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ISO14001  
ISO14001:2015



ISO9001  
ISO9001:2015



HANGCHA trucks conform  
to the European Safety  
Requirements.

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# Turret Stockpicker

with capacity of 3,000 to 3,500lbs

LI-ION  
TECHNOLOGY

INNOVATIVE LITHIUM-ION



*The World of Hangcha*





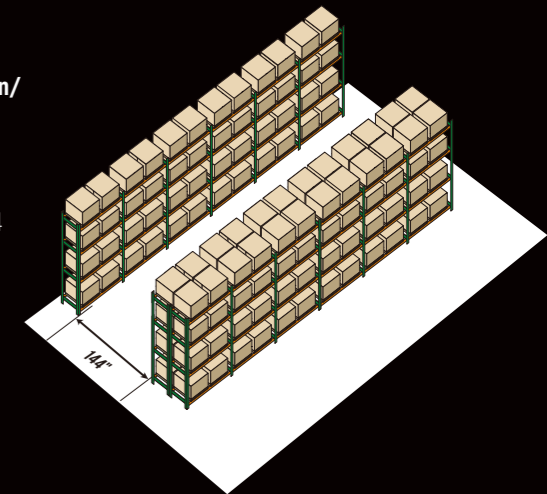
# MAXIMUM EFFICIENCY

- / The narrow aisles required for operations and the fork lift height up to 483 inch maximize the space availability of your warehouses.
- / The high lift mast boasts high load capacity and improved stacking efficiency.
- / The high-power AC oil pump motor and the large-displacement silent gear pumps are used to greatly increase the lifting and lowering speed, as well as its operating efficiency.
- / The energy-saving electro-hydraulic control hydraulic system makes the whole stacker energy-saving and efficient and enables the battery to support longer operating hours.
- / With multi-speed models, the stacker is adapted to different operating conditions.

## How HANGCHA VNA delivers space savings

### Traditional Sit-Down/ Counterbalance:

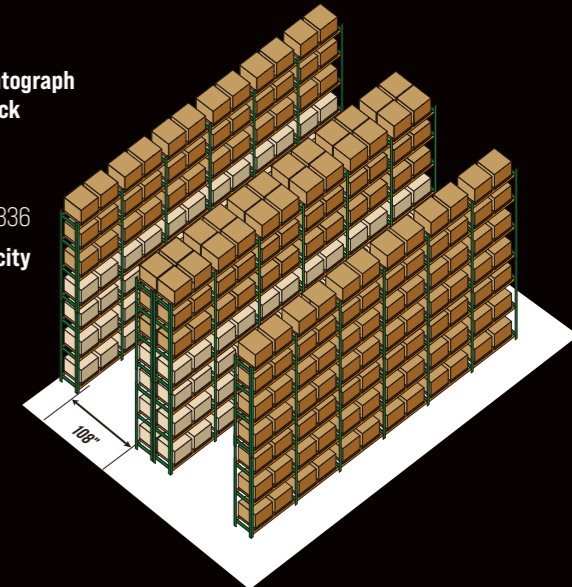
Aisle width: 144"  
Pallet levels: 4  
Pallet positions: 144



### Narrow Aisle Pantograph Single Reach Truck

Aisle width: 108"  
Pallet levels: 7  
Pallet positions: 336

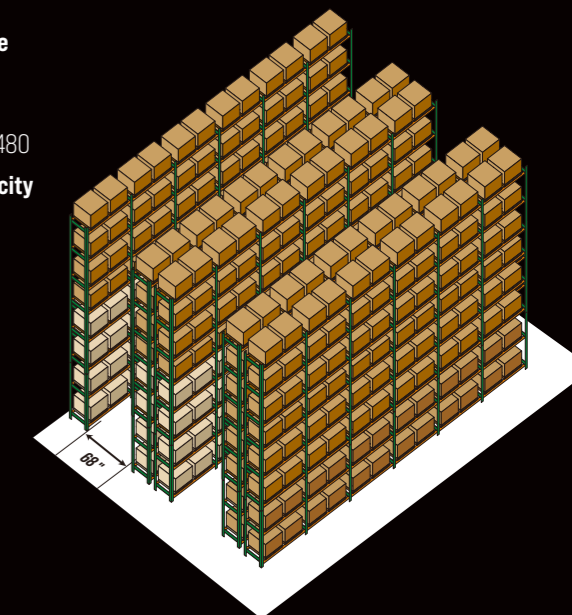
**133% more capacity**



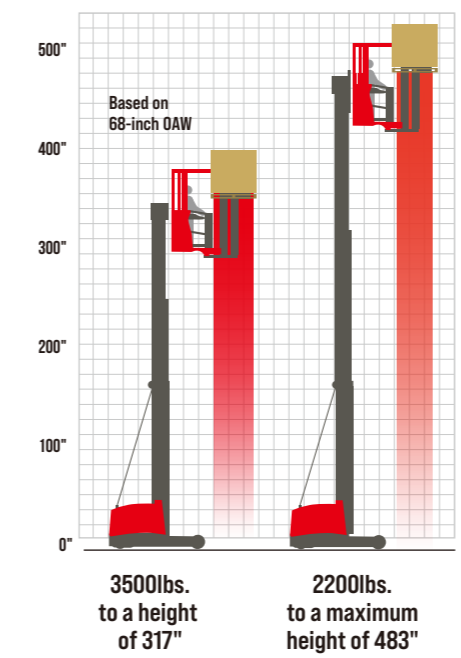
### Very Narrow Aisle

Aisle width: 68"  
Pallet levels: 8  
Pallet positions: 480

**233% more capacity**



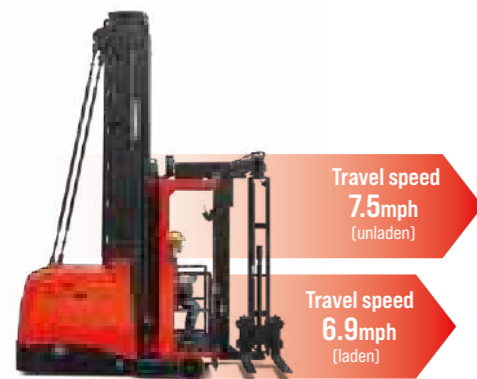
## More Height 483"



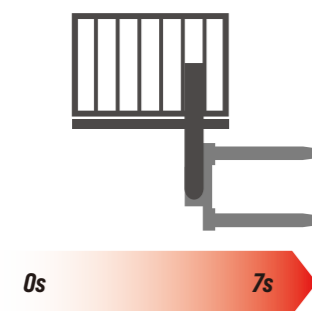
# HIGH PERFORMANCE IN HIGH RACKS.

## Advancement

- / Electromagnetic brake is used to realize intelligent braking allows for more efficient and safer braking.
- / With the advanced electro-hydraulic control system, the traveling speed is automatically associated with the lifting height and turning angle; The load weight is automatically associated with the lifting height; Thus the fork position is intelligently identified and the traveling speed is controlled.
- / The integrated mechanical, electrical and hydraulic control achieves the step-less speed regulation of the driving and the fork movement, allowing for more precise and stable control.
- / The large-screen LCD display and the gauges with fault self-diagnosis functions can accurately display information in harsh environments.
- / With efficient and precise adjustment performance, the newly equipped AC control system supports longer operating hours after being charged once.
- / The dynamic variable hydraulic system enables lowered oil temperature, being energy-saving and efficient.

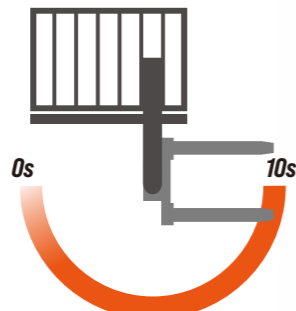


The fork has high lifting and lowering speeds and high operating efficiency.



### Traverse Speed

Complete full traverse in 7 seconds.



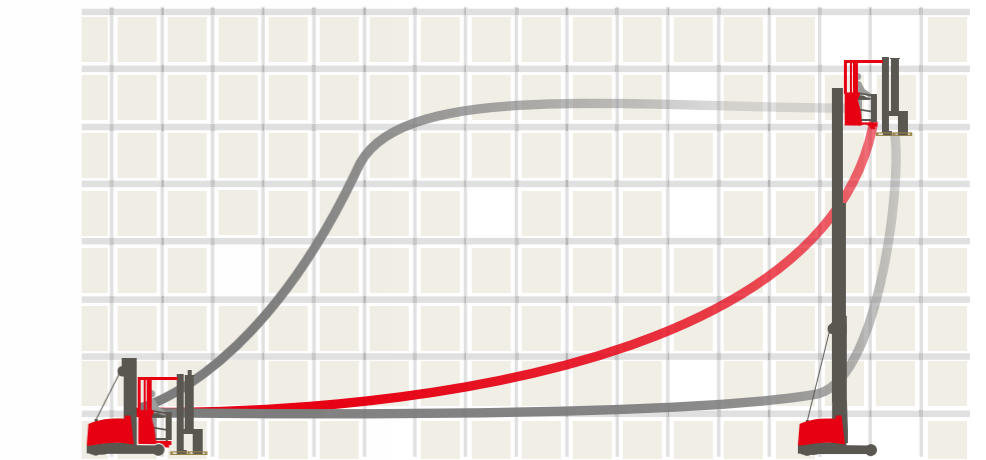
### Pivot Speed

Complete a full, 180-degree pivot in 10 seconds.



## Auto Positioning System

Takes the most effective route to the next rack location.



- / Increased Productivity
- / Increased Pick Accuracy

- / Reduced Operator Fatigue
- / Flexibility

## Reliability and safety

- / The low center of gravity at three pivots and the high strength of the main force-bearing components such as frame and mast are designed to meet heavy-duty operating conditions.
- / The main electrical components such as the motor controller, contactor, power plug and emergency cut-off switch are all products of well-known brands.
- / The AC power system has high efficiency, complete protection functions and greatly improved reliability and service life.
- / The optional front and rear wheel braking systems allowing large braking torque are suitable for indoor slippery roads.
- / The double safety pedals, left and right guardrails, automatic induction joystick and other active and passive safety systems are equipped to prevent hazards caused by mis-operation.

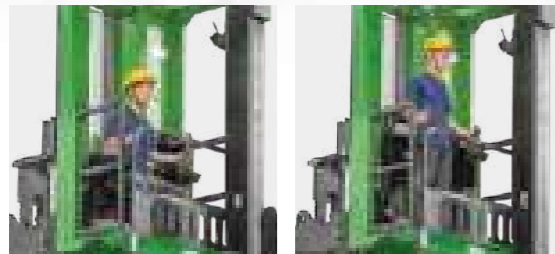


The optimized design of the wide-view mast enables the operator to get a better view and thus operate the stacker more safely.

# EXCELLENT ERGONOMIC

## Comfort

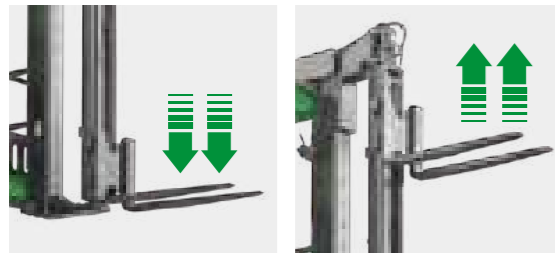
- / Electro-hydraulic proportional integrated control system allows for more accurate and smooth operations.
- / EPS [ Electric Power Steering ] makes steering more gentle and comfortable.
- / The joystick can be adjusted according to the operator's using habits.
- / A new integrated instrument has complete functions and clear readings.



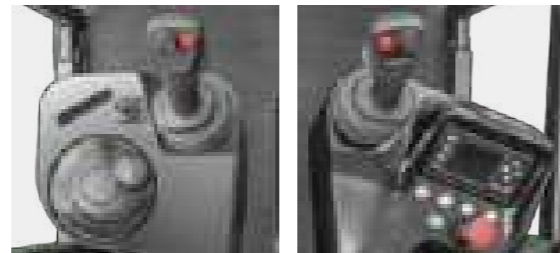
You can conveniently change the driving mode between stand-on type and seated type.



Low step on height for easy on and off.



Equipped with the electro-hydraulic control buffer system, the fork slows down automatically when arriving at an end of any position to reduce the impact.



The ergonomically arranged joystick, instruments and switches make operations more comfortable and flexible.

## Maintainability

- / The brushless AC motor is maintenance-free and significantly reduces the operating costs.
- / The fully open door enables easy repair, maintenance and commissioning.
- / The battery removed side roll out enables easy repair and maintenance.
- / The electronically controlled electrical components are placed together and are highly integrated.



## Options

- / Different battery (compartment) sizes
- / Forks of different specifications
- / Different lift height
- / Blue light
- / Fan
- / 12 V power plug
- / Fire extinguisher
- / Monitoring system
- / Magnetic navigation;
- / Guide roller
- / Load height limiting device

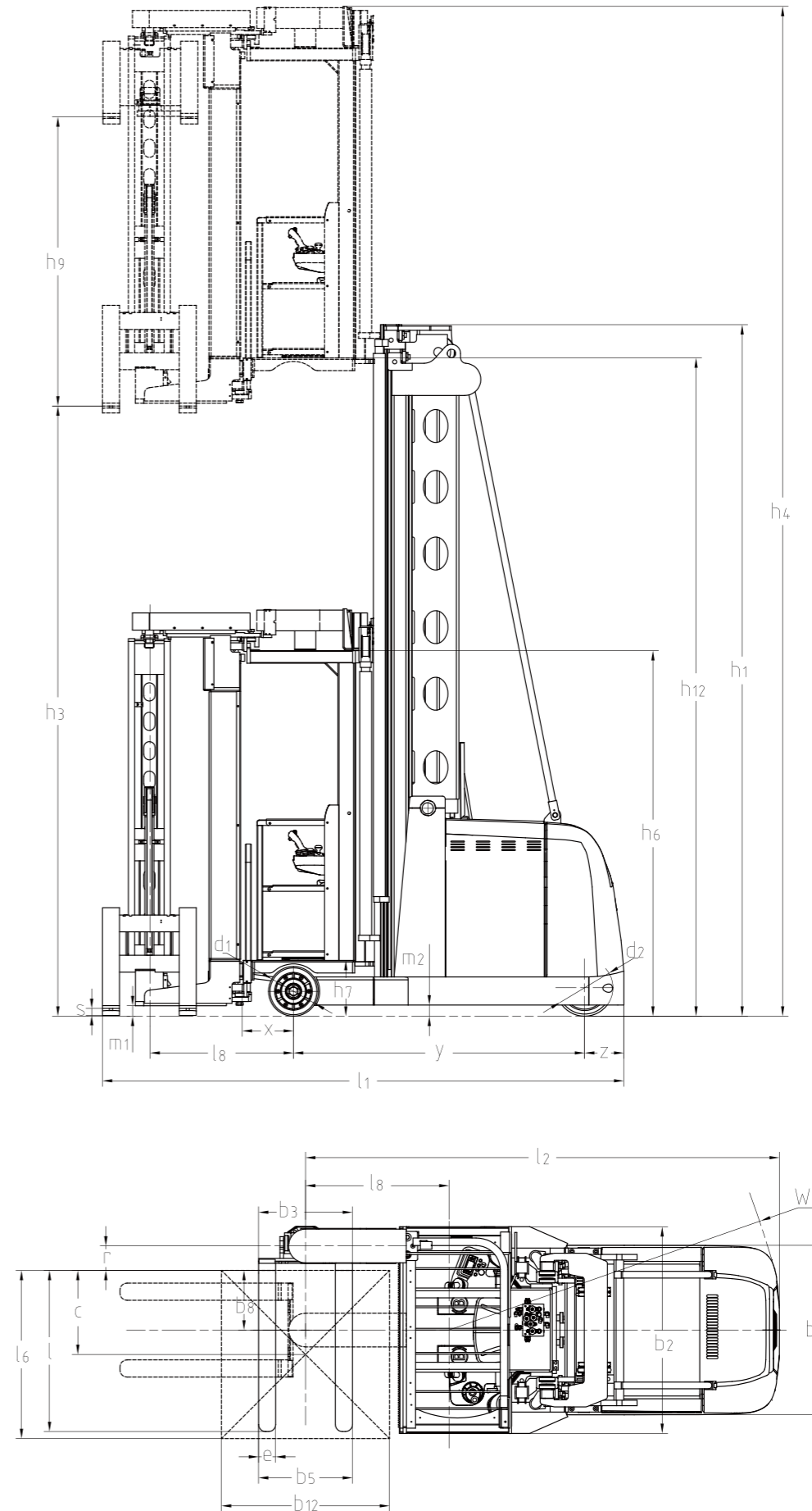
## Standard Specification

- / AC motor and controller
- / Stand-on type & seated type
- / Electro-hydraulic proportional valve system
- / Low-noise gear oil pump
- / Battery side roll out
- / Electric horn
- / Reverse buzzer
- / Multi-function instrument
- / Fork height display
- / Alarm light
- / LED light in the cabin
- / Safety rope
- / Polyurethane wheel tyre
- / Laneway mode
- / Electric power steering system
- / Electromagnetic parking brake
- / Security operating system
- / Travelling speed control during lifting
- / Central sideshift
- / Chain looseness reminder
- / Travelling speed control at corner
- / Lateral barriers left and right



# Turret Stockpicker Specification

		HANGCHA GROUP CO.,LTD.							
		CSDS14-XC1-NA	CSDS16-XC1-NA	CSDS14-XC1-NAI	CSDS16-XC1-NAI				
Distinguishing mark	1.1	Manufacturer							
	1.2	Manufacturer's type designation	CSDS14-XC1-NA	CSDS16-XC1-NA	CSDS14-XC1-NAI	CSDS16-XC1-NAI			
	1.3	Drive	Electric	Electric	Electric	Electric			
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker	standing / seated	standing / seated	standing / seated	standing / seated			
	1.5	Rated capacity/rated load	Q	lb (kg)	3000(1361)	3500(1588)	3000(1361)	3500(1588)	
	1.6	Load centre distance	c	in (mm)	24(600)	24(600)	24(600)	24(600)	
	1.8	Load distance, centre of drive axle to fork	x	in(mm)	14.5(366)	14.5(366)	14.5(366)	14.5(366)	
	1.9	Wheelbase	y	in (mm)	see table 1	see table 1	see table 1	see table 1	
	1.10	Centre of drive wheel / counterweight	z	in (mm)	11(280)	11(280)	11(280)	11(280)	
	Weight	2.1	Service Weight		lb (kg)	6600	7100	6600	7100
Tyres, chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		in (mm)	polyurethane	polyurethane	polyurethane	polyurethane	
	3.2	Tyre size, front			Φ14x8.1(Φ355x205)	Φ14x8.1(Φ355x205)	Φ14x8.1(Φ355x205)	Φ14x8.1(Φ355x205)	
	3.3	Tyre size, rear			Φ16x6.7(Φ406x170)	Φ16x6.7(Φ406x170)	Φ16x6.7(Φ406x170)	Φ16x6.7(Φ406x170)	
	3.5	Wheels, number front / rear (x = driven wheels)			2/1x	2/1x	2/1x	2/1x	
	3.6	Tread, front	b10	in (mm)	49.9(1266)	49.9(1266)	49.9(1266)	49.9(1266)	
	Dimensions	4.2	Height, mast lowered	h1	in (mm)	131(3330)	131(3330)	131(3330)	131(3330)
4.4		Lift	h3	in (mm)	140(3565)	140(3565)	140(3565)	140(3565)	
4.5		Height, mast extended	h4	in (mm)	253(6435)	253(6435)	253(6435)	253(6435)	
4.7		Height of overhead guard (cabin)	h6	in (mm)	103(2610)	103(2610)	103(2610)	103(2610)	
4.8		Standing height	h7	in (mm)	16(410)	16(410)	16(410)	16(410)	
4.11		Auxiliary lift	h9	in (mm)	71(1810)	71(1810)	71(1810)	71(1810)	
4.14		Standing height raised	h12	in (mm)	154.5(3925)	154.5(3925)	154.5(3925)	154.5(3925)	
4.19		Overall length	l1	in (mm)	see table 1	see table 1	see table 1	see table 1	
4.20		Length to face of forks	l2	in (mm)	see table 1	see table 1	see table 1	see table 1	
4.21		Overall width	b1/b2	in (mm)	47.6(1210)/58.1(1475)	47.6(1210)/58.1(1475)	47.6(1210)/58.1(1475)	47.6(1210)/58.1(1475)	
4.22		Fork dimensions	s/e/l	in (mm)	2x4.8x45.3(50x122x1150)	2x4.8x45.3(50x122x1150)	2x4.8x45.3(50x122x1150)	2x4.8x45.3(50x122x1150)	
4.24		Fork-carriage width	b3	in (mm)	26.4(670)	26.4(670)	26.4(670)	26.4(670)	
4.25		Distance between fork-arms	b5	in (mm)	25.6(650)	25.6(650)	25.6(650)	25.6(650)	
4.29		Reach, sideways		in (mm)	49.2(1250)	49.2(1250)	49.2(1250)	49.2(1250)	
4.31		Ground clearance, laden, below mast	m1	in (mm)	3.2(80)	3.2(80)	3.2(80)	3.2(80)	
4.32		Ground clearance, centre of wheelbase	m2	in (mm)	3.2(80)	3.2(80)	3.2(80)	3.2(80)	
4.35		Turning radius	Wa	in (mm)	see table 1	see table 1	see table 1	see table 1	
4.38.1		Total lift	h3+h9	in (mm)	211.6(5375)	211.6(5375)	211.6(5375)	211.6(5375)	
4.38.2		Order picking height		in (mm)	217.5(5525)	217.5(5525)	217.5(5525)	217.5(5525)	
4.38.7		Inner clear height of operator compartment		in (mm)	83.5(2120)	83.5(2120)	83.5(2120)	83.5(2120)	
Performance data	5.1	Travel speed, laden/unladen		mph(km/h)	6.9/7.5(11/12)	6.5/7.5(10.5/12)	6.9/7.5(11/12)	6.5/7.5(10.5/12)	
	5.2	Lift speed, laden/unladen		fpm(m/s)	104.3/120(0.53/0.61)	102.4/120(0.52/0.61)	104.3/120(0.53/0.61)	102.4/120(0.52/0.61)	
	5.3	Lowering speed, laden/unladen		fpm(m/s)	88.6/98.5(0.45/0.5)	88.6/98.5(0.45/0.5)	88.6/98.5(0.45/0.5)	88.6/98.5(0.45/0.5)	
	5.4	Traverse speed,laden/unladen		fpm(m/s)	37.4/39.4(0.19/0.2)	37.4/39.4(0.19/0.2)	37.4/39.4(0.19/0.2)	37.4/39.4(0.19/0.2)	
	5.7	Gradeability, laden/unladen		%	5	5	5	5	
	5.10	Service brake			Electric	Electric	Electric	Electric	
	5.11	Parking brake			Electric	Electric	Electric	Electric	
	Electric-engine	6.1	Drive motor rating S2 60 min		hp(kW)	10.7(8)	10.7(8)	10.7(8)	10.7(8)
		6.2	Lift motor rating at S3 15%		hp(kW)	36.2(27)	36.2(27)	36.2(27)	36.2(27)
		6.4	Battery voltage, nominal capacity K5 "A"		V/Ah	80/465	/	/	/
			Battery voltage, nominal capacity K5 "B"		V/Ah	80/620	80/620	/	/
Battery voltage, nominal capacity K5 "C"				V/Ah	/	80/930	/	/	
Battery voltage, nominal capacity K5 "D"				V/Ah	/	/	80.5/604	80.5/604	
Battery voltage, nominal capacity K5 "E"				V/Ah	/	/	/	80.5/906	
6.5		Battery weight		lb (kg)					
	Battery dimensions		in (mm)	see table 1	see table 1	see table 1	see table 1		
	Max. battery weight	l/b/h	lb (kg)						
	Min. battery weight		lb (kg)						
Misc.	8.1	Type of drive control			MOSFET/AC	MOSFET/AC	MOSFET/AC	MOSFET/AC	
	8.4	Sound pressure level at operator's ear as per EN 12053		db(A)	65	65	65	65	
	8.6	Steering			Electric	Electric	Electric	Electric	



# Mast Specification

	Total height h3 + h8	Lift h3	Auxiliary Lift h8	Free lift h2 + h8	Height mast lowered h1	Height, mast extended h4	Load capacity @600mm/24inch	
							CSDS14	CSDS16
	in(mm)	in(mm)	in(mm)	in(mm)	in(mm)	in(mm)	lb/kg	lb/kg
Double full free mast	212(5375)	140(3565)	71(1810)	71(1810)	131(3330)	253(6435)	3000(1361)	3500(1588)
	226(5740)	155(3930)	71(1810)	71(1810)	138(3510)	268(6800)	3000(1361)	3500(1588)
	242(6144)	171(4334)	71(1810)	71(1810)	146(3715)	284(7205)	3000(1361)	3500(1588)
	258(6548)	187(4738)	71(1810)	71(1810)	154(3915)	300(7610)	3000(1361)	3500(1588)
	274(6952)	202(5142)	71(1810)	71(1810)	162(4120)	316(8015)	3000(1361)	3500(1588)
	290(7356)	218(5546)	71(1810)	71(1810)	170(4320)	331(8415)	2900(1315)	3500(1588)
	306(7760)	234(5950)	71(1810)	71(1810)	178(4520)	347(8820)	2800(1270)	3500(1588)
	321(8164)	250(6354)	71(1810)	71(1810)	186(4725)	363(9225)	2600(1180)	3400(1540)
	337(8568)	266(6758)	71(1810)	71(1810)	194(4925)	379(9630)	2500(1135)	3300(1495)
	345(8770)	274(6960)	71(1810)	71(1810)	198(5025)	387(9830)	2400(1090)	3200(1450)
Triplex full free mast	279(7090)	208(5280)	71(1810)	140(3560)	138(3308)	321(8150)	3000(1361)	3500(1588)
	303(7700)	232(5890)	71(1810)	148(3770)	138(3510)	345(8760)	2900(1315)	3500(1588)
	327(8310)	256(6500)	71(1810)	156(3975)	146(3715)	369(9370)	2700(1225)	3400(1540)
	351(8920)	280(7110)	71(1810)	165(4180)	154(3915)	393(9980)	2580(1170)	3200(1450)
	375(9530)	304(7720)	71(1810)	173(4385)	162(4120)	417(10590)	2360(1070)	3000(1361)
	399(10140)	328(8330)	71(1810)	181(4590)	170(4320)	441(11200)	2200(1000)	2800(1270)
	423(10750)	352(8940)	71(1810)	189(4800)	178(4520)	465(11810)	2020(915)	2600(1180)
	447(11360)	376(9550)	71(1810)	197(5005)	186(4725)	489(12420)	1900(860)	2400(1090)
	471(11970)	400(10160)	71(1810)	205(5210)	194(4925)	513(13030)	1750(795)	2250(1020)
	483(12275)	412(10465)	71(1810)	209(5315)	198(5025)	525(13335)	1600(725)	2050(930)

Table 1

Battery and compartment size			A	B	C	D	E
6.4	Battery Voltage	V	80	80	80	80.5	80.5
	Battery Type		Lead-acid	Lead-acid	Lead-acid	Lithium	Lithium
	Battery capacity maximum 5 Hr Rate	Ah	465	620	930	604	906
Battery Compartment	"X" Max.	in(mm)	40.5(1028)	40.5(1028)	40.5(1028)	40.5(1028)	40.5(1028)
	"Y" Max.	in(mm)	24.1(611)	28(711)	39.3(999)	24.1(611)	31.9(810)
	"Z" Max.	in(mm)	30.4(772)	30.4(772)	30.4(772)	30.31(770)	32.68(830)
6.5	Minimum Batt.Wt.	lb(kg)	2555(1159)	3245(1472)	4504(2043)	1069(485)	1323(600)
	Maximum Batt.Wt.	lb(kg)	2824(1281)	3587(1627)	4978(2258)	1135(515)	1411(640)
1.9	Wheelbase	y (in\mm)	77.9(1978)	81.8(2078)	77.9(1978)	81.8(2078)	81.8(2078)
4.19	Overall length	l1 (in\mm)	142.5(3620)	146.5(3720)	157.7(4005)	142.5(3620)/146.5(3720)	142.5(3620)/146.5(3720)
4.20	Length to face of forks	l2 (in\mm)	136.1(3456)	140(3556)	151.2(3841)	136.1(3456)/140(3556)	136.1(3456)/140(3556)
4.35	Turning Radius	Wa (in\mm)	80.9(2258)	92.8(2358)	104.1(2643)	80.9(2258)/92.8(2358)	80.9(2258)/92.8(2358)

