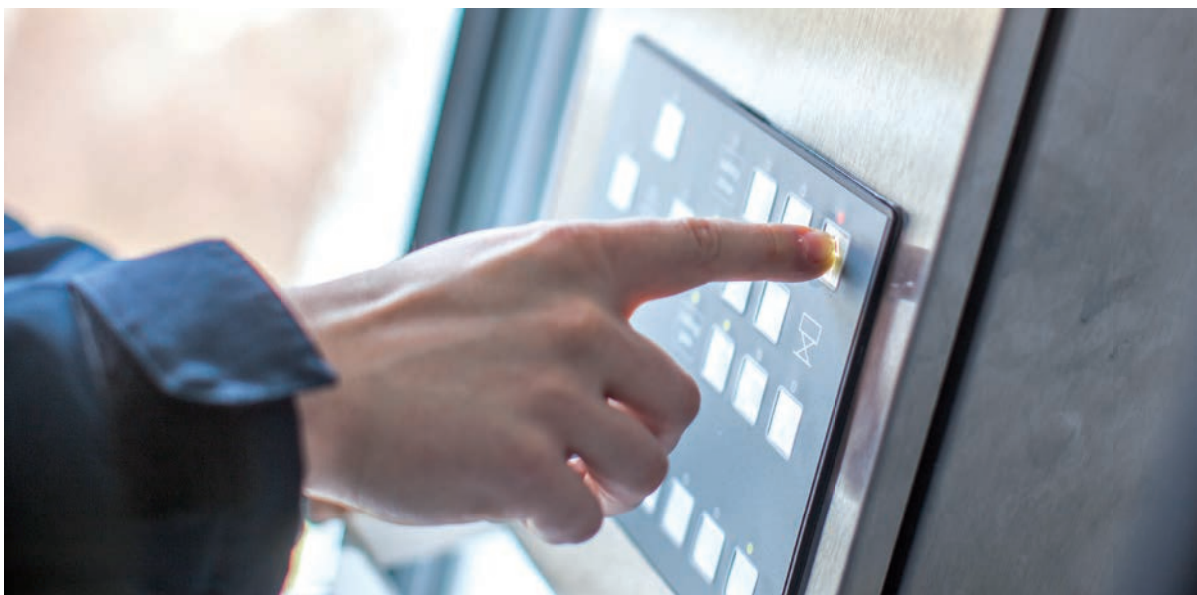
The software also tells the operator the reason why functions are disabled.



## MAINTENANCE MENU

Thanks to the maintenance menu, troubleshooting any potential faults is simple so that the vehicle is back in use in no time.





## ENABLED FUNCTIONS

Integrated diagnostic software to show malfunctions and to simplify maintenance and repair. Depending on the specific situation, the software enables only those functions that the operator is allowed to use.



Emergency operating panel



# DOLL AMERICA

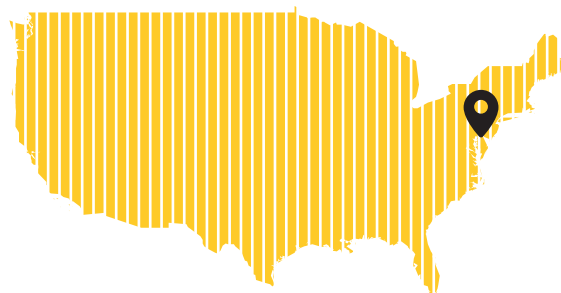
The USA is one of the key markets for ground support equipment. As one of the leading manufacturers of catering vehicles, DOLL has recognized this potential and has founded a subsidiary in the land of opportunity in the Philadelphia region. Our new location allows us to provide outstanding direct service and support to our customers and demonstrate our innovative strength, in-depth expertise and sophisticated know-how.

DOLL AMERICA's team consists of American and German specialists who combine their engineering skills and their knowledge of the American market. This allows us to focus on the needs of our American customers, with the power of two strong countries. This is DOLL AMERICA!

**DOLL**

**DOLL AMERICA INC.**

522 Pedricktown Rd.,  
Bridgeport, New Jersey, 08014  
[www.doll-america.com](http://www.doll-america.com)



## AVAILABLE IN THREE VERSIONS

### X-CAT L

- Full size driver's cabin
- Sill heights: 114" to 326"
- Payload: 11,000 lbs

### X-CAT M

- Sill heights: 55" to 236"
- Payloads: 9900 lbs
- The driver's cab can be converted into a half-cab version

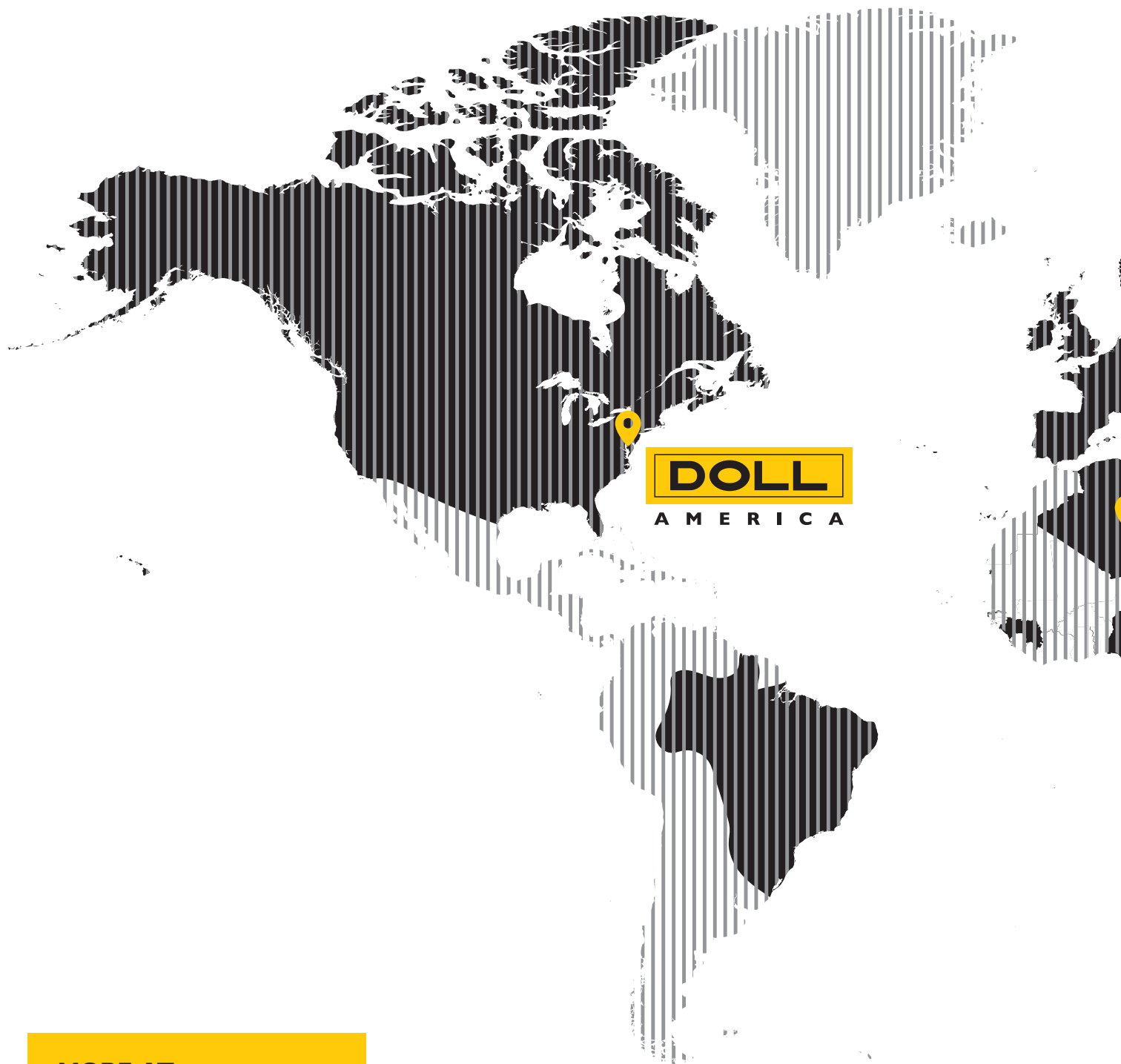
### X-CAT S

- More information on request

The various advantages of DOLL catering trucks are rounded off by customer-specific option packages.

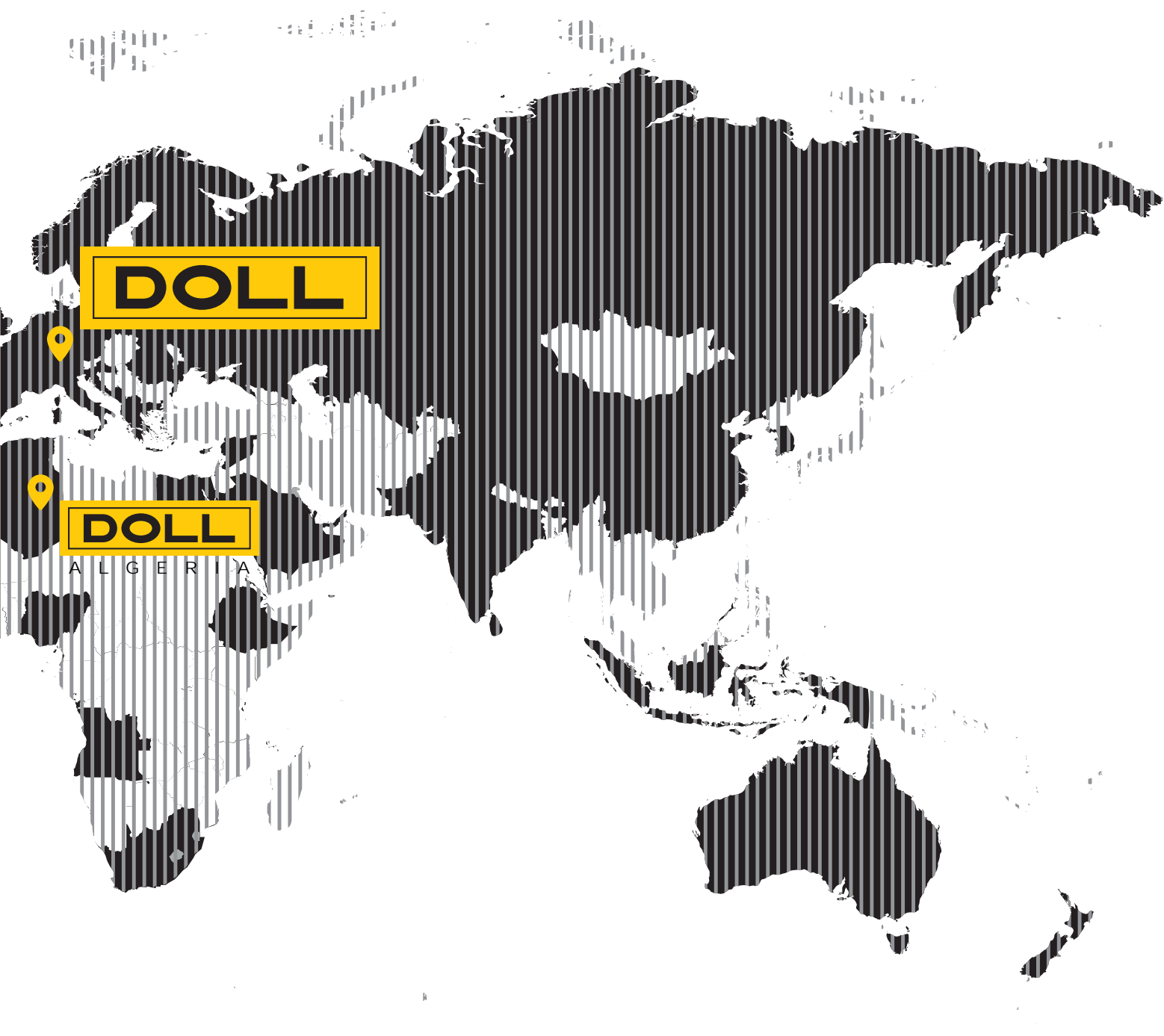


# DOLL WORLDWIDE



**MORE AT:**  
**[www.doll.eu](http://www.doll.eu)**  
**[www.doll-america.com](http://www.doll-america.com)**







# SERVICE

DOLL Technology provides all vehicles with adequate safety margins in their design. Vehicles are manufactured to a high standard, ensuring a long service life even when used in harsh conditions. As with all vehicles, regular maintenance is required to ensure that the vehicles remain fully functional and safe. Even the best components show wear over time. DOLL Service offers all the services that you require for your vehicles, 24/7, wherever you are.

**MORE AT:**  
**[www.doll.eu](http://www.doll.eu)**



## SPARE PARTS LOGISTICS

There are numerous original spare parts for all DOLL, delivered quickly whenever and wherever you need them. These are delivered as quickly as possible when needed.

## REPAIR AND MAINTENANCE

DOLL experts will handle any repairs with diligence, providing servicing and maintenance tailored to your needs. Vehicles thus retain their maximum value and offer permanent driving pleasure.

## AVAILABILITY AND SERVICE NETWORK

The Service line and the free Truck Hotline are available across Europe twenty-four hours a day, combined with an extensive partner network and service stations worldwide.

## TRAINING

Service partners and dealers need to be highly familiar with DOLL vehicles to ensure that they can offer precisely the right assistance at all times. We therefore provide training for the different individual DOLL vehicle types on a regular basis. There are also special training courses for operating and maintaining DOLL vehicles for those interested.



# +49 7804 49 163

## YOU CAN REACH US

Mon. - Fri. 8:00 a.m. to 8:00 p.m.

## ENJOY THE ADVANTAGES OF OUR CUSTOMER CARD

Fast help via the ADAC network and transfer to a DOLL  
service partner – 24 hours a day, round the clock.



**DOLL**

### CUSTOMER CARD

## +49 7804 49 163

Free hotline - 24/7.



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