

## 6.0-7.0t Mast Specification

Type	Model	Max. Fork Height	Overall height				Free lift		Front Overhang	Tilt range		Capacity	
			Lowered	Extended		With backrest	Without backrest	F		R	load capacity at 600mm		
				With backrest	Without backrest						6t	7t	
		mm	mm	mm	mm	mm	mm	mm	[°]	[°]	kg	kg	
STD Duplex	XHP60/70M250	2500	2250	3495/3667	3907	160	160	598.5/603.5	6	12	6000	7000	
	XHP60/70M270	2700	2350	3695/3867	4107	160	160	598.5/603.5	6	12	6000	7000	
	XHP60/70M300	3000	2500	3995/4167	4407	160	160	598.5/603.5	6	12	6000	7000	
	XHP60/70M330	3300	2650	4295/4467	4707	160	160	598.5/603.5	6	12	6000	7000	
	XHP60/70M360	3600	2800	4595/4767	5007	160	160	598.5/603.5	6	12	6000	7000	
	XHP60/70M400	4000	3000	4895/5167	5407	160	160	598.5/603.5	6	12	6000	7000	
	XHP60/70M430	4300	3200	5300/5467	5707	160	160	598.5/603.5	6	6	6000	7000	
	XHP60/70M450	4500	3300	5500/5667	5907	160	160	598.5/603.5	6	6	6000	7000	
	XHP60/70M480	4800	3450	5800/5967	6207	160	160	598.5/603.5	6	6	6000	7000	
	XHP60/70M500	5000	3550	6000/6167	6407	160	160	598.5/603.5	6	6	6000	7000	
	XHP60/70M550	5500	3850	6590/6667	6907	160	160	598.5/603.5	3	6	5500	6400	
	XHP60/70M600	6000	4100	7050/7167	7407	160	160	598.5/603.5	3	6	5200	6200	
Full Free Lift	XHP60/70U250	2500	2185	3455/3615	3637	1230/1070	1048	625.5/631.5	6	12	6000	7000	
	XHP60/70U270	2700	2300	3655/3815	3837	1345/1185	1163	625.5/631.5	6	12	6000	7000	
	XHP60/70U300	3000	2450	3955/4115	4137	1495/1335	1313	625.5/631.5	6	12	6000	7000	
	XHP60/70U330	3300	2600	4255/4415	4437	1645/1485	1463	625.5/631.5	6	12	6000	7000	
	XHP60/70U360	3600	2750	4555/4715	4737	1795/1635	1613	625.5/631.5	6	12	6000	7000	
	XHP60/70U400	4000	2950	4955/5115	5137	1995/1835	1813	625.5/631.5	6	12	6000	7000	
Triplex	XHP60/70N450	4500	2725	5735	5907	1500	1328	667/672	6	6	5300	6200	
	XHP60/70N480	4800	2825	6035	6207	1600	1428	667/672	6	6	5300	6100	
	XHP60/70N500	5000	2875	6213	6407	1672	1478	667/672	6	6	5300	6100	
	XHP60/70N550	5500	3075	6785	6907	1800	1678	667/672	3	6	5000	5900	
	XHP60/70N600	6000	3225	7235	7407	2000	1828	667/672	3	6	4800	5300	
	XHP60/70N650	6500	3375	7713	7907	2172	1978	667/672	3	6	3800	4300	
	XHP60/70N700	7000	3675	8385	8407	2300	2278	667/672	3	6	3100	3600	

SUBTRACT 200kg WITH INTEGRAL SIDESHIFTER, SUBTRACT 300kg WITH EXTERNAL SIDESHIFTER.

## 8.0t Mast Specification

Type	Model	Max. Fork Height	Overall height				Free lift		Front Overhang	Tilt range		Capacity	
			Lowered	Extended		With backrest	Without backrest	F		R	load capacity at 600mm		
				With backrest	Without backrest						8t	kg	
		mm	mm	mm	mm	mm	mm	mm	[°]	[°]	kg	kg	
STD Duplex	X80M250	2500	2450	/	3710	/	200	714	6	12	8000		
	X80M270	2700	2550	/	3910	/	200	714	6	12	8000		
	X80M300	3000	2700	/	4210	/	200	714	6	12	8000		
	X80M330	3300	2850	/	4510	/	200	714	6	12	8000		
	X80M360	3600	3000	/	4810	/	200	714	6	12	8000		
	X80M400	4000	3200	/	5210	/	200	714	6	12	8000		
	X80M430	4300	3400	/	5510	/	200	714	6	6	8000		
	X80M450	4500	3500	/	5710	/	200	714	6	6	8000		
	X80M480	4800	3650	/	6010	/	200	714	6	6	8000		
	X80M500	5000	3750	/	6210	/	200	714	6	6	8000		
	X80M550	5500	4050	/	6740	/	200	714	3	6	7200		
	X80M600	6000	4300	/	7240	/	200	714	3	6	6800		
Full Free Lift	X80U250	2500	2450	/	3705	/	1245	719	6	12	8000		
	X80U270	2700	2550	/	3905	/	1345	719	6	12	8000		
	X80U300	3000	2700	/	4205	/	1495	719	6	12	8000		
	X80U330	3300	2850	/	4505	/	1645	719	6	12	8000		
	X80U360	3600	3000	/	4805	/	1795	719	6	12	8000		
	X80U400	4000	3200	/	5205	/	1995	719	6	12	8000		
Triplex	X80N450	4500	2750	/	5775	/	1485	759	6	6	6800		
	X80N480	4800	2850	/	6075	/	1585	759	6	6	6800		
	X80N500	5000	2950	/	6360	/	1600	759	6	6	6300		
	X80N550	5500	3100	/	6810	/	1800	759	3	6	5900		
	X80N600	6000	3250	/	7275	/	1985	759	3	6	5400		
	X80N650	6500	3530	/	7840	/	2200	759	3	6	4800		
	X80N700	7000	3700	/	8310	/	2400	759	3	6	4000		

SUBTRACT 200kg WITH INTEGRAL SIDESHIFTER, SUBTRACT 300kg WITH EXTERNAL SIDESHIFTER.

## 9.0-10t Mast Specification

Type	Model	Max. Fork Height	Overall height				Free lift		Front Overhang	Tilt range		Capacity	
			Lowered	Extended		With backrest	Without backrest	F		R	load capacity at 600mm		
				With backrest	Without backrest						9t	10t	
		mm	mm	mm	mm	mm	mm	mm	[°]	[°]	kg	kg	
STD Duplex	X100M250	2500	2600	/	4055	/	200	726	6	12	9000	10000	
	X100M270	2700	2700	/	4255	/	200	726	6	12	9000	10000	
	X100M300	3000	2850	/	4555	/	200	726	6	12	9000	10000	
	X100M330	3300	3000	/	4855	/	200	726	6	12	9000	10000	
	X100M350	3500	3100	/	5055	/	200	726	6	12	9000	10000	
	X100M360	3600	3150	/	5155	/	200	726	6	12	9000	10000	
	X100M400	4000	3350	/	5555	/	200	726	6	12	9000	10000	
	X100M430	4300	3550	/	5855	/	200	726	6	6	9000	10000	
	X100M450	4500	3650	/	6055	/	200	726	6	6	9000	10000	
	X100M480	4800	3800	/	6355	/	200	726	6	6	9000	10000	
	X100M500	5000	3900	/	6555	/	200	726	6	6	9000	10000	
	X100M550	5500	4200	/	7055	/	200	726	3	6	8500	9000	
Full Free Lift	X100M600	6000	4450	/	7555	/	200	726	3	6	7500	8000	
	X100M650	6500	4750	/	8055	/	200	726	3	6	6000	6700	
	X100U230	2300	2500	/	3845	/	955	744	6	12	9000	10000	
	X100U250	2500	2600	/	4045	/	1055	744	6	12	9000	10000	
	X100U270	2700	2700	/	4245	/	1155	744	6	12	9000	10000	
	X100U300	3000	2850	/	4545	/	1305	744	6	12	9000	10000	
	X100U330	3300	3000	/	4845	/	1455	744	6	12	9000	10000	
	X100U360	3600	3150	/	5145	/	1605	744	6	12	9000	10000	
	X100U400	4000	3350	/	5545	/	1805	744	6	12	9000	10000	
	X100N450	4500	2850	/	6055	/	1305	794	6	6	8000	8500	
	X100N480	4800	2950	/	6355	/	1405	794	6	6	8000	8500	
	X100N500	5000	3050	/	6555	/	1505	794	6	6	8000	8200	
Triplex	X100N550	5500	3200	/	7055	/	1655	794	3	6	7500	7700	
	X100N600	6000	3350	/	7555	/	1805	794	3	6	6700	7000	
	X100N650	6500	3630	/	8055	/	2085	794	3	6	5800	6200	
	X100N700	7000	3800	/	8655	/	2255	794	3	6	4800	5200	

SUBTRACT 200kg WITH INTEGRAL SIDESHIFTER, SUBTRACT 300kg WITH EXTERNAL SIDESHIFTER.



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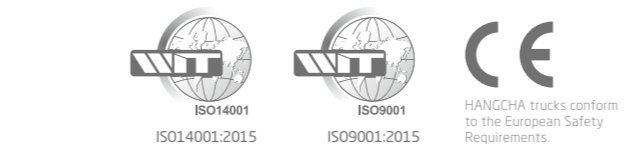
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# XH SERIES HEAVY-DUTY HIGH-VOLTAGE LITHIUM BATTERY FORKLIFT

with capacity of 6,000 to 10,000kg



The World of Hangcha



INNOVATIVE LITHIUM-ION

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# XH SERIES HEAVY-DUTY HIGH-VOLTAGE LITHIUM BATTERY FORKLIFT

Independently developed by Hangcha on the basis of decades of a deep understanding of electric forklifts and internal combustion forklifts, the dedicated XH series heavy-duty high-voltage lithium battery forklifts are a new series of products with a new energy vehicle voltage platform, a water-cooling lithium battery, as well as a pioneered special structure that represents a breakthrough over the traditional design concept. Breaking through the perception of drive electric forklift, the series of products supersede the internal combustion forklifts and redefine the new generation of electric forklifts in terms of efficiency, power, reliability, etc.

VOLTAGE

**309 V**

100% CHARGE FOR

**1 Hour**

WATER RESISTANCE

**IPX4**

SPEED MODELS

**3**

PROTECTION RATE

**IP67**

## Stylish appearance

/ With the inherited classic exterior design of the dedicated XC lithium battery forklift and a smooth and sturdy profile, the whole vehicle is compact, elegant, stylish and sturdy.

THE *Plus*  
FOR YOUR  
BUSINESS



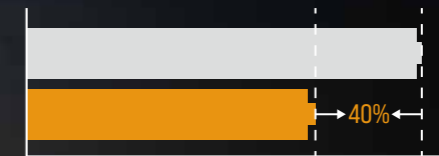


# FASTER & MORE EFFICIENCY.

Compared with low-voltage lithium battery forklifts, high-voltage lithium battery technology can save about 40% of the overall cost during the service cycle.

## 40%

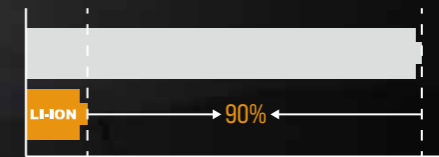
Low Voltage Lithium Battery Forklift  
Hangcha High Voltage Lithium Electric Forklift



Compared with fuel forklifts, high-voltage lithium battery technology can save about 90% of the overall cost during the service cycle.

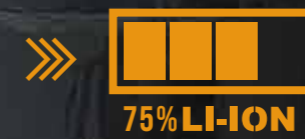
## 90%

Fuel Forklift  
Lithium Electric Forklift



## 4000

CYCLES OF CHARGING



Under normal charging and discharging conditions, the lithium battery of Hangcha products has a capacity retention rate of more than 75% and a life span of up to 10 years after 4000 cycles of charging and discharging.

## POWER PERFORMANCE COMPARISON

	High Voltage Lithium Electric Forklift	Fuel Forklift
Travel speed, laden/unladen	23/32km/h	23-25km/h
Lift speed, laden/unladen	560/580mm/s	380/410mm/s
Max. gradeability, S2-5min, laden/unladen	34/30%	15%-25%

Through disruptive battery and fast charging technology, the charging time is greatly shortened.

Fast charging makes it possible for the whole vehicle to work continuously, shortening the waiting time and greatly improving efficiency.

Get the battery fully charge:



Hangcha High Voltage Electric Forklift



Electric Forklift

HIGH-VOLTAGE

# 70.4Kwh

Battery capacity





# STRONG ADAPTABILITY



The drive axle, steering axle and tires of internal combustion forklifts can meet the demand of high-intensity operating conditions of internal combustion forklifts.



Both the drive and operating systems are vehicle-grade permanent magnet synchronization systems. Equipped with a high speed ratio gearbox, the driving speed, lifting speed, upslope degree and acceleration performance surpass that of internal combustion vehicles.

It meets all-weather operating conditions and is usable under severe operating conditions such as cold storage, heavy rains and waterlogged roads.



# ULTRA-LONG BATTERY LIFE



- / With a 309V high-voltage platform and vehicle-grade permanent magnet synchronization system, the vehicle boasts of a smaller current, very low heat loss and more energy-efficient;
- / The vehicle uses an overall controller to control the traction motor controller assembly to form a highly independent, user-friendly and intelligent drive system.

# SAFE AND RELIABLE



The cover of the vehicle is designed to be sealed to the water resistance level of IPX4 for the body. All the motor, electronic controls and high-voltage components reach the dust and water resistance level of IP67, a high protection level adequate to withstand harsh operating environments and ensure safety and reliability;

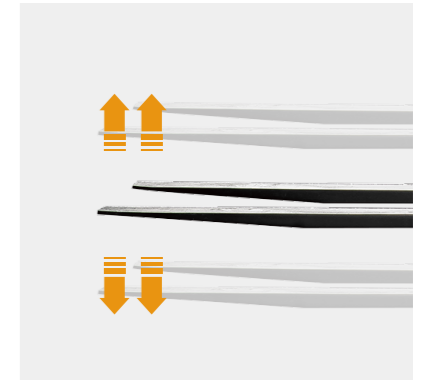
- / All CATL lithium batteries are equipped with standard automatic battery fire extinguishing devices, allowing higher safety in use;
- / The electrical system is equipped with high-voltage interlocks, insulation detection and monitoring, offering vehicle-grade safety measures. The MSD maintenance switch enables one-click power-down and safer maintenance;
- / The steering axle with standard configuration of turning and deceleration functions reduces the overturning risk effectively.



Automatic battery fire extinguishing devices



The MSD maintenance switch



The standard configuration provides a fork descending buffering function. In addition, an optional control function for buffering the fork's ascending is provided to protect the goods and guarantee safety when working;

# SUPER CHARGING



The standard IC super-fast charging technology allows the water cooling system to work during charging and high current charging, thus only 1h is required for fully charging;



Optional 0.5C charger (fully charged in 2h), economical and convenient.



Charging port



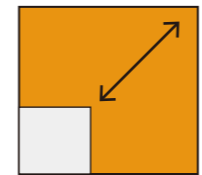
# DUAL WATER COOLING SYSTEMS



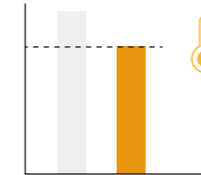
*It is the first time that the motor-battery dual water cooling systems and full suspension damping system are used on new energy forklifts, which can be fully applicable to various severe operating conditions such as high temperature and strong load.*

The most integrated large volume hydraulic oil tank boasts of good hydraulic heat dissipation and low oil temperature, further ensuring long-term and reliable operation of hydraulic parts and prolonging service life.

The volume of the hydraulic oil tank and the heat dissipation area are 2.5 times that of ordinary high-voltage electric truck. The hydraulic oil temperature is lowered by more than 20% compared with ordinary high-voltage electric truck.



**2.5x**  
INCREASE



**20%**  
REDUCE



With the standard configuration of CATL standard box (batch use for passenger cars), the water cooling system keeps the battery working for 8 years or 4000 cycles at the optimum temperature, realizing a capacity attenuation of no more than 20%.

**8** BATTERY  
WORKING  
YEAR

**4000** BATTERY  
CYCLES

The water cooling system keeps the battery at the best working temperature of about **30°C**, with high efficiency, slow decay and long life.



The **large ventilation opening** designed for internal combustion forklifts allows better heat dissipation of the battery and the motor.



The heat dissipation area of the air outlet is **7.5 times** that of ordinary high-voltage electric truck. The working temperature of the motor/electric control + battery is lower than that of ordinary high-voltage electric truck by more than **10%**.

# CONVENIENT MAINTENANCE

- / The vehicle with ergonomic design, a wide view and a large operating space makes it easier for drivers to operate;
- / The multi-functional color screen instrument is designed to have graphic interfaces; three SPE speed gears are selectable to adapt to different operating conditions; interfaces can be switched between English and Chinese to meet the demands of customers at home and abroad;
- / Reasonable arrangement of battery and motor radiator allows more convenient liquid replenishment and maintenance;
- / The water tank cover and the left and right side plates of the hood can be dismantled without a tool, so that the operable surface is large during cleaning and maintenance, convenient and fast.



Battery and motor radiator



Multi-functional color screen instrument



## Standard Specification

- / Multi-function color-screen combination instrument
- / LED combination headlights, LED rear combination three-color taillights
- / Standard duplex mast, fork, fork carriage and load backrest
- / Stamped iron hood, stamped iron side plates
- / Stamped stainless steel boarding step
- / The gas spring of the hood with a touch-proof mechanism
- / Handbrake with a touch-proof mechanism
- / Integrated fuse box
- / Charging muzzle meets national standards
- / Reverse buzzer
- / Standard box of lithium battery
- / Water chilling unit for lithium battery
- / Maintenance-free 12V lead acid battery
- / Two-in-one permanent magnet AC traction motor controller
- / Two-in-one permanent magnet AC oil pump motor controller
- / Power DC-DC two-in-one
- / VCU controller
- / MSD maintenance switch
- / Emergency power off switch
- / Mileage display, operating time display
- / Load sensing steering system
- / Turning deceleration function
- / Fork descending buffering
- / SPE power selection
- / Electronic water pump
- / Electronic fan
- / Heat dissipater
- / Expansion tank
- / Load-sensitive multiway valve
- / Silent gear pump
- / Toolbox, folder
- / Traction pin
- / Hangcha cloud intelligent management system
- / Left and right rear view mirrors
- / Standard box of lithium battery with low temperature electric heating systems
- / Standard box of lithium battery with battery heat management systems

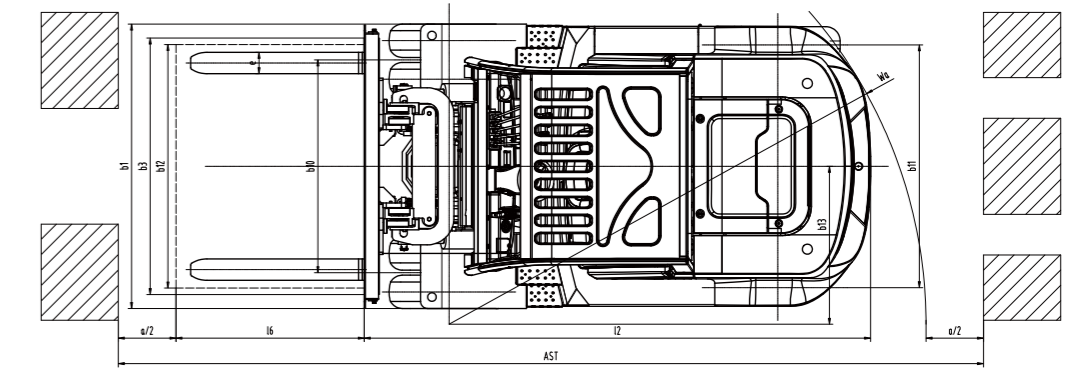
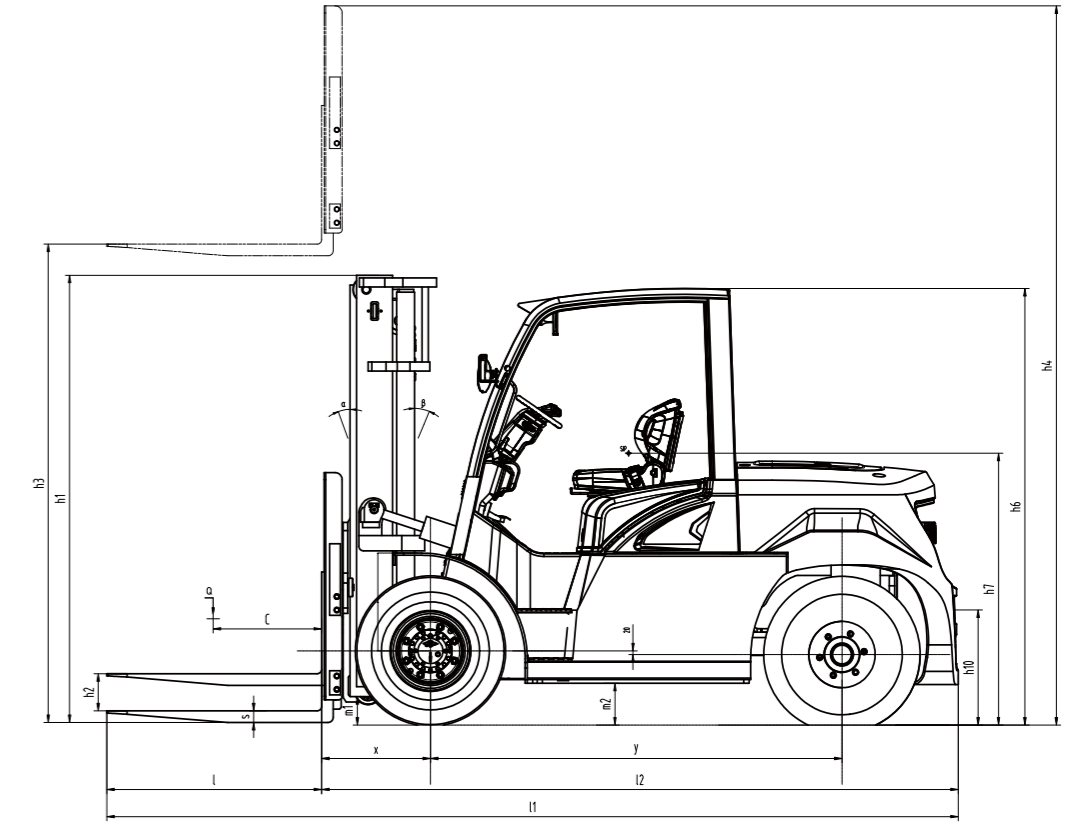
## Options

- / Solid tire
- / Reversing video
- / Front/Rear blue light
- / Rear LED operation light
- / Dedicated lithium battery charger
- / Right rear armrest with horn button
- / OPS seat sensing function
- / Triple multi-way valve
- / Quadruple multi-way valve
- / Quintuple multi-way valve
- / Heightened load backrest
- / Widened fork carriage
- / Forks of other lengths
- / Free duplex mast
- / Free triplex mast
- / Built-in side mast
- / Accessories for other specifications
- / Fully-suspended seat
- / Start with a PIN code or by swiping a card
- / Double front wheels
- / Cab
- / Lockable hood
- / Fire extinguisher
- / High and low overhead guards
- / Alarm light
- / Colored solid environmentally friendly seamless tire



## XH Series Heavy-duty High-voltage Lithium Battery Forklift Specification

Distinguishing mark	HANGCHA GROUP CO.,LTD.							
	1.1	Manufacturer		CPD60-XHY2G-W	CPD70-XHY2G-W	CPD80-XHY2G-W	CPD90-XHY2G-W	CPD100-XHY2G-W
Weight	1.2	Manufacturer's type designation		CPD60-XHY2G-W	CPD70-XHY2G-W	CPD80-XHY2G-W	CPD90-XHY2G-W	CPD100-XHY2G-W
	1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas		Electric	Electric	Electric	Electric	Electric
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker		Seated	Seated	Seated	Seated	Seated
	1.5	Rated capacity/rated load	kg	6000	7000	8000	9000	10000
	1.6	Load centre distance	c (mm)	600	600	600	600	600
	1.8	Load distance, centre of drive axle to fork	x (mm)	608.5	608.5	713.8	725.8	725.8
	1.9	Wheelbase	y (mm)	2300	2300	2500	2500	2500
	2.1	Service Weight	kg	9150	9850	12000	13400	14200
	2.2	Axle loading, laden front/rear	kg	13720/1430	15310/1620	17880/2120	20080/2320	21640/2560
Tyres, chassis	2.3	Axle loading, unladen front/rear	kg	4220/4870	4500/5350	5680/6320	6250/7150	6350/7850
	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic
	3.2	Tyre size, front		8.25-15-14PR	8.25-15-14PR	9.00-20-14PR	9.00-20-14PR	9.00-20-14PR
	3.3	Tyre size, rear		8.25-15-14PR	8.25-15-14PR	9.00-20-14PR	9.00-20-14PR	9.00-20-14PR
	3.5	Wheels, number front / rear (x = driven wheels)		4x/2	4x/2	4x/2	4x/2	4x/2
	3.6	Tread, front	b <sub>0</sub> (mm)	1489	1489	1628	1628	1628
	3.7	Tread, rear	b <sub>1</sub> (mm)	1700	1700	1700	1700	1700
	4.1	Tilt of mast/fork carriage forward/backward	α/β (°)	6/12	6/12	6/12	6/12	6/12
	4.2	Height, mast lowered	h <sub>1</sub> (mm)	2500	2500	2700	2850	2850
Dimensions	4.3	Free lift	h <sub>2</sub> (mm)	160	160	200	200	200
	4.4	Lift	h <sub>3</sub> (mm)	3000	3000	3000	3000	3000
	4.5	Height, mast extended	h <sub>4</sub> (mm)	4407	4407	4210	4555	4555
	4.7	Height of overhead guard (cabin)	h <sub>5</sub> (mm)	2440	2440	2560	2560	2560
	4.8	Seat height/stand height	h <sub>7</sub> (mm)	1276	1276	1387	1387	1387
	4.12	Coupling height	h <sub>10</sub> (mm)	645	645	760	760	760
	4.19	Overall length	l <sub>1</sub> (mm)	4723.5	4758.5	5486	5486	5486
	4.2	Length to face of forks	l <sub>2</sub> (mm)	3523.5	3558.5	3986	3986	3986
	4.21	Overall width	b <sub>1</sub> /b <sub>2</sub> (mm)	1990	1990	2197	2197	2197
	4.22	Fork dimensions	s/e/l(mm)	65×150×1200	65×150×1200	75×160×1500	80×160×1500	80×160×1500
	4.23	Fork carriage ISO 2328, class/type A,B		IV A	IV A	IV A	V A	V A
	4.24	Fork-carriage width	b <sub>3</sub> (mm)	1976	1976	2100	2100	2100
	4.31	Ground clearance, laden, below mast	m <sub>1</sub> (mm)	200	200	250	250	250
	4.32	Ground clearance, centre of wheelbase	m <sub>2</sub> (mm)	234	234	320	320	320
	4.34.1	Aisle width for pallets 1000 x 1200 crossways	A <sub>1</sub> (mm)	5088.5	5138.5	5533.8	5545.8	5545.8
4.34.2	Aisle width for pallets 800 x 1200 lengthways	A <sub>2</sub> (mm)	5288.5	5338.5	5733.8	5745.8	5745.8	
4.35	Turning radius	W <sub>1</sub> (mm)	3280	3330	3620	3620	3620	
4.36	Internal turning radius	b <sub>1</sub> s <sub>1</sub> (mm)	1090	1090	1135	1135	1135	
Performance data	5.1	Travel speed, laden/unladen	km/h	28/31	28/31	29/32	29/32	29/32
	5.2	Lift speed, laden/unladen	m/s	560/580	510/530	420/470	400/470	380/470
	5.3	Lowering speed, laden/unladen	m/s	480/420	480/420	460/400	460/400	460/400
	5.6	Max. Drawbar pull, laden/unladen	N	54000	54000	54000	54000	54000
	5.8	Max. gradeability, laden/unladen	%	34/30	30/30	26/30	24/30	22/30
	5.9	Acceleration time, laden/unladen (0-10m)	s	/	/	/	/	/
Electric engine	5.1	Service brake		Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic
		Parking brake		Mechanical	Mechanical	Mechanical	Mechanical	Mechanical
	6.1	Drive motor rating S2 60 min	kW	45	45	54.5	54.5	54.5
	6.2	Lift motor rating at S3 15%	kW	35x2	35x2	35x2	35x2	35x2
	6.4	Battery voltage, nominal capacity K5	(V)/(Ah)	309/228	309/228	309/302	309/302	309/302
6.5	Battery weight	kg	690	690	890	890	890	
Addition data	10.1	Operating pressure for attachments	MPa	19	19	20	20	20
	10.2	Oil volume for attachments	L/min	60	60	60	60	60



$AST=l6+x+Wa+a$  L6: load length a=200 mm safety clearance

