

- > Capacities from 1.5 to 20.0 tonnes
- > Lift heights up to 12500 mm





**Electric Multidirectional** Sideloader





## environmentally friendly

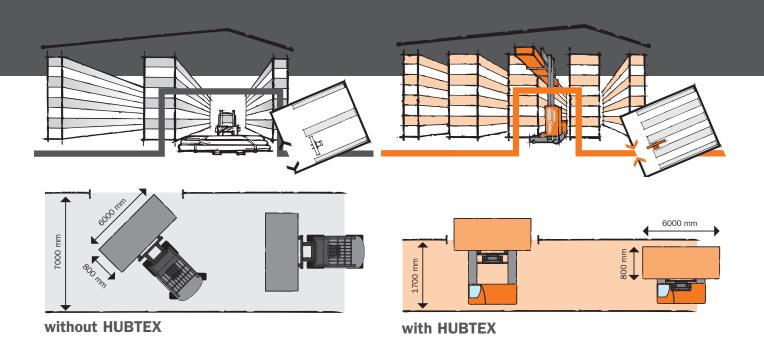
We offer multidirectional sideloaders with electric drive in the load capacity classes from 1.5 to 20.0 tonnes. These all-purpose industrial trucks can be used for the handling of long goods, stacks of metal sheets, chip boards, tools, cable drums, rollers, oversized pallets and round bars in narrow aisle rack systems or in a freely moveable manner in the indoor and outdoor area. Within the production series, the industrial trucks can be tailor-made to meet the individual requirements of the end user.



#### Optimize your warehouse capacity!

Due to the use of HUBTEX sideloaders, narrow aisles can be passed through without any problems and the distance between the rack rows reduced to a minimum. In this way, space is created for additional rack rows and new warehouse capacity.

- > up to 100% more storage space
- > fast, safe and efficient
- > less damage to merchandise/less breakage



# The series at a glance:

- **>** 2120 series
- **>** 2121 series
- **>** 2125 series
- **>** 2130 series
- **>** 2131 series
- **>** 2140 series
- **>** 2150 series



**>** 2134 series

➤ Man Up series

0



#### 2120 series "The compact sideloader"

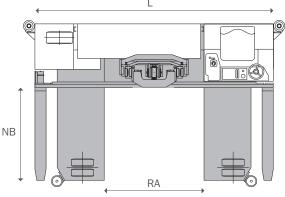
The 2120 series is a very compact and agile universal sideloader with multidirectional steering for the handling of pallets and long loads. Due to the short frame length, this series is also suitable for the use as fork-lift reach truck in the pallet rack system or as frontloader for block storage.

Series	2120
Capacity (t)	1.5 to 3.0
Load bed width NB (mm)	600 to 1600
Lift height (mm)	up to 8500
Frame length L (mm)	2090
Load bed opening RA (mm)	1000
Tyre equipment (optional) <sup>1</sup>	PU / EL
Battery voltage	48 V
Cabin (optional) <sup>2</sup>	Q





MQ.30







2121
1.5 to 3.0
600 to 1800
up to 8500
2760
1340
PU / EL
48 V
Q / D / L / SU

2125	
3.0 to 4.5	
800 to 1800	
up to 10000	
2440	
1340	 _"Let everybody do
PU / EL	what he can do best"
48 V	
Q	

#### 2121 series "The long and narrow one"

The 2121 series is a universal sideloader with multidirectional steering for the handling of pallets and long loads. 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.

#### 2125 series "The universal sideloader"

The 2125 series is the most compact and agile universal sideloader with multidirectional steering in its class. With vertical AC motors it can be used outside in all weathers as well as inside in guided aisle operations.



#### 2130 / 2131 series "The all-rounders"

The series 2130 and 2131 are universal sideloaders with multidirectional steering for handling of pallets and long loads. They can be optionally equipped with a short chassis length for block stacking or with a narrow cab/back frame for their use in rack system aisles. Different cabin versions are offered for individual requirements, from those for the smallest possible aisle width up to those for the highest possible operator comfort. The sideload-

Load bed width NB (mm)

Lift height (mm)

Frame length L (mm)

Load bed opening RA (mm)

Tyre equipment (optional)<sup>1</sup>

Battery voltage

Cabin (optional)<sup>2</sup>

2130

3.0 to 4.5

600 to 2100

up to 10000

2880 / 3170 / 3500

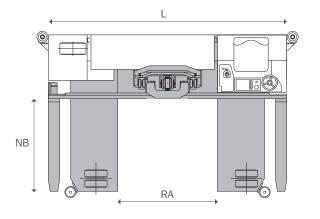
1340 / 1630 / 1960

PU / EL

80 V<sup>3</sup>

Q/D/SU

1) PU = Vulkollan, EL = elastic 2) Q = crosswise, D = diagonal, L = lengthwise, SU = stand up 3) US = 72 Volt





ers are available with Vulkollan (PU) tyres for pure indoor use or with elastic (EL) tyres for combined indoor and outdoor applications. Both series are equipped with travel motors which are constructed in an upright and water-protected manner, and can be used without hesitation in outdoor areas, even in poor weather conditions.



2131	2140
5.0 to 7.0	3.0 to 5.5
600 to 2100	600 to 2100
up to 10000	up to 10000
2880 / 3170 / 3500	3350 / 3680
1340 / 1630 / 1960	1340 / 1670
PU / EL (up to 5.0 t)	PU
80 V³	80 V <sup>3</sup>
Q / D / SU	L / SU



## 2140 series

#### "The sideloader for narrow aisles"

The 2140 series is a heavy duty multidirectional sideloader specifically designed for the narrowest of aisles yet can lift up to 5,500 kg and lift heights up to 10,000 mm can be achieved making it especially suitable for the long loads market.



#### 2150 series "The robust sideloader"

HUBTEX sets new standards with the 2150 series. The sideloader with multidirectional steering is characterized by its robust design and extremely high load capacities. It transports and handles long and heavy loads in combined indoor and outdoor applications. It reaches speeds of up to 16 km/h due to its strong travel motors and large-sized elastic tyres (EL). The sideloader can be used without hesitation in outdoor areas, even in poor weather conditions. Spacious and ergonomically designed drivers' cabins in "XL size" offer highest comfort for the operator.

Capacity (t)

Load bed width NB (mm)

Lift height (mm)

Frame length L (mm)

Load bed opening RA (mm)

Tyre equipment (optional)<sup>1</sup>

Battery voltage

Cabin (optional)2

2150

6.0 to 8.0

800 to 2100

up to 10000

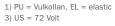
3720 / 4050 (Q cabin) + 3990 / 4320 (DXL cabin)

1340 + 1630 / 1960

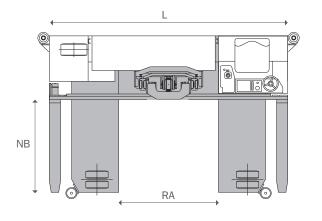
EL

80 V<sup>3</sup>

Q / QXL / DXL



2) Q = crosswise, D = diagonal, L = lengthwise, SU = stand up  $XL = extra \ large$ 











2132
6.0 to 10.0
800 to 2100
up to 10000
3490 / 3820
1340 + 1630 / 1960
PU (up to 10.0 t) / EL (up to 6.0 t)
80 V <sup>3</sup>
0

2134
12.0 to 20.0
1000 to 2100
up to 10000
4000
1960
PU / EL (up to 12.0 t)
80 V <sup>3</sup>
Q / QXL / DXL

#### 2132 series "The versatile sideloader"

The 2132 vehicle series with multidirectional steering is the entry level for heavy load handling. With its soft elastic tyres, it handles long and heavy loads of up to 6000 kg in combined indoor and outdoor applications. The sideloader can be used without hesitation in outdoor areas, even in poor weather conditions. With its large-sized Vulkollan (PU) tyres, the series has a load capacity of up to 10000 kg and is mainly used in the hall or in canopied outdoor areas.

#### 2134 series "The heavy-duty sideloader"

The sideloader with multidirectional steering is characterized by its robust design and high load capacities. The series is designed for the handling of heavy, extremely long and/or deep loads. With its large-sized Vulkollan (PU) tyres, the sideloader is mainly used in the hall or in canopied outdoor areas. Spacious and ergonomically designed drivers' cabins in "XL size" offer optimal comfort for the operator.

#### MU series "Man up"

The MU series is a man-up universal sideloader with multidirectional steering for the handling of long, deep and heavy loads. It is characterized by its compact design and is especially suitable for narrow aisle storage applications. During the handling of loads, the man-up cabin ensures an optimum view at all storage rack levels. With this version, time is saved and loads are safely stored in the rack system, even at great lift heights. The man-up cabin is recommended for lift heights exceeding 7 metres.

1) PU = Vulkollan 2) Q = crosswise, SU = stand up, liftable

Series
Capacity (t)
Load bed width NB (mm)
Lift height (mm)
Frame length L (mm)
Load bed opening RA (mm)
Tyres
Battery voltage
Cabin (optional)<sup>2</sup>

MU
2.0 to 12.0
800 to 2100
up to 12500
3170 / 3500
1630 / 1960
PU
80 V<sup>3</sup>

Q / SU



HUBTE (

MU 50





# **Equipment features of the series in detail**

All HUBTEX trucks are designed to exactly match the users application and requirements.

HUBTEX offers a wide range of options to ensure the equipment operates as safely and efficiently as possible.

# The right equipment for every application

#### >>> Tyre equipment

For different requirements, HUBTEX offers Vulkollan 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.







Vulkollan (PU)

Elastic (EL)

Elastic with profile (EL)



#### >>> Electric drive with CAN-BUS technology

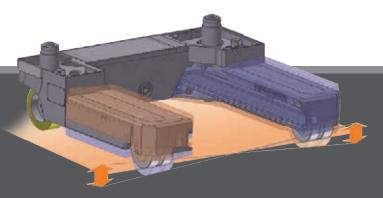
All HUBTEX electric multidirectional sideloaders are based on the latest technologies. They are equipped with powerful three-phase AC drives (travel motors) and three-phase AC pump units which offer considerable advantages:

- Maintenance-free enclosed motor construction with improved protection against moisture and dirt, especially suitable for outdoor application, even in poor weather conditions,
- Strong 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 and repeatedly started on gradients,
- High starting torque gives exceptional control in confined areas for accurate truck positioning,
- Precise driving speed control for accurate positioning,
- ➤ No carbon brushes or electric contactors means substantially reduced operating costs.



#### >> Articulated frame

The two-piece articulated chassis frame which has been tried and tested over decades ensures permanent floor contact of all wheels to immediately compensate for uneven floor or ground. This exclusive design makes the truck extremely stable end allows high residual capacities at very high lift heights.



The two-piece articulated chassis frame ensures permanent floor contact of all wheels.

The modular design guarantees best accessibility for maintenance and service.







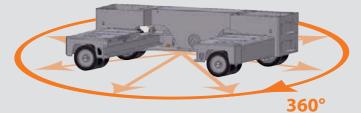
#### >>> Multidirectional steering

In lengthwise drive, your HUBTEX sideloader can quickly transport long material through narrow doors and aisles.

In crosswise drive, the HUBTEX sideloader can be used as conventional frontloader.

Circle drive enables a fast turning of the truck. Diagonal drive ensures safe handling to load and unload lorries.

This agility will be a big advantage and can help you by saving up to 50% of valuable floor space.



With a leading edge technology, optionally available

steering system, it is possible to change from lengthwise via diagonal to crosswise drive, without intermediate stop. This reduces the time for changing direction, reduces wear and ensures a high throughput performance. Low wear and high handling performance is the motto.

#### >>> Lift masts and fork carriages

Stable and strong lift masts with internally reeved hydraulics (No hose reels) are manufactured "in-house" and have a high reserve of load capacity. HUBTEX manufactures different lift masts and fork carriages for the safe and efficient handling of all loads. A hydraulic fork adjusting device and a side shifter are available as option.

#### > Telescopic fork carriage

For extremely unstable long loads or different load lengths, HUBTEX manufactures telescopic fork carriages which are optionally offered with 2 or 4 forks.

Version and adjustable range are adapted to the specific load requirements of the customer.



> Attached fork carriage with two additional forks

For trucks with a short type I carriage a quickly detachable long carriage is available allowing the truck to temporarily lift very long loads. Four forks can at the same time be utilized.





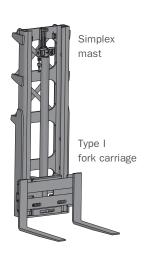
Two-stage lift mast with standard free lift (Simplex)

Your advantage: The most cost-effective mast version is manufactured with standard free lift for all HUBTEX sideloaders. When the loads rest on the load bed, the closed height of the mast is also the maximum transport height.

Standard fork carriage type I

For the handling of pallets and rigid long loads or cassettes with fork pockets.

➤ The fork carriages can be combined with all lift masts.







Two-stage lift mast with full free lift (Duplex)

Your advantage: The closed height of the mast is also the maximum transport height in the free lift range. This is, above all, advantageous to the handling of loads in the case of passages and limited hall heights.

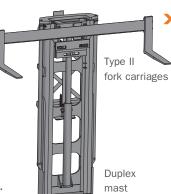
Three-stage lift mast with full free lift (Triplex)

Your advantage: lowest overall height, in the retracted condition, for great lift heights.

> Spreaded fork carriage type II

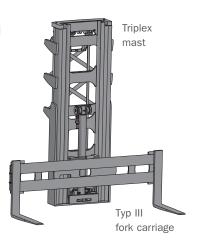
For the handling of all sorts of pallets and long loads.

The HUBTEX fork carriage type II has an extremely low overall height which ensures the best possible utilization of the available ceiling height (up to a maximum of 3000 kg).



Spreaded fork carriage type III

For the handling of all sorts of pallets and long loads. The HUBTEX fork carriage type III is characterized by its stable and robust design, and has been tried and tested in industrial use over decades.





#### >> Forks

HUBTEX offers forks for every application. As an essential vehicle component, they have to meet particularly high requirements. Due to the use of high-quality products, least possible wear and high load capacities are ensured.

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

To compensate for uneven floor or ground, lifting forks are available for all load capacities, also in combination with 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.

#### > Knife type forks (Full taper)

Knife type forks are available at extra cost for picking up loads in extremely narrow spaces. (without illustration).



Normal (base) position

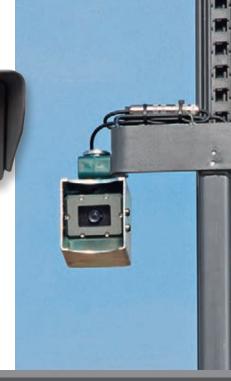
#### >>> Storage aids

For the safe and efficient handling of goods at great lift heights or in narrowly dimensioned rack aisles, HUBTEX offers additional storage aids.



### > Colour video camera with flat screen

Cameras from HUBTEX carry out valuable work in many industrial sectors. They increase the safety, improve the driver's view during the storage operation and optimize 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 99 positions. The lift mast stops automatically upon reaching the preselected rack compartment level. In this process, the system distinguishes whether goods are placed in storage or are removed from the storage rack. 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.







#### > Cabin accessories

- working headlamps, can be manually adjusted from the cabin
- LED working headlamps on the cabin roof, can be manually adjusted
- beacon
- paper tray/writing pad
- > cabin interior lighting
- radio/CD including two loudspeakers





>>> Cabin versions for the smallest possible aisle widths or for the highest possible comfort

#### Ergonomics

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

- > all-round cabin windscreen
- lockable door with sliding window (only in case of the Q cabin)
- > electric heating
- > screen wiper
- > heatable driver's seat



Crosswise seat cabin (Q)



Diagonal seat cabin with fixed seat (DF 770)



Diagonal seat cabin with swivel seat (DS 770))

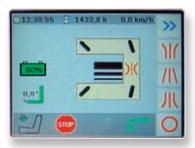
#### Joystick with integrated driving direction switch

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 & teleforks, without moving the hand from this single controller.

#### > HIT 2 HUBTEXinformation terminal

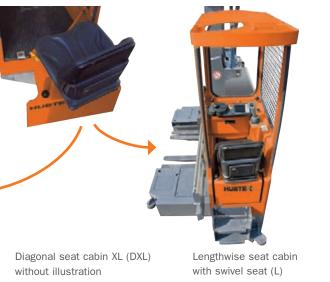
Most modern industrial onboard computer technology on HUBTEX sideloaders allows easy access to driver and service information at a single glance.



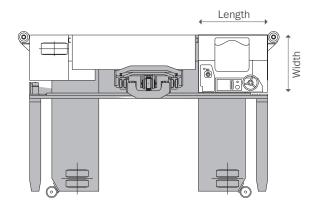
X = Standard, O = Option

Series	Crosswise seat (Q)						Diagonal seat   Lengthwise			Star	nd up	Manup (MU)		
Width (mm)	770	850	850	850	850	900	1000 XL	770	1000 XL	610	520	610	770	850
Length (mm)	930	710	770	830	930	930	1030	930	1300	930	930	930	930	930

2120		Х												
2121	0		Х		0			0		О	o	0	0	
2125				Х	0	o								
2130	o		Х		Х	o		0					0	0
2131	o		Х		Х	О		0					0	0
2140										Х	О	Х		SU 610
2132					Х	0		0						0
2150					Х	0	х		х					
2134					Х	0	О							0
MU														X



Standup cabin (SU)



DF = fixed seat, DS = swivel seat, XL = extra large



#### >>> Track guidance systems

HUBTEX offers three different track guidance systems for narrow aisle solutions for the maximum utilization of the available storage space.
With a safety distance as low as 100 mm on each side, the aisle width is reduced to a minimum.

Guide rollers

#### > Vulkollan 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 is robust and has been proven in practice.





Wire guidance

Optical guidance

#### > Wire guidance

The wire guidance ( $150\,\mathrm{mm}$  safety distance on each side) is a reliable and safe system with the advantage that the guide wire moves your HUBTEX sideloader into the lane before the latter 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 guide wire, according to DIN 15 185 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 linear metres.

#### > Optical guidance

The optical guidance system (150 mm safety distance on each side) is based on the wire guidance technology and is used when the required iron-free space is not available in the floor for the guide wire.



### Personal protection systems in the narrow aisle where sideloaders move in guided operation

In the case of aisle widths (AST) with safety distances of less than 500 mm on each side, the system operator is obligated to install approved personal protection systems according to DIN 15 185 Part 2 "Protective devices in storage and narrow aisles". HUBTEX offers two different personal protection systems. Both systems comply with the valid guideline.



#### > HUBTEX mobile personal protection system, model PSA

The rack aisle is permanently monitored by means of two laser scanners. If the laser scanners detect persons or obstacles within their protection field in the aisle, your HUBTEX sideloader will be automatically brought to a standstill, independently of the driver's/operator's actuation. For the activation/deactivation, the HUBTEX sideloader is equipped with two aisle recognition systems.



HUBTEX mobile personal protection system, model PSA

#### > HUBTEX stationary aisle protection system, SGA

With the stationary aisle protection system, HUBTEX offers an alternative to the mobile PSA. The SGA is an automatically operating safety device and is used for the protection of persons during the operation of industrial trucks in narrow aisles. It is officially approved as risk minimizing measure for the operation of a narrow aisle warehouse. It is regarded as cost-effective alternative for warehouses with up to three rack aisles. If desired, further functions can be performed by the SGA: Monitoring of escape doors/escape routes.



## further options...

#### 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.





#### Further accessories

- > intermediate lift limitation,
- > mast reach limitation,
- Secutex coating,
- ➤ lift height indicator,
- > load moment monitoring,
- audible warning signal,
- distance warning sensors,
- > radio/CD player,
- ... and many more.



# Rental or financing

HUBTEX holds an equipment fleet of 50 vehicles ready for short or long-term rental. This is one of the largest sideloader fleets offered for rental on the market. Thus, we can offer you a suitable solution for your application, as well.

Apart from that, we are pleased to offer you the appropriate financing model for your new HUBTEX sideloader. Our range of options from hire purchase to full rental which includes maintenance and repair is available to suit our customers needs.



## Your HUBTEX moves on and on

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".



#### > More HUBTEX

Excellently trained technicians whose knowledge and know-how always reflects the latest state of the art.

#### More service

- ➤ Exactly calculable maintenance costs due to factory guidelines with regard to service times.
- ➤ No unnecessary time required for fault finding due to latest diagnostic tools.
- ➤ Highest quality due to the exclusive use of original spare parts.
- ➤ Fastest possible solution of problems by comprehensive factory support.
- ➤ Technicians have the welder's qualification certificate which allows them to perform safety-relevant work tasks on their own.

#### > More value

- Due to the exclusive use of original spare parts, your truck remains an original HUBTEX.
- Our service experts offer you maximum transparency regarding the development of your maintenance costs.
- Customized maintenance concepts provide you with a clearly calculable cost structure.
- On request, we analyze your present maintenance costs and show you where potential for savings exists.

#### > 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.

HUBTEX at your disposal in more than 60 countries all over the world.



#### **HUBTEX Maschinenbau GmbH & Co. KG**

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## Further HUBTEX products at a glance:

- ➤ Diesel/Gas Fourway Sideloaders
- ➤ Electric Fourway High-Lift Trucks
- **▶** Sideloaders
- ➤ Order Picking Systems
- ➤ Glass Transport Systems
- ➤ Heavy-Duty Compact Frontlifts
- ➤ Fork-Lift Reach Trucks
- ➤ Special-Purpose Vehicles
- ➤ Heavy-Duty Transport Vehicles
- ➤ Second-Hand and Rental Equipment

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