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ISO14001
ISO14001:2015



ISO9001
ISO9001:2015



HANGCHA trucks conform
to the European Safety
Requirements.

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XH SERIES HIGH-VOLTAGE LITHIUM BATTERY FORKLIFT

with capacity of 6,000 to 10,000kg



The World of Hangcha



XH SERIES HIGH-VOLTAGE LITHIUM BATTERY FORKLIFT

Independently developed by Hangcha on the basis of decades of 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 and 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..

THE *Plus*
FOR YOUR BUSINESS

VOLTAGE

309 V

SPEED MODELS

3

MAX. GRADEABILITY

30%

TRAVEL SPEED

32km/h

WATER RESISTANCE

IPX4

PROTECTION RATE

IP67

Stylish exterior

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



COMMITTED TO IMPROVING

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%

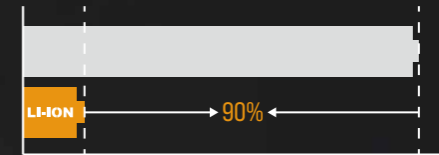
Low Voltage Lithium Battery Forklift
Hangcha High Voltage Lithium Electric Forklift



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.

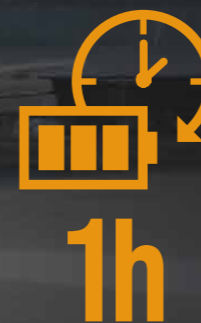
POWER PERFORMANCE COMPARISON

	High Voltage Lithium Electric Forklift	Fuel Forklift
Travel speed, laden/unladen	29/32km/h	15-20km/h
Lift speed, laden/unladen	400/470mm/s	430/470mm/s
Max. gradeability, S2-5min, laden/unladen	24/30%	15%-20%

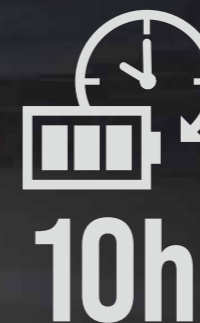
Through disruptive battery and fast charging technology, the charging time is greatly shortened.

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 (6.0-7.0t)



Electric Forklift

HIGH-VOLTAGE

93.3Kwh

Battery capacity



EFFICIENT AND DURABLE



Standard large-capacity lithium battery



Charging port

Ultra-long battery life

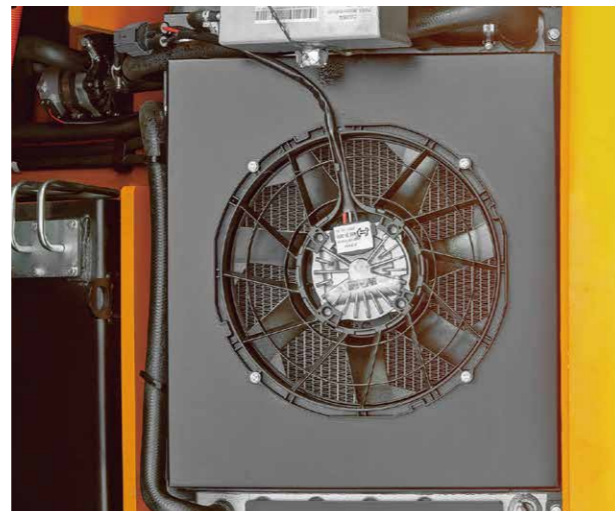
- / Standard large-capacity lithium battery meets long battery life requirements.
- / Both the drive and operating systems are vehicle-grade permanent magnet synchronization systems, being energy-saving and efficient;
- / With 309V high-voltage platform, the vehicle boasts of a smaller current and very low heat loss;
- / The vehicle uses an overall controller to control the traction motor controller assembly and the driving motor controller assembly to form a highly independent, light-weighted, efficient and intelligent drive system.

Quick charge

- / The standard battery with superfast charging technology needs only 1.0h(6.0-7.0t)/1.5h(8.0-10t) to charge fully;
- / Optional slow-charge charger (2h(6.0-7.0t)/3h(8.0-10t) to charge fully), cost-effective and economical.

Internal combustion condition

- / Both the drive and operating systems are vehicle-grade permanent magnet synchronization systems. Equipped with a high speed ratio gearbox, the driving speed, upslope degree and acceleration performance surpass that of internal combustion vehicles.
- / It adopts the same structural design of drive axle, steering axle and tires as internal combustion forklifts, which can meet the demand of high-intensity operating conditions.
- / With regard to the series of products, a water cooling system with a good heat dissipation effect is used on a new energy forklift for the first time, so that the forklift can carry out long-time and high-intensity operations as internal combustion forklifts.
- / It meets all-weather operating conditions and is usable under severe operating conditions such as cold storage, heavy rain and waterlogged roads.



Cooling 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.



The electrical system is equipped with high-voltage interlocks, insulation detection and vehicle-grade safety means. The MSD maintenance switch enables one-click power-down and safer maintenance.



The standard configuration provides a fork descending buffering function. In addition, an optional electronic control function for buffering the fork's ascending is provided to protect the goods from falling and damaging the ground.



An optional OPS seat sensing feature is provided to enable high safety by disabling the descending, lifting and driving when the driver leaves the seat and giving out an alarm when the driver leaves the seat without activating the hand brake.

Easily maintainable

- / Equipped with a lock, charging, liquid replenishment and maintenance become convenient.
- / The water tank lid can be removed quickly and easily without a tool to enable a large operating area for cleaning and maintenance.

Standard Specification

- / Multi-function color-screen combination instrument
- / Large integral rubber pedal pads
- / LED combination headlights, LED rear combination three-color taillights
- / Duplex wide-view mast
- / 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 meeting national standards
- / Reverse buzzer
- / Lithium battery pack
- / Lithium battery pack with low temperature electric heating systems
- / 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
- / Two-in-one DC-DC power supply
- / 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
- / 2nd valve (6.0-7.0t)
- / 4th valve (8.0-10t)
- / Quadruple multi-way valve
- / Silent gear pump
- / Traction pin
- / Left and right rear view mirrors
- / Hangcha cloud intelligent management system

Options

- / Solid tire
- / Reversing video
- / Front/rear blue lights
- / Rear operation lights
- / Dedicated lithium battery charger
- / Reverse armrest (with a horn button)
- / OPS seat sensing function
- / 3th/4th valve (6.0-7.0t)
- / 5th valve
- / Quintuple multi-way valve
- / Widened fork carriage
- / Forks of other lengths
- / Free duplex mast
- / Free triplex mast
- / Accessories for other specifications
- / Start with a PIN code or by swiping a card
- / Coloring solid environmentally friendly seamless tire
- / Toolbox, folder
- / Integrated fingertip control system including ergonomic armrests

Optional battery list

Voltage/capacity	309V/228Ah	309V/302Ah	348V/302Ah
6.0-7.0t	●	○	—
8.0-10t	—	●	○

Note: ● Standard battery capacity; ○ Optional battery capacity; — Null.



6.0-7.0t Mast Specification

Type	Model	Lifting height	Overall height			Free lift		Front Overhang	Tilt range		Capacity	
			Lowered	Extended		With backrest	Without backrest		FWD	BWD	Load center@600mm	
				With backrest	Without backrest						6t	7t
Wide view mast	XHP60/70M250	2500	2250	3495/3667	3907	160	160	603.5/608.5	6	12	6000	7000
	XHP60/70M270	2700	2350	3695/3867	4107	160	160	603.5/608.5	6	12	6000	7000
	XHP60/70M300	3000	2500	3995/4167	4407	160	160	603.5/608.5	6	12	6000	7000
	XHP60/70M330	3300	2650	4295/4467	4707	160	160	603.5/608.5	6	12	6000	7000
	XHP60/70M360	3600	2800	4595/4767	5007	160	160	603.5/608.5	6	12	6000	7000
	XHP60/70M400	4000	3000	4995/5167	5407	160	160	603.5/608.5	6	12	6000	7000
	XHP60/70M430	4300	3200	5300/5467	5707	160	160	603.5/608.5	6	6	6000	7000
	XHP60/70M450	4500	3300	5500/5667	5907	160	160	603.5/608.5	6	6	6000	7000
	XHP60/70M480	4800	3450	5800/5967	6207	160	160	603.5/608.5	6	6	6000	7000
	XHP60/70M500	5000	3550	6000/6167	6407	160	160	603.5/608.5	6	6	6000	7000
Wide view full free duplex mast	XHP60/70M550	5500	3850	6550/6667	6907	160	160	603.5/608.5	3	6	5500	6400
	XHP60/70M600	6000	4100	7050/7167	7407	160	160	603.5/608.5	3	6	5200	6200
	XHP60/70U250	2500	2185	3455/3615	3637	1230/1070	1048	631.5/636.5	6	12	6000	7000
	XHP60/70U270	2700	2300	3655/3815	3837	1345/1185	1163	631.5/636.5	6	12	6000	7000
	XHP60/70U300	3000	2450	3955/4115	4137	1495/1335	1313	631.5/636.5	6	12	6000	7000
	XHP60/70U330	3300	2600	4255/4415	4437	1645/1485	1463	631.5/636.5	6	12	6000	7000
	XHP60/70U360	3600	2750	4555/4715	4737	1795/1635	1613	631.5/636.5	6	12	6000	7000
	XHP60/70U400	4000	2950	4955/5115	5137	1995/1835	1813	631.5/636.5	6	12	6000	7000
	XHP60/70N450	4500	2725	5735	5907	1500	1328	672/667	6	6	5300	6200
	XHP60/70N480	4800	2825	6035	6207	1600	1428	672/667	6	6	5300	6100
Wide view full free triplex mast	XHP60/70N500	5000	2875	6213	6407	1672	1478	672/667	6	6	5300	6100
	XHP60/70N550	5500	3075	6785	6907	1800	1678	672/667	3	6	5000	5900
	XHP60/70N600	6000	3225	7235	7407	2000	1828	672/667	3	6	4800	5300
	XHP60/70N650	6500	3375	7713	7907	2172	1978	672/667	3	6	3800	4300
XHP60/70N700	7000	3675	8385	8407	2300	2278	672/667	3	6	3100	3600	

8.0t Mast Specification

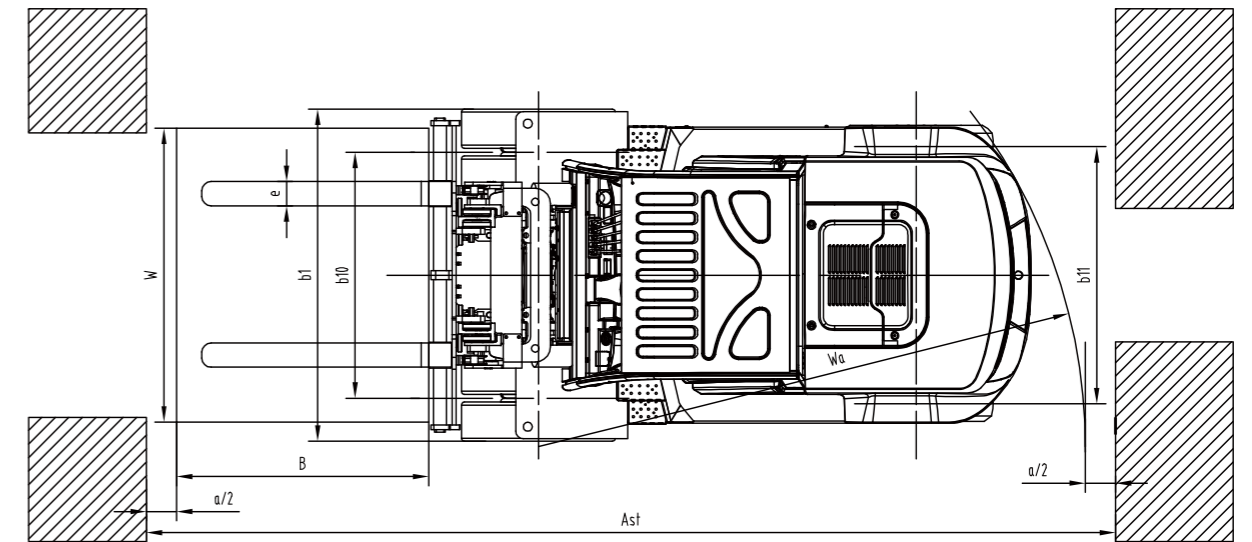
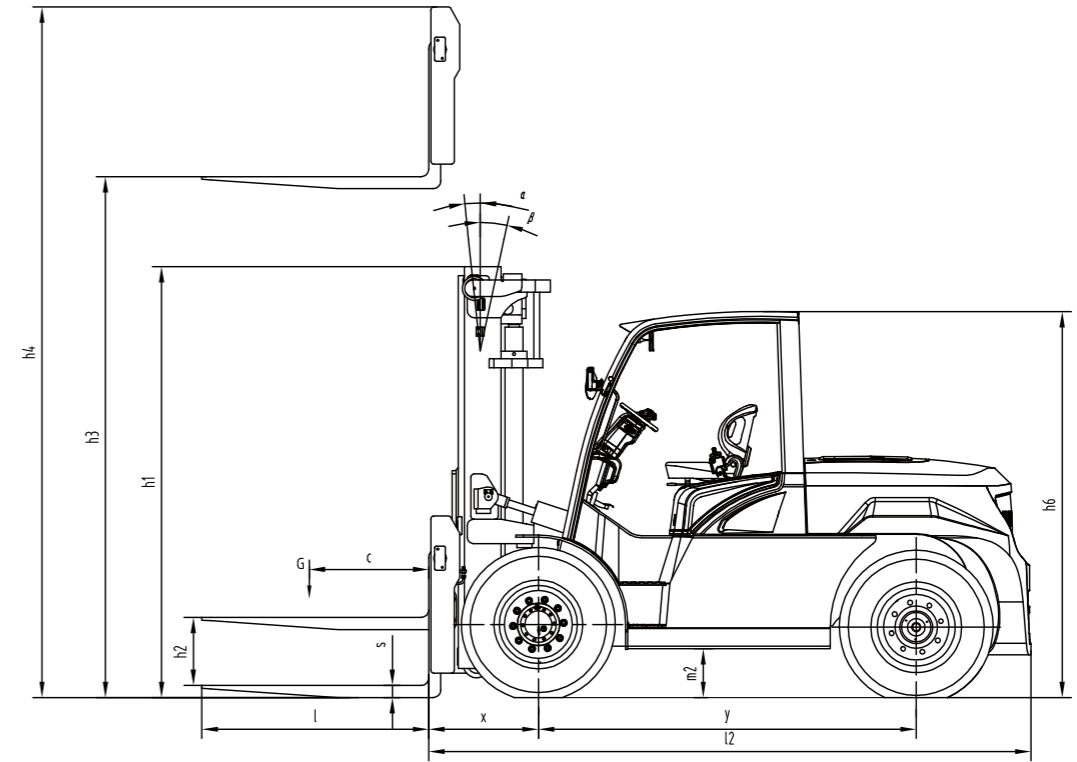
Type	Model	Lifting height	Overall height			Free lift	Front Overhang	Tilt range		Capacity	
			Lowered	Extended				FWD	BWD	Load center@600mm	
				Without backrest	With backrest					8t	kg
Wide view mast	X80M250	2500	2450	3710	200	714	6	12	8000		
	X80M270	2700	2550	3910	200	714	6	12	8000		
	X80M300	3000	2700	4210	200	714	6	12	8000		
	X80M330	3300	2850	4510	200	714	6	12	8000		
	X80M350	3500	2950	4710	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		
	X80M650	6500	4600	7790	200	714	3	6	5600		
Wide view full free duplex mast	X80U230	2300	2350	3505	1145	719	6	12	8000		
	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		
	X80N450	4500	2750	5775	1485	759	6	6	6800		
Wide view full free triplex mast	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		

9.0-10t Mast Specification

Type	Model	Lifting height	Overall height			Free lift	Front Overhang	Tilt range		Capacity	
			Lowered	Extended				FWD	BWD	Load center@600mm	
				Without backrest	With backrest					9t	10t
Wide view mast	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	
	X100M360	3600	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	
	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	
	Wide view full free duplex mast	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	
Wide view full free triplex mast	X100N500	5000	3050	6555	1505	794	6	6	8000	8200	
	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	8555	2255	794	3	6	4800	5200		

XH Series 6.0-10t High-voltage Lithium Battery Forklift Specification

Distinguishing mark	HANGCHA GROUP CO.,LTD.								
	1.1	Manufacturer		CPD60-XHY2G	CPD70-XHY2G	CPD80-XHY2G	CPD90-XHY2G	CPD100-XHY2G	
1.2	Manufacturer's type designation		CPD60-XHY2G	CPD70-XHY2G	CPD80-XHY2G	CPD90-XHY2G	CPD100-XHY2G		
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	Q (kg)	6000	7000	8000	9000	10000		
1.6	Load centre distance	c (mm)	600	600	600	600	600		
1.7	Load distance, centre of drive axle to fork	x (mm)	603.5	608.5	714	726	726		
1.8	Wheelbase	y (mm)	2300	2300	2500	2500	2500		
2.1	Service Weight	kg	9200	9700	11800	13400	14200		
2.2	Axle loading, laden front/rear	kg	13400/1800	14970/1730	17700/2100	20080/2320	21640/2560		
2.3	Axle loading, unladen front/rear	kg	4250/4950	4310/5390	5500/6300	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		
3.4	Wheels, number front / rear (x = driven wheels)		4x/2	4x/2	4x/2	4x/2	4x/2		
3.5	Tread, front	b10 (mm)	1489	1489	1628	1628	1628		
3.6	Tread, rear	b11 (mm)	1700	1700	1700	1700	1700		
4.1	Tilt of mast/fork carriage forward/backward	$\alpha/\beta(^{\circ})$	6/12	6/12	6/12	6/12	6/12		
4.2	Height, mast lowered	h1 (mm)	2500	2500	2700	2850	2850		
4.3	Free lift	h2 (mm)	160	160	200	200	200		
4.4	Lift	h3 (mm)	3000	3000	3000	3000	3000		
4.5	Height, mast extended	h4 (mm)	4407	4407	4210	4555	4555		
4.6	Height of overhead guard (cabin)	h6 (mm)	2440	2440	2560	2560	2560		
4.7	Seat height/stand height	h7 (mm)	1276	1276	1387	1387	1387		
4.8	Overall length	l1 (mm)	4753.5	4758.5	5474	5486	5486		
4.9	Length to face of forks	l2 (mm)	3553.5	3558.5	3974	3986	3986		
4.10	Overall width	b1 (mm)	1990	1990	2197	2197	2197		
4.11	Fork dimensions	s/e/l (mm)	60×150×1200	65×150×1200	75×160×1500	80×160×1500	80×160×1500		
4.12	Distance between fork-arms	b5 (mm)	300/1850	300/1850	440/2000	440/2000	440/2000		
4.13	Ground clearance, laden, below mast	m1 (mm)	200	200	250	250	250		
4.14	Ground clearance, centre of wheelbase	m2 (mm)	238	238	320	320	320		
4.15	Aisle width for pallets 1000 x 1200 crossways	Ast (mm)	5133.5	5138.5	5534	5546	5546		
4.16	Aisle width for pallets 800 x 1200 lengthways	Ast (mm)	5333.5	5338.5	5734	5746	5746		
4.17	Turning radius	Wa (mm)	3330	3330	3620	3620	3620		
5.1	Travel speed, laden/unladen	km/h	28/31	28/31	29/32	29/32	29/32		
5.2	Lift speed, laden/unladen	mm/s	550/590	510/540	460/500	400/470	380/470		
5.3	Lowering speed, laden	mm/s	480/420	480/420	455	455	455		
5.4	Max. gradeability, laden/unladen	%	34/30	30/30	26/30	24/30	22/30		
5.5	Service brake		Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic		
5.6	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		
6.3	Battery voltage, nominal capacity K5	V/Ah	309/228	309/228	309/302	309/302	309/302		
6.4	Battery weight	kg	740	740	890	890	890		
7.1	Type of drive unit		AC	AC	AC	AC	AC		
8.1	Manufacturer		Enpower	Enpower	Enpower	Enpower	Enpower		
9.1	Operating pressure for attachments	MPa	19	19	20	20	20		



$Ast = a + Wa + x + B$ a: Clearance (200mm)

