

# ELECTRIC MULTI DIRECTIONAL SIDELOADER

**PHOENIX** -  
INDIVIDUALLY  
CUSTOMISED  
FOR EVERY  
APPLICATION



LOAD CAPACITIES UP TO 10 TONNES  
LIFT HEIGHTS UP TO 14000 MM

[www.hubtex.com](http://www.hubtex.com)

**HUBTEX.**

WE CREATE THE UNIQUE

# *PHOENIX*

## **CUSTOMISABLE FOR ANY APPLICATION**

Our sideloaders with multidirectional steering from the PHOENIX truck series can be flexibly adapted to the individual requirements of the customer.

Customers can choose from a variety of series with application-specific fork carriage designs, cabins, lift masts and individual equipment options to find their ideal solution. As these series offer an almost endless number of possible combinations, a HUBTEX multidirectional sideloader can be perfectly customised to any application.

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# Increased storage capacities ensure optimal utilisation

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**UP TO 100% MORE STORAGE SPACE**

**FAST, SAFE AND EFFICIENT**

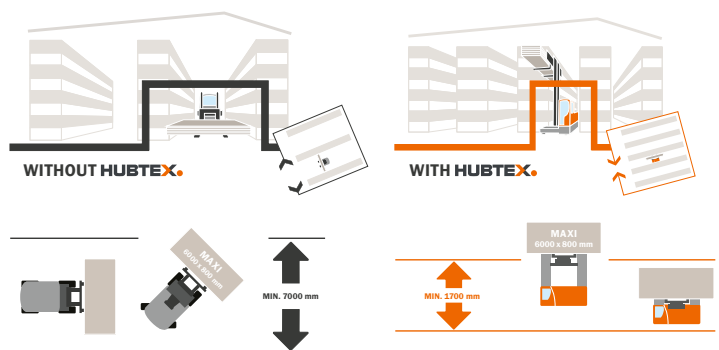
**LESS DAMAGE TO THE GOODS**

Due to the use of HUBTEX sideloaders, narrow aisles can be passed through without any problems. The distances between the rows of racks can be reduced to a minimum, creating extra space for additional storage. HUBTEX thus ensures increased storage capacity and, as a result, offers optimal use of storage space.

## SMALLER AISLE WIDTHS THANKS TO MULTIDIRECTIONAL FORKLIFTS

Loads of all types, in particular long loads with load capacities of 1.5 to 10.0 tonnes.

- *Electric drive*
- *Indoor and outdoor application*
- *Handling / transport / order picking*
- *Guided operation in narrow aisles or free-ranging usage*



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**HUBTEX.**

# A detailed look at the **PHOENIX** electric multidirectional sideloader

## Operator comfort

- Perfect all-round visibility
- Free-view lift mast desing
- Ergonomic cabin design
- Comfortable entry
- Simplified battery exchange

## Technical benefits

- Larger battery capacities ensure longer operating times
- Low energy consumption
- 360° HX multidirectional steering

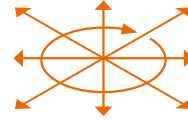


Series	Capacity (t) <sup>1</sup>	Lift height h3 (mm)	Loadarm opening Ra (mm)	Frame length (mm)	Driving speed <sup>2</sup>	Tyres	Battery (V)
2820	1.5 - 3.0	Up to 10000	1000/1230/1400	2100/2330/2500	10	EL or PU	48
2821	1.5 - 3.0	Up to 10000	1340/1630/1960	2760/2880/3050/3170/3380	10	EL or PU	48
2825	3.0 - 4.5	Up to 10000	1340	2440	11	EL or PU	48
2829	3.0 - 4.5	Up to 14000	1340/1630/1960	2880/3170/3500/3620/3950	11	EL or PU	48
2830	3.0 - 4.5	Up to 14000	1340/1630/1960	2880/3170/3500/3620/3950	11	EL or PU	80
2831	5.0 - 7.0	Up to 14000	1340/1630/1960	2880/3170/3500	11	PU up to 7.0 t / EL up to 5.0 t	80
2832	6.0 - 10.0	Up to 14000	1340/1630/1960	3490/3820	11	PU up to 10.0 t / EL up to 7.0 t	80

<sup>1</sup> Load centre 600 mm <sup>2</sup> Longitudinal drive

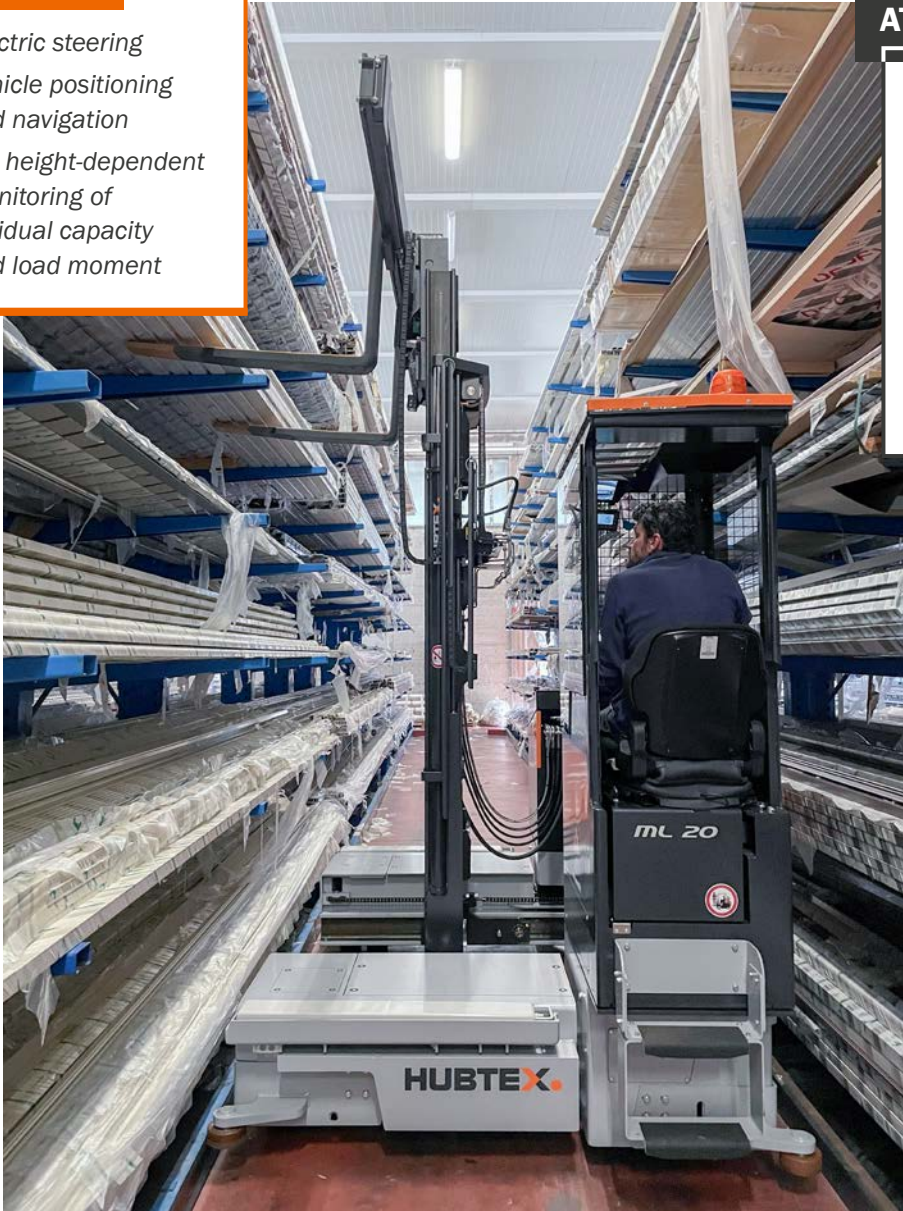
### Special features

- Capacities from 1.5 to 10.0 t
- Indoor and outdoor application
- Environmentally friendly and low-noise electric drive
- Fork carriage tilt for high residual capacities and safe handling at high lift heights
- Reduced energy and maintenance costs thanks to modern three-phase technology and the elimination of carbon brushes
- Articulated frame for mechanical level compensation
- Reduced loadarm height for optimal accessibility of the lower rack level
- Guided operation in narrow aisles or free-ranging usage
- Multidirectional steering for optimal manoeuvrability



### INNOVATIONS

- Electric steering
- Vehicle positioning and navigation
- Lift height-dependent monitoring of residual capacity and load moment



### SERIES AT A GLANCE

- series 2820
- series 2821
- series 2825
- series 2829
- series 2830/31
- series 2832

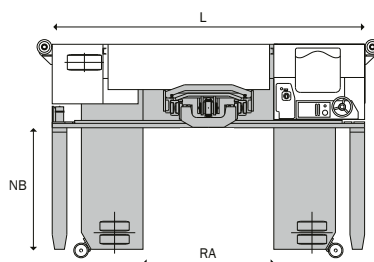
# PHOENIX – the right series for any application

## 2820

The 2820 series is a very compact and agile universal sideloader with multidirectional steering for the handling of pallets and long material. Due to the short frame length, this series is also suitable for use in pallet racking as a reachtruck or in block storage as a forklift.

## 2821

The 2821 series is a universal sideloader with multidirectional steering for the handling of pallets and long goods. It is characterized by its compact design and is especially suitable for narrow aisle storage applications. The smallest possible aisle width can be achieved because of the choice of different cabins.



Q = Crosswise  
D = Diagonal  
L = Lengthwise  
SU = Stand-up

PU = Polyurethane  
EL = Elastic

Series	2820	2821
Capacity (t)	1.5 to 3.0	1.5 to 3.0
Loadbed width (mm)	800 to 1600	600 to 1600
Lift height (mm)	Up to 10000	Up to 10000
Frame length (mm)	2100 / 2330 / 2500	2760 / 3050 / 3380
Loadarm opening (mm)	1000 / 1230 / 1400	1340 / 1630 / 1960
Tyres	PU / EL	PU / EL
Battery voltage (V)	48 V	48 V
Cabin	Q	Q / D / L / SU



## 2825

The 2825 series is the most compact and agile universal sideloader with multidirectional steering in its class.

The truck is suitable for the handling of pallets and long loads, in narrow aisle warehouses, indoor or outdoors, even on semi-solid surfaces. Thanks to its upright, waterproof drive motors, there are no concerns when it comes to using the lift truck outdoors.

## 2829

The 2829 series can be customised for a variety of applications. It offers three different frame lengths with corresponding loadarm openings and various cabin options.

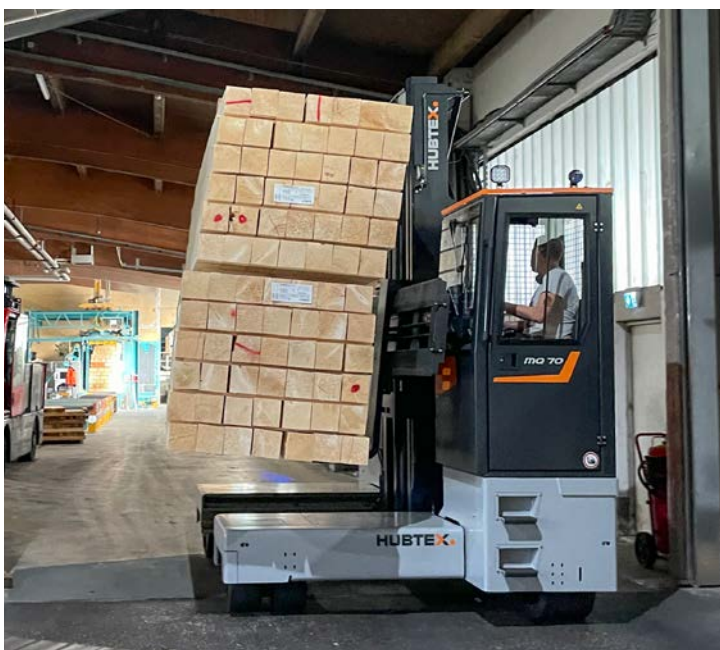
This series is ideal for use in guided narrow aisles as well as for free ranging applications.

## 2830 / 31

Both series are universal sideloaders with multidirectional steering for handling of pallets and long goods. They can be configured either with a compact frame length for block storage or as a narrow version for a guided application in narrow aisles. The cabin variants offer everything from minimal working aisle width to maximum operator comfort.

The forklifts are available with polyurethane (PU) tyres solely for indoor use or elastic (EL) tyres for combined indoor and outdoor use. Both series have waterproof, upright drive motors and can be used outdoors, even in rain and snow.

2825	2829	2830 / 31
3.0 to 4.5	3.0 to 4.5	3.0 to 4.5 / 5.0 to 7.0
800 to 1800	800 to 1800	600 to 2100
Up to 10000	Up to 14000	Up to 14000
2440	2880 / 3170 / 3500 / 3620 / 3950	2880 / 3170 / 3500
1340	1340 / 1630 / 1960	1340 / 1630 / 1960
PU / EL	PU / EL	EL up to 5.0 t / PU up to 7.0 t
48 V	48 V	80 V
Q	Q / D / SU / L	Q / D / SU / L



## 2832

The 2832 truck series is ideal for handling heavy loads. With its elastic tyres, the truck can handle long and heavy loads of up to 7000 kg both indoors and outdoors.

The sideloaders can be used outdoors without hesitation, even in rain and snow. The large polyurethane tyres enable the truck series to carry up to 10000 kg.

Series	2832
Capacity (t)	5.0 to 10.0
Loadbed width (mm)	800 to 2100
Lift height (mm)	Up to 14000
Frame length (mm)	3490 / 3820
Loadarm opening (mm)	1340 + 1630 / 1960
Tyres	PU (9.0 t up to 10.0 t) EL (5.0 t up to 7.0 t)
Battery voltage (V)	80 V
Cabin	Q

Q = crosswise

PU = polyurethane

EL = Elastic



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# The **PHOENIX** is comfortable and optimally equipped

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All HUBTEX vehicles are individually manufactured industrial trucks that can be tailored to your specific warehouse application. In order to satisfy all of your requirements, HUBTEX offers a variety of different equipment options.

## ➤ **ELECTRIC DRIVE WITH CAN BUS TECHNOLOGY**

All HUBTEX electric multidirectional side-loaders are based on state-of-the-art technologies. They are equipped with powerful three-phase AC drives (drive motors) and three-phase AC pump units which offer considerable advantages:

- *Maintenance-free enclosed motor construction with improved protection against moisture and dirt, especially suitable for outdoor application.*
- *Powerful three-phase AC motors for optimal running characteristics on ramps and gradients. An "Anti-Rollback" feature ensures safety and gives the driver confidence when the vehicle is stopped on gradients.*
- *High driving speed and very good acceleration values*
- *Precise driving and speed control for accurate positioning*
- *Accurate lifting and lowering*





## ➤ LIFT MASTS AND FORK CARRIAGES

Stable and robust lift masts produced in-house with internal, protected hydraulics and large load capacity reserves. HUBTEX manufactures different lift masts and fork carriages for the safe and efficient handling of all loads. A hydraulic fork adjustment and sideshift are available as options.

### Telescopic fork carriage

For extremely unstable and bending long goods or loads of varying lengths, HUBTEX manufactures telescopic fork carriages either with 2 or 4 forks. The execution and adjustment range are adapted to the specific load requirements (not shown).

### Detachable spreaded fork carriage with two additional forks and quick change system

The detachable spreaded fork carriage for manual pick-up on the standard fork carriage type I or spreaded fork carriage type III with quick-change system is available as an option. This option is intended for short-term handling of long goods.



## ➤ TYRES



Polyurethane (PU)

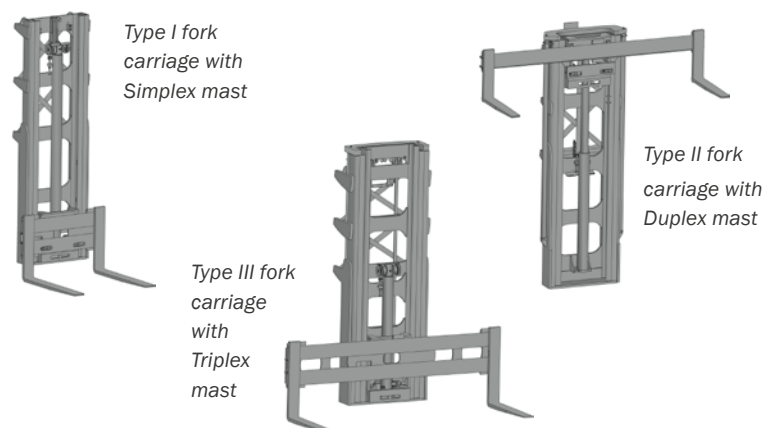
Elastic (EL)

For different requirements, HUBTEX offers polyurethane tyres (PU) for even industrial floors and, optionally, soft elastic tyres (EL) for poor ground or floor conditions or for outdoor use to preserve the vehicle components and the driver's health.

## ➤ LIGHTING



“See and be seen” is the motto of this feature. HUBTEX offers several lighting options within the chassis frame for optimal safety on your company premises.



The fork carriages can be combined with all lift masts

## ➤ DRIVER'S CABIN

The spacious and ergonomically designed driver's cabin offers comfort and plenty of room.

All of the truck information is clearly shown on the HIT colour display (HUBTEX Information Terminal). In most cabin variants, the HIT is mounted on an adjustable support arm so that the operator can individually adjust the alignment.

All hydraulic functions and the direction selection function are controlled as standard via the ergonomic multifunction joystick. The height and angle of the steering column can be adjusted to offer the driver additional comfort.



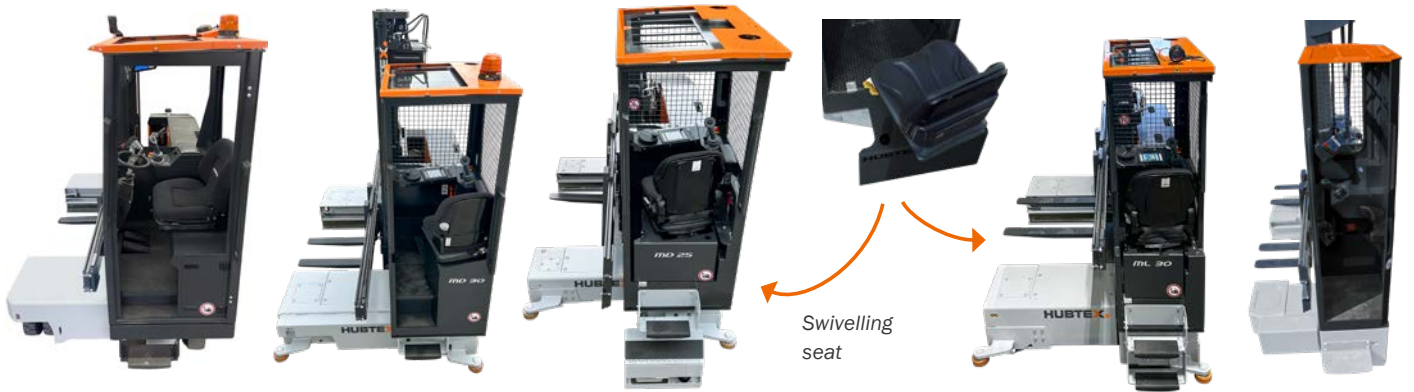
### Maximum all-round visibility

Thanks to the new generation of cabins, which have already proven successful in other series, and the re-design of the mast types, the trucks offer the best visibility in their class.

### Ergonomics

The spacious and ergonomically designed driver's cabin offers greater freedom of movement and an unrestricted all-round visibility. The vibration damped workstation as well as the full suspension, multiply adjustable comfort seat provide for smooth working without getting tired and preserve the driver's health.

**Cabin variants for the smallest working aisle widths and the greatest possible comfort**



➤ *Cross seat cabin (Q 770, Q 850, Q 900, Q 1000)*

➤ *Diagonal seat cabin with fixed seat (DF 770)*

➤ *Diagonal seat cabin with swivelling seat (DS 770)*

➤ *Longitudinal seat cabin (L 610)*

➤ *Stand-up cabin (SU 520, SU 610, SU 770)*



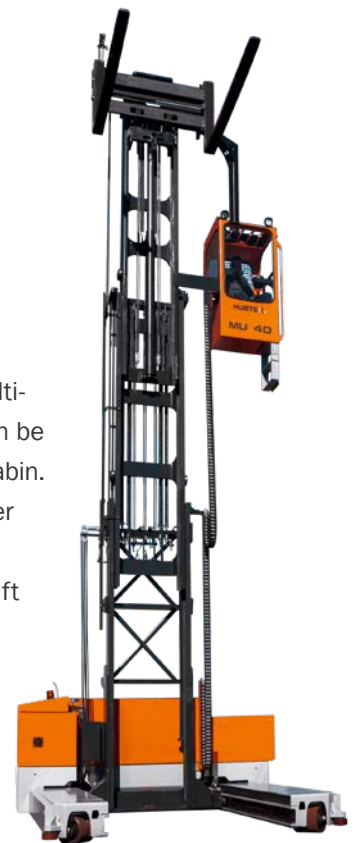
**Sideloader cabin**

In addition, we offer a sideloader cabin (SL 850) as a further alternative. This is an ideal option for long transport routes due to the orientation of the driver's seat.



**Man-up cabin**

Optionally, the electric multi-directional sideloaders can be equipped with a man-up cabin. This ESTL-based sideloader is particularly suitable for use in narrow aisles with lift heights greater than 7 m.



## HIT – HUBTEX Information Terminal



State-of-the-art on-board computer technology allows easy access to driver and service information at a single glance.

Optionally, access to driver and service information can be obtained through remote access.

## Joystick with integrated switch for preselection of the driving direction

All main driving and hydraulic functions are controlled from a single ergonomically designed joystick developed by HUBTEX. The joystick offers fully proportional lift / lower, mast reach and fork tilt, plus optional fork positioning and teleforks, without moving the hand from this single controller.



## Cabin accessories

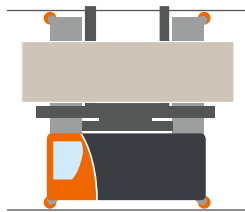
- Manually adjustable LED working lights on the cabin roof
- Flashing beacon
- Interior cabin lighting
- Radio with USB port and Bluetooth, two speakers
- Closed cabin with safety glass
- Lockable door with sliding window (Q cabin)
- Electric heating
- Windshield wiper
- Heatable driver's seat



## ➤ GUIDING SYSTEMS FOR NARROW AISLE APPLICATION

HUBTEX offers three different guidance systems for narrow aisle solutions to maximise the usage of the available storage space. With a safety distance of only 100 mm on each side, the aisle width is reduced to a minimum.

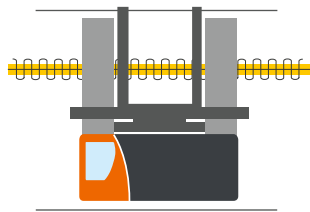
### Guide rollers



Guide rollers (100 mm safety distance on each side) in single version up to 4.5 t and in twin version from 4.5 t. This mechanical guidance system is robust and has been proven in practice.

In combination with the mobile personal protection system optional tracking assistance is available to assist the driver when entering the narrow aisle and to prevent damage.

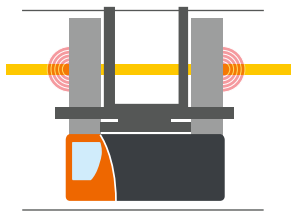
### Wire guidance



The wire guidance (150 mm safety distance on each side) is a reliable and safe system with the advantage that the wire moves your HUBTEX sideloader onto the lane before the truck enters the rack system. In this way, damage to the sideloader or the rack system is ruled out.

For this purpose, an iron-free space is required in the area of the inductive wire, according to DIN 15185 part 1. If an investment is made in a new vehicle, this system is the most cost-effective guidance system from an aisle length of 400 metres or more.

### Optical guidance

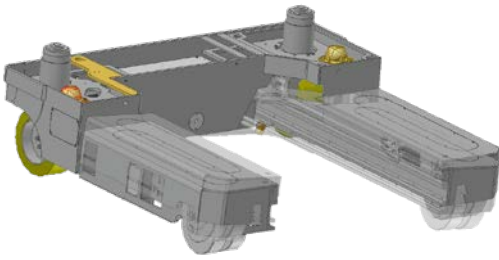


The optical track guidance system (150 mm safety distance per side) is based on inductive wire guidance technology but is used when there is no iron-free area on the ground in order to install the inductive wire.



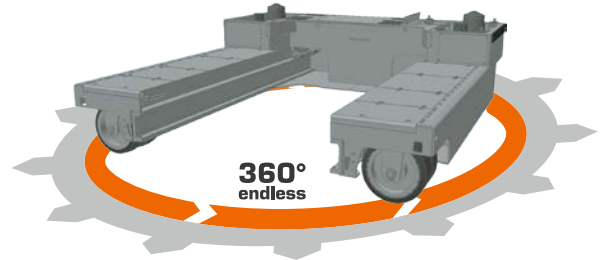
Further information  
regarding tracking  
assistance in narrow aisles

## ➤ ARTICULATED FRAME



The two-part chassis, which has been tried and tested over decades, ensures that all wheels are in constant contact with the ground. The truck immediately compensates for any unevenness on the ground. This protects the components as well as the health of the operator.

## ➤ MULTIDIRECTIONAL STEERING SYSTEM



In **longitudinal drive**, the HUBTEX can quickly transport long material through narrow gates and aisles. The sideloader can also be used as a conventional forklift in **crosswise drive**. The **Circular drive** makes it possible to quickly turn on the spot. **Diagonal drive** enables safe handling when loading and unloading trucks.

## FIRST TIME AVAILABLE FOR ELECTRIC MULTIDIRECTIONAL SIDeloader

### ➤ UP TO 33% LESS ENERGY CONSUMPTION THANKS TO ELECTRIC STEERING



The PHOENIX series is the first ever electric multidirectional sideloader to be available with purely electric steering as an option. This feature reduces the noise level to a minimum. In addition, the use of the electric steering leads to a significantly lower energy consumption. The tried-and-tested electro-hydraulic steering is still available as standard.

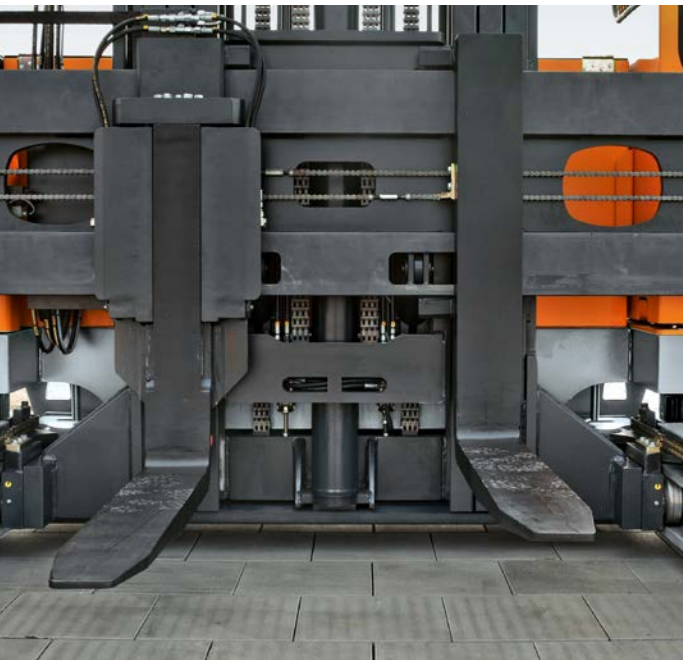
## ➤ OPTIONAL 360° HX MULTIDIRECTIONAL STEERING SYSTEM

The mobility of the trucks is a great advantage and can save up to 50% of the storage space. By using the optionally available 360° steering system HX, HUBTEX trucks can change without stopping from longitudinal to cross drive. This reduces the time needed to switch wheels, provides excellent manoeuvrability and has the added benefit of significantly reducing the wear on the wheels. Low wear and high handling performance is paramount.



## ➤ FORKS

HUBTEX offers forks for every application. As an essential forklift component, they have to meet particularly high requirements. The selection of high quality fork material ensures minimal wear and high lifting capacities.



### **Height-adjustable forks (level compensation)**

To compensate for uneven floor or ground, height-adjustable forks are available for all load capacities, also in combination with telescopic forks.

### **Knife forks**

Knife type forks are available at extra cost and are used for picking up loads in extremely narrow load pick-up situations (without illustration).

### **Telescopic forks**

For the loading and unloading of lorries from one side or for the double-deep storage of goods in rack systems, the HUBTEX sideloaders can be equipped with telescopic forks (manual or hydraulic) which are available in all lengths and load capacities.

*collapsed (basic) length of telescopic forks*



*extended length of telescopic forks*





## ➤ STORAGE AIDS

For the safe and efficient handling of goods at high lift heights or in narrow working aisles, HUBTEX offers additional storage aids.

### Colour video camera with flat screen



Cameras carry out valuable work in many industrial sectors. They increase the safety, improve the driver's view during the storage operation and optimise the utilization of the sideloader. The product range comprises robust and compact cameras and displays, a large number of special cables and plug connections which ensure smooth and permanent image transmission. They are optionally mounted onto the forks, the fork carriage or the lift mast.

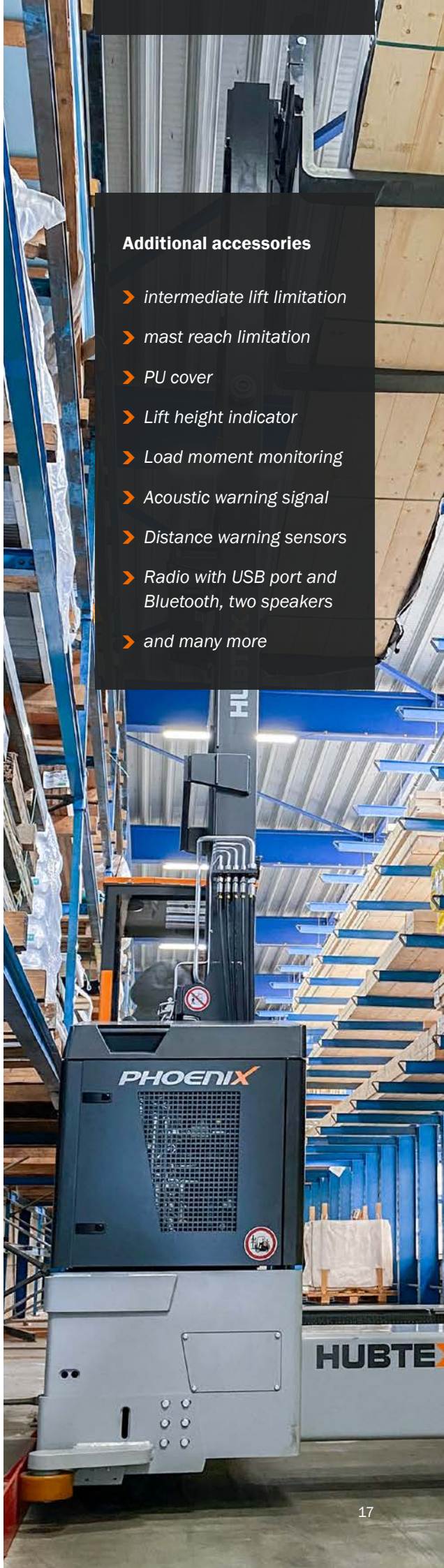
### HUBTEX Load Manager (HLM)



The HLM can be freely programmed as electronic lift height preselection with 199 positions. The lift mast stops automatically upon reaching the preselected rack level. The system differentiates whether goods are moved in or out of storage. In this way, time is saved and damage to the goods is ruled out, since the sideloader does not need to plunge into the rack compartment in an uncontrolled manner.

### Additional accessories

- intermediate lift limitation
- mast reach limitation
- PU cover
- Lift height indicator
- Load moment monitoring
- Acoustic warning signal
- Distance warning sensors
- Radio with USB port and Bluetooth, two speakers
- and many more



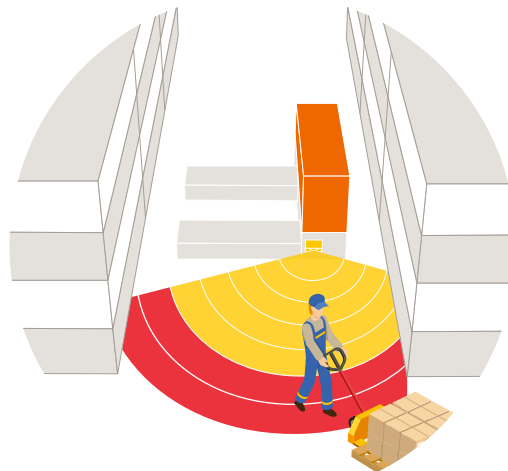
## ➤ PERSONAL PROTECTION SYSTEMS IN THE NARROW AISLE WHERE SIDeloadERS MOVE IN GUIDED OPERATION

In the case of working aisle widths with less than 500 mm safety distance per side, the operator of the warehouse is obliged to install approved personal protection systems in accordance with DIN 15185 Part 2 „Personal protection when using industrial trucks in narrow aisles“. HUBTEX offers two different personal security systems. Both systems comply with the guideline.



### Stationary aisle protection system, SGA

- Alternative to PSA mobil
- Automatic protective device
- Protection of people when using industrial trucks in narrow aisles
- Approved by the authorities
- Cost-effective alternative for up to three working aisles
- Optional: Escape door monitoring / escape route monitoring



### HUBTEX personal protection system, PSA-mobil

- Monitoring of narrow aisle with two laser scanners
- If people or obstacles are detected in the aisle, your HUBTEX truck brakes automatically to a standstill
- Can be used regardless of the number of working aisles

Personal protection system, PSA-mobil





## ➤ EFFICIENT, QUICK AND ERROR-FREE STORAGE AND RETRIEVAL WITH HUBTEX ASSISTANCE SYSTEMS

Thanks to its narrow aisles and large lift heights, the narrow-aisle warehouse enables maximum utilisation of the available storage space. However, this type of storage also has its price - it places high demands on the operator and the electric multidirectional sideloader. Due to the large amount of storage positions, the driver has numerous storage coordinates at his disposal. Memorising all these storage positions and quickly transporting the goods to the correct locations is a difficult task and often leads to goods being stored or retrieved in the wrong places. To avoid such errors and to increase productivity, HUBTEX offers assistance systems.

### **Semi-automated truck positioning**

The assistance system consists of a horizontal and vertical positioning device and a touch panel in the cabin. The truck positioning is activated once the rack position is entered manually into the HUBTEX touch panel. By operating the joystick for lifting and the drive pedal, the correct storage location is approached partly automated.

### **WMS connection**

The next stage to achieving semi-automated vehicle positioning is to connect the multidirectional forklift to the Warehouse Management System (WMS). The target height and horizontal position for storage/retrieval is transmitted directly from the WMS to the semi-automated truck positioning system. The driver confirms the order and simply has to activate the driving and lifting functions. When lifting, the fork automatically stops at the correct height.



# Step-by-step automation

Electric multidirectional sideloaders are suitable for a diverse range of applications. HUBTEX already offers a large number of modular systems.

The path leads from assisted driving, for example with intelligent route guidance, to track-guided driving and autonomous driving. In the future, even complex transport tasks can be carried out automatically with multidirectional sideloaders being fully integrated into the automated production processes.

The trucks can be used flexibly and carry out their transport tasks quickly, efficiently and reliably. Customers with high turnover rates benefit from this in particular.

As result customers benefit from reduced process costs coupled with a reduction in operating costs as well as optimised material flows and an increase in efficiency.





## Remote maintenance system

### ➤ THE REMOTE MAINTENANCE SYSTEM AT A GLANCE:

- *Data transfer of battery charge status, operating hours and error codes*
- *Data transfer of error codes, battery charge status and operating hours*
- *Available with functions for parameter modifications and software updates*
- *Maximum machine availability, minimised production downtimes and service calls*

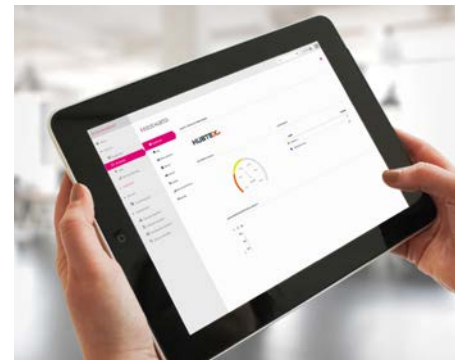
Important truck data is transmitted to the HUBTEX Service department via a gateway on the lift trucks.

HUBTEX technicians can directly access the data of the truck and provide fast assistance in the event of vehicle malfunctions.

Customers benefit from maximum machine availability and minimised production downtimes.



**HUBTEX CLOUD SERVICE**



## Rental or financing

### ➤ FINANCING SOLUTIONS

HUBTEX maintains one of the largest fleets of sideloaders on the market. With 50 machines available for short- and long-term rental, we can provide the perfect solution for your individual application.

We are also happy to offer the right financing solution for your new HUBTEX. The range of offers includes everything from leasing individual vehicles to full service packages, which also include spare parts, maintenance and repair work.

## ➤ MORE SERVICE

Exactly calculable maintenance costs due to factory guidelines with regard to service times.

Fastest possible reaction times in case of service needs by comprehensive factory support.

## ➤ MORE VALUE

Due to the exclusive use of original spare parts, your truck remains an original HUBTEX.

Customised maintenance concepts provide you with a clearly calculable cost structure.

## ➤ MORE SAFETY

You can be sure that all safety-related equipment of your truck is checked by competent, specialized technicians according to the latest guidelines at least once per year.

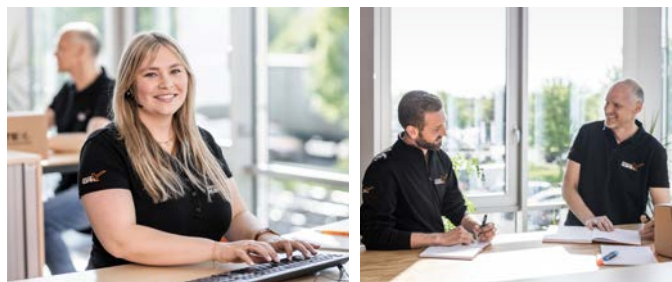


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# Your HUBTEX moves on and on ...

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Who should understand your HUBTEX better than we do? Apart from excellent service, HUBTEX offers you long-term investment security which is indeed "the manufacturer's know-how".



# *SERVICE* **HUBTEX.**



## HUBTEX VEHICLES

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ELECTRIC-MULTIDIRECTIONAL-SIDELOADERS › DIESEL-/GAS-FOUR-WAY-SIDELOADERS › MULTIDIRECTIONAL COUNTERBALANCE FORKLIFT › ORDER PICKING SYSTEMS › GLASSTRANSPORT SYSTEMS › HEAVY DUTY TRANSPORT VEHICLES › REACH TRUCKS › SPECIAL TRUCKS › SECOND-HAND-AND RENTAL EQUIPMENT

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# HUBTEX.

WE CREATE THE UNIQUE

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