

V202501-EN

MiMA[®]
Min. Space Max. Performance

BANYITONG SCIENCE & TECHNOLOGY DEVELOPING CO.,LTD.

Since 1994

Electric Order Picker

MHA10/MHA13 Series

Max. lift height: 6000/9500mm

MiMA[®]
Min Space,Max Performance



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FASTER & SAFER PICKING SOLUTION FOR HIGH-DENSITY WAREHOUSE

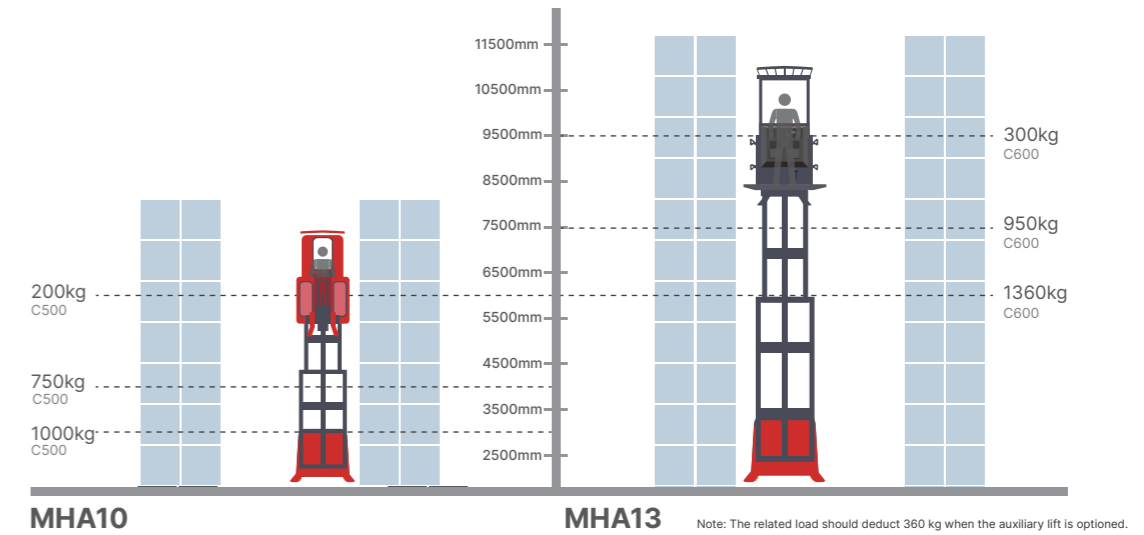
At MiMA Forklift we offer highly innovative solutions for the growing need for order picker forklifts, such as the the **growing e-commerce and retailing industry**, which requires picking not only on ground level but also at heights of up to 11.1 meters. MiMA Order Pickers are perfect for industries that require efficient picking and sorting of goods. If your warehouse features VNA racking of high-density, and handles a wide variety of products, accurate picking, **MiMA MHA Series** order pickers are the best choices.

MHA13
High-Level Vertical
Order Picker

MHA10
Mid-Level Vertical
Order Picker

STABILITY AT HEIGHT

MiMA's order pickers **MHA Series** are engineered for optimum picking performance in tight spaces, making them ideal for high-level picking in busy warehouses. It features robust construction, with reinforced cabins and masts that enhance stability, even in the ultra-high position.



EFFICIENT, SAFE, AND ERGONOMIC DESIGN

Operators always have four secure contact points with the vehicle, preventing accidental movement during high-lift operations. With available safety rails, advanced components, smooth proportional control systems, and other safety-focused features, MiMA ensures operators stay productive, comfortable, and secure throughout their shifts.



Smooth

Imported core components, offering superior performance. Proportional lifting system ensures smooth start and stop.



Stable

Ergonomic design and cushioned floor provide enhanced stability and comfort during long shifts.



Fold-up monitored side gates

Only when the side gates are in the monitored state and the foot switch is touched can the vehicle be lifted and driven at a high level, providing safe and easy picking.



Auxiliary lift

Fork can be lifted to a suitable height according to the needs of the operator, more humane, improving work efficiency.

*Auxiliary lift is optional for MHA13 series.

FLEXIBILITY IN PERFORMANCE

MiMA order pickers are available in two capacity options: 1.0 tons and 1.3 tons. The MHA10 Series 1.0-ton model offers a maximum lift height of 6 meters, while the upgraded MHA13 Series 1.3-ton model can lift from 5 to 9.5 meters.

For these models, MiMA has developed two distinct types of cabins. The open cabin, which does not feature an auxiliary lift but provides greater efficiency, is ideal for picking larger and heavier loads. And the closed cabin, which includes an auxiliary lift to eliminate the need for operators to bend over, offers enhanced comfort for users.

MHA13 ▶

Efficiency at Its Best For High-Level Picking

Upgrade to Precision, Power, and Safety in Every Lift

The MHA13 Series is an upgraded version of the MHA series, offering enhanced features and higher performance. It is a Man-up high-level order picker with a 1.36-ton rated capacity and a lift height range from 5.0 to 9.5 meters, reaching to 11.1 meters (and customized higher) for picking.

Equipped with a 48V electrical system, full AC motor, and advanced Curtis controller, this model is designed for safe, efficient, and stable high-level picking and inventory tasks in VNA applications.

Key Specs ▶

Operation Scenario

High-level picking

Load Capacity

1360kg (3000lbs)

Lift height

9500mm (374in)

Customized to 12500mm

Picking height

11100mm (437in)

Customized to 14100mm



◀ MHA10

Efficiency at Its Best For High-Level Picking

The MHA10 is a high-performance electric order picker, ideal for light-duty indoor warehouse tasks. With a 6-meter lifting height and 7.6-meter picking reach, it handles 1 ton goods easily. Featuring ergonomic design, optional auxiliary lift, proportional control, and safety features like a wheel display and seatbelt, it ensures smooth, safe, and fatigue-free operations.

◀ Key Specs

Operation Scenario

Mid-level picking

Lift height

6000mm (236in)

Load Capacity

1000kg (2204lbs)

Picking height

7600mm (299in)

YOUR ULTIMATE SOLUTION FOR HIGH-PERFORMANCE ORDER PICKING: MHA13

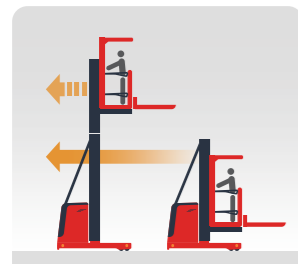
Power and Precision Ensured, Efficiency, Durability, and Comfort Combined.

● Powerful Performance, Trusted Durability

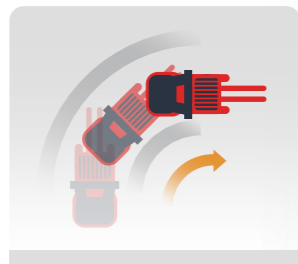
- **Upgraded pump motor and gear pump;** Mast lifting speed increased to over 500mm/s, more than 60% faster than the previous model.
- **With a sleek design and shorter vehicle width** (1070mm) for narrower rack aisles, optimizing storage density and enhancing capacity expansion.
- AC maintenance-free system: Features an AC motor for high efficiency, power, and high durability.

● Built for Safety and Confidence

- Equipped with an emergency stop button and speed-limiting functions, ensuring safe operation during high-lift and turning conditions.
- Operators can lean on four secure contact points, offering safety and confidence during high-altitude tasks.
- HD display and lighting provide clear visibility in low-light environments, improving picking safety.



Automatic speed control at high position



Turning speed limit



Lifting speed limit



**9500mm
(374inches)**
Maximum
lifting height

*Customized to 12500mm

1070mm
Overall width

● Comfort in Every Step

- An ergonomically designed platform with cushioned flooring offers a stable working environment with better visibility during extended shifts.
- The auxiliary lift allows operators to adjust the mast height without squatting, reducing fatigue and increasing operational efficiency.
- Featuring a **thumb switch**, enabling seamless control of mast lifting and multiple functions with just one hand—making every task easier.



● Adapt to Your Specific Needs

- The high-position load capacity is enhanced with a standard lift height of 9,500mm, offering superior rigidity and strength.
- Mast upgraded with stronger channel steel and crossbeams (**MiMA can customize to lift heights to 12,500mm**).
- Its open platform design offers greater visibility and room for future upgrades.
- Integrated with a wire guidance system (optional), making it compatible with advanced warehouse automation systems.

● Efficiency and Endurance that Drive Success

- **Optimized travel speeds** improve efficiency, accelerating picking operations and minimizing work time to help you achieve more in less time.
- Choose from lead-acid or **lithium batteries** for fast charging and extended runtime, ensuring up to **8 hours of uninterrupted performance** to keep your operations running smoothly and efficiently.
- Powered by batteries (Lithium battery available), our forklifts operate without oil, ensuring a **cleaner and greener solution** for your needs.



LCD display



Operate handle



EPS Steering wheel



Fold-up monitored side gates

● **Standard**

STANDARD AND OPTIONAL

A World of Customization, Tailored to Your Needs

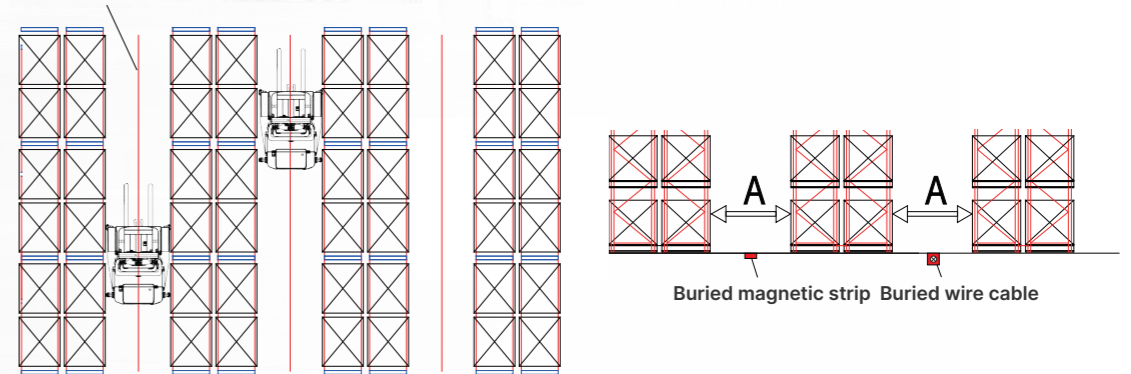
● **Fork Auxiliary Lift and Open Cabin(Optional)**



● **Magnetic guidance/wire guidance(Optional)**

No need to install ground guide rail, avoid ground construction and reduce warehouse construction costs.

Magnetic navigation/ wire navigation



● **Other options**

Overload warning (load display, not for metering).	Fork option lengths available
Guide rollers	Double side consoles, fork direction/mast direction
Customized fork length	Protective mast guard wire mesh
LED working light	Fan

Note: All the above configurations may involve optional items. Please consult our sales manager before purchasing.

SPECIFICATION

Characteristics			
1.1	Manufacturer	MIMA	MIMA
1.2	Model	MHA	MHA
1.3	Model code	MHA10L[1]	MHA10S[1]
1.4	Power type	Electric	Electric
1.5	Operation	Order Picking	Order Picking
1.6	Load capacity	Q(kg)	1000
1.7	Load center distance	C(mm)	500
1.8	Front overhang	x(mm)	148
1.9	Wheelbase	y(mm)	1410

Weights			
2.1	Service weight(incl. battery)	kg	2490
2.2	Axle loading, laden front/rear	kg	940/2550
2.3	Axle loading, unladen front/rear	kg	1410/1080

Wheels			
3.1	Tyre type,front/rear		Polyurethane
3.2	Tyre size, front	mm	φ150×90
3.3	Tyre size, rear	mm	φ254×102
3.4	Wheels,number front/rear (X=driven)		4/1X
3.5	Track width, rear	b10(mm)	1008
3.6	Track width, front	b11(mm)	0

Dimensions			
4.1	Mast retracted height	h1(mm)	Refer to mast parameter
4.2	Free lifting height	h2(mm)	Refer to mast parameter
4.3	Lift height	h3(mm)	Refer to mast parameter
4.4	Mast extended height	h4(mm)	Refer to mast parameter
4.5	Max. lifting height	h3+h9(mm)	Refer to mast parameter
4.6	Max. picking height	h12+1600(mm)	Refer to mast parameter
4.7	Overhead guard height	h6(mm)	2270
4.8	Ground clearance,min height of the operation surface	h7(mm)	260
4.9	Auxiliary lift height	h9(mm)	670
4.10	Ground clearance,min height of the operation surface	h12(mm)	Refer to mast parameter
4.11	Ground clearance,Min fork surface	h13(mm)	70
4.12	Overall length	l1(mm)	2825
4.13	Body to fork surface length	l2(mm)	1755
4.14	Overall width	b1/b2(mm)	1150/1150
4.15	Fork dimensions	l/e/s(mm)	1070/100/40
4.16	Fork rack width	b3(mm)	730
4.17	Fork outside spread	b5(mm)	700~220
4.18	Width over guide rollers	b6(mm)	1336
4.19	Ground clearance below mast	m1(mm)	50
4.20	Ground clearance, body	m2(mm)	50
4.21	Aisle width	Ast(mm)	1750[2]
4.22	Turning radius	Wa(mm)	1625
4.23	Main aisle width	mm	≥(2920+400)[3]

Performance			
5.1	Travelling speed, laden/unladen	km/h	6/6
5.2	Lift speed, laden/unladen	mm/s	115/140
5.3	Lowering speed, laden/unladen	mm/s	165/125
5.4	Maximum gradient, laden/unladen	%(tanθ)	/
5.5	Traveling Brake		Regenerative braking / electromagnetic braking
5.6	Service brake		Electromagnetic

Drive			
6.1	Drive motor, rating S2=60	kw	2.5 AC
6.2	Lift motor, rating S3=15%	kw	3 DC
6.3	Battery voltage/nominal capacity	(V)/(Ah)	24/400[4]
6.4	Battery weight	kg	340

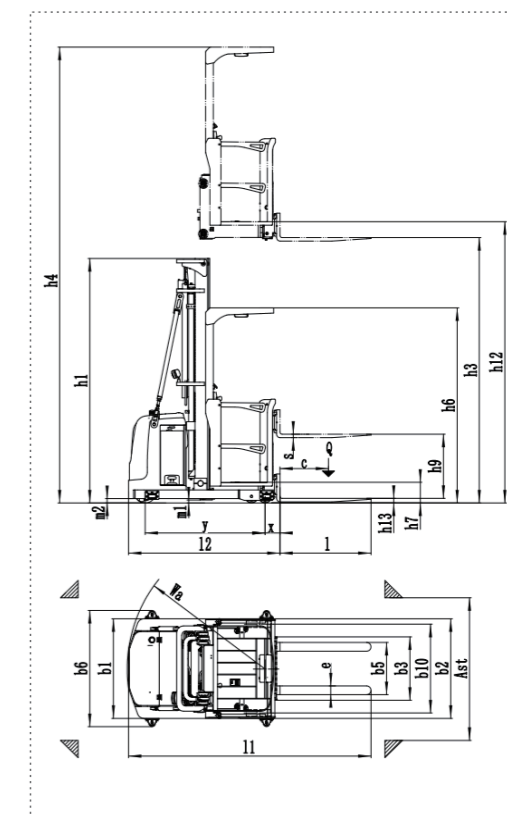
Others			
7.1	Type of drive control		AC
7.2	Noise level at operator's ear (EN12053 Standard)		70

MAST SPECIFICATION

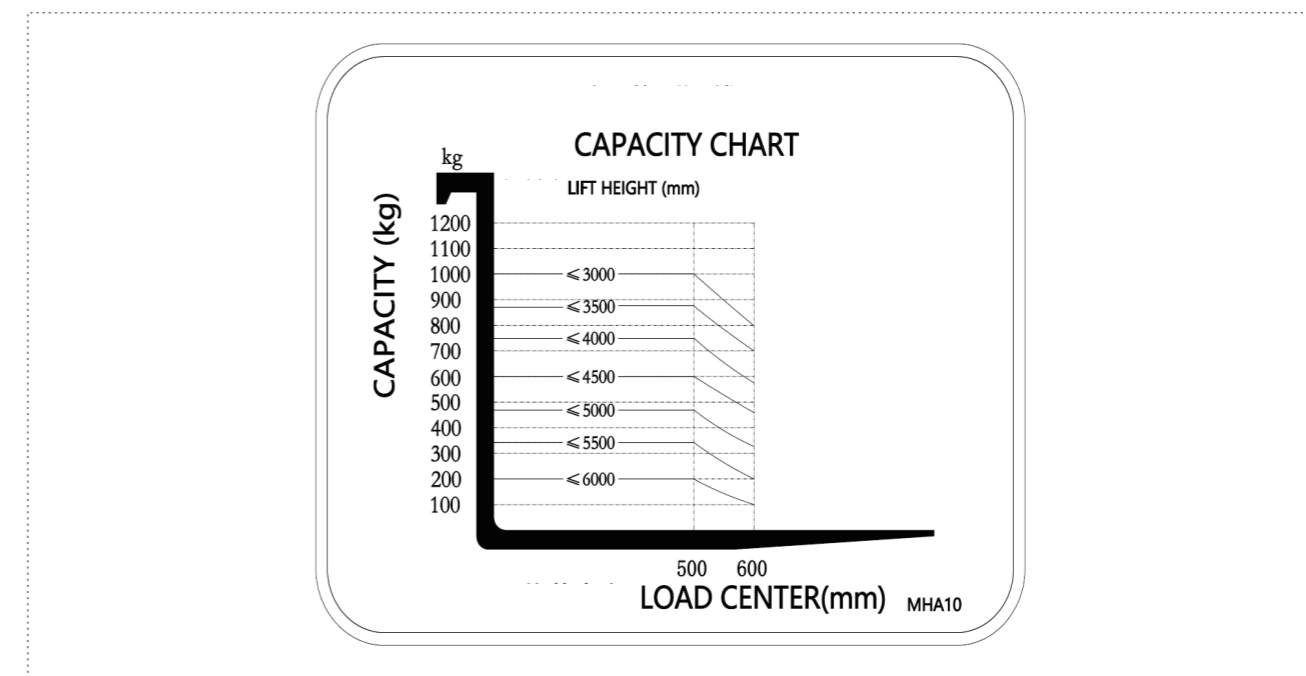
Duplex Mast					
Model	MHA	10-30	10-35	10-40	10-45
Lift height		2760	3260	3760	4260
Max. Lifting height		3430	3930	4430	4930
Max.Picking height		4600	5100	5600	6100
Mast retracted height		2300	2550	2850	3100
Mast extended height		5010	5510	6060	6610
Free Lifting height		0	0	0	0

Triplex Mast						
Model	MHA	10-40S	10-45S	10-50S	10-55S	10-60S
Lift height		3760	4260	4760	5260	5760
Max. Lifting height		4430	4930	5430	5930	6430
Max.Picking height		5600	6100	6600	7100	7600
Mast retracted height		2149	2316	2482	2649	2815
Mast extended height		5955	6455	6955	7455	7955
Free Lifting height		0	0	0	0	0

THREE-VIEW DRAWING



CAPACITY CHART



SPECIFICATION

Characteristics				
1.1	Brand		MIMA	MIMA
1.2	Product Model		MH-U	MH-U
	Vehicle Model Code		1MH13U-T[1]	1MH13U-H[1]
1.3	Power type		Battery	Battery
1.4	Operation		Picking	Picking
1.5	Load capacity	Q(kg)	1360	1360
1.6	Load center distance	C(mm)	600	600
1.8	Front overhang	x(mm)	277	277
1.9	Wheelbase	y(mm)	1435	1555

Weights				
2.1	Service Weight(incl. battery)	kg	/	/
2.2	Axle loading, laden, front/rear	kg	/	/
2.3	Axle loading, unladen, front/rear	kg	/	/

Wheels				
3.1	Tyre type, front/rear		Polyurethane Tyre	Polyurethane Tyre
3.2	Tyre size, front	mm	φ343×120	φ343×120
3.3	Tyre size, rear	mm	φ152×105	φ152×105
3.5	Wheels number, front/rear (X=driven)		4 / 1X	4 / 1X
3.6	Track width, front	b10(mm)	918	1368

Dimensions				
4.2	Mast retracted height	h1(mm)	Refer to the mast specification	Refer to the mast specification
4.3	Free Lift height (standard)	h2(mm)	Refer to the mast specification	Refer to the mast specification
4.4	Lift height	h3(mm)	Refer to the mast specification	Refer to the mast specification
4.5	Mast extended height	h4(mm)	Refer to the mast specification	Refer to the mast specification
	Max. picking height	h12+1600(mm)	Refer to the mast specification	Refer to the mast specification
4.7	Overhead guard height	h6(mm)	2320	2320
4.8	Platform height	h7(mm)	230	230
4.14	Platform height, raised	h12(mm)	Refer to the mast specification	Refer to the mast specification
4.15	Ground clearance, min fork surface	h13(mm)	70	70
4.19	Overall length	l1(mm)	3178	3298
4.21	Overall width	b1/ b2(mm)	1070/1070	1070/1520
4.22	Fork dimensions	l/e/s(mm)	1220/100/50	1220/100/50
4.25	Fork outside spread	b5(mm)	577、635、693	577、635、693
4.27	Width over guide rollers	b6(mm)	1275	1650
4.31	Ground clearance below mast, laden	m1(mm)	98	98
4.32	Ground clearance, center of wheelbase, laden	m2(mm)	50	50
4.34	Right angle stacking aisle width (1200×1000)	Ast(mm)	1270[2]	1770[2]
4.35	Turning radius	Wa(mm)	1706	1826
	Main aisle width	(mm)	≥(3280+400)[3]	≥(3400+400)[3]

Performance				
5.1	Travel Speed, laden/unladen	km/h	8/8	10/10
5.2	Lifting Speed, laden/unladen	mm/s	330/350	380/400
5.3	Lowering Speed, laden/unladen	mm/s	350/350	400/400
5.8	Max straight gradeability, laden/unladen	%(tanθ)	5/8	5/8
5.10.1	Service brake		Electromagnetic brake/Regenerative brake	Electromagnetic brake/Regenerative
5.10.2	Parking brake		Electromagnetic brake	Electromagnetic brake

Drive				
6.1	Drive motor, rating S2=60	kw	6.5 AC	6.5 AC
6.2	Lift motor, rating S3=15%	kw	14 AC	14 AC
6.4	Battery voltage/nominal capacity K5	(V) / (Ah)	48/400[4]	48/600[5]

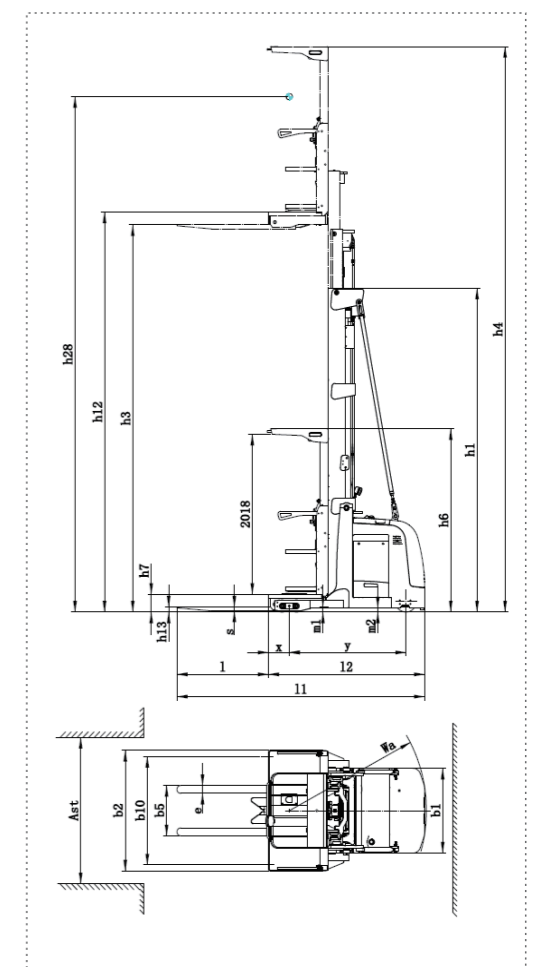
Others				
6.2	Battery replacement method		Side pull	Side pull
6.4	Steering system		Electrical steering	Electrical steering

MAST SPECIFICATION

MHA13U-H						
Model	MHA13-H	13-95	13-90	13-85	13-80	13-75
Lift height	h3	9500	9000	8500	8000	7500
Mast picking height	h28	11260	10760	10260	9760	9260
Mast retracted height	h1	4084	3918	3751	3584	3418
Mast extended height	h4	11750	11250	10750	10250	9750
Free lifting height	h2	1764	1589	1431	1264	1098

MHA13U-T						
Model	MHA13-T	13-70	13-65	13-60	13-55	13-50
Lift height	h3	7000	6500	6000	5500	5000
Mast picking height	h28	8760	8260	7760	7260	6760
Mast retracted height	h1	3251	2988	2818	2653	2488
Mast extended height	h4	9250	8750	8250	7750	7250
Free lifting height	h2	931	668	498	333	168

THREE-VIEW DRAWING



CAPACITY CHART

