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MiMA®
Min Space,Max Performance

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MiMA®
Min. Space Max. Performance

Since 1994

MFE15/MFE20

Stand-on Electric Scissors Reach Truck

Max.Lifting Height: 10160mm

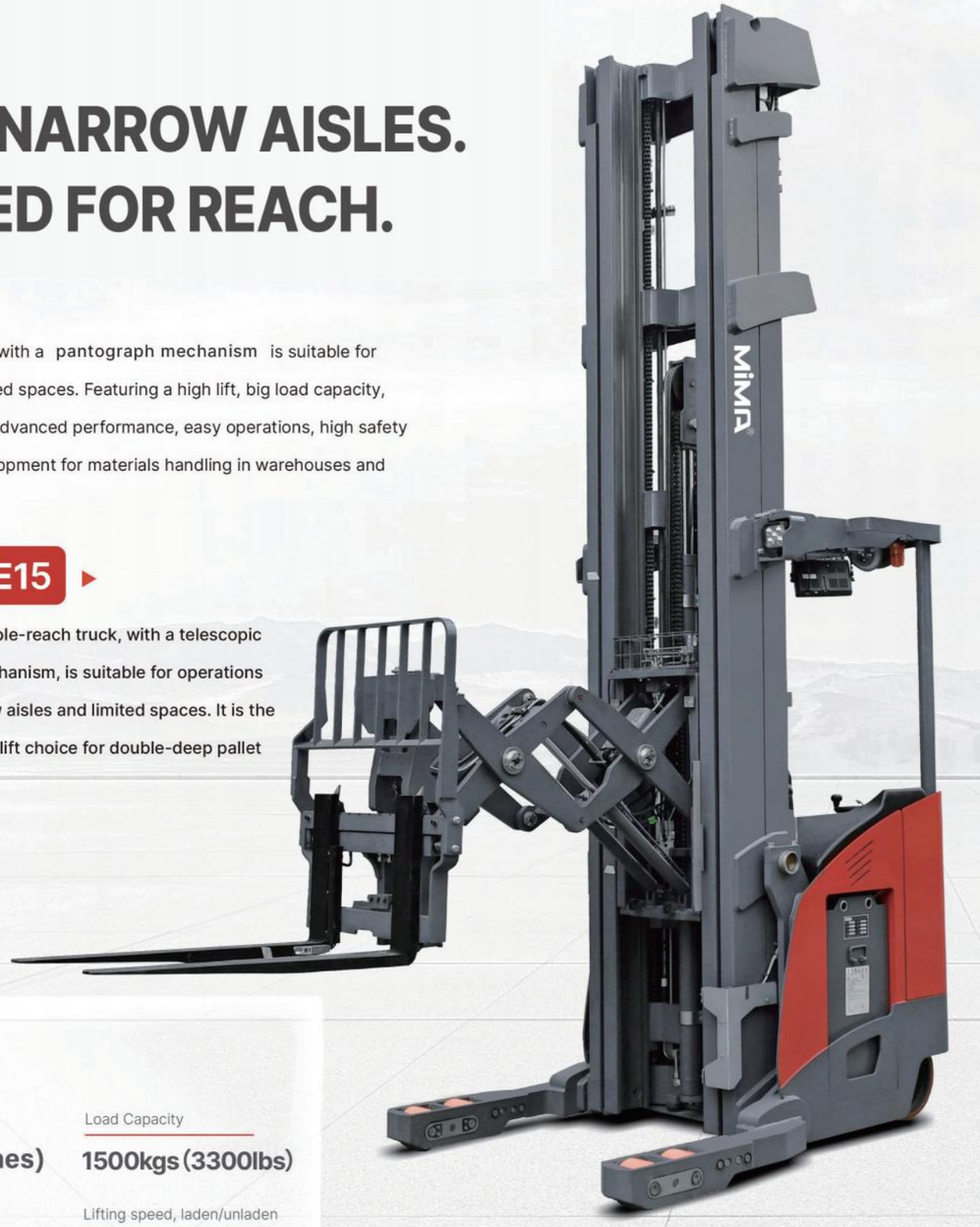
www.mimaforklift.com

BUILT FOR NARROW AISLES. ENGINEERED FOR REACH.

The 3,300-4,400 lbs electric forklift with a **pantograph mechanism** is suitable for operations in narrow aisles and limited spaces. Featuring a high lift, big load capacity, and small turning radius, as well as advanced performance, easy operations, high safety and reliability, etc., it is an ideal equippment for materials handling in warehouses and supermarkets,etc.

MFE15

The double-reach truck, with a telescopic fork mechanism, is suitable for operations in narrow aisles and limited spaces. It is the best forklift choice for double-deep pallet racking!



Key Specs

Suitable for
Double deep rack

Max. Lift height
10160mm(400inches)

Load Capacity
1500kgs (3300lbs)

Driving speed, laden/unladen
10/10 (km/h)

Lifting speed, laden/unladen
400/500(mm/s)

MFE20

The single-reach truck, pantograph mechanism, is suitable for operations in narrow aisles and limited spaces, the most widely used forklift in U.S. warehouses.

Key Specs

Suitable for
Single deep rack

Max. Lift height
10160mm(400inches)

Load Capacity
2000kgs(4400lbs)

Driving speed, laden/unladen
10/10 (km/h)

Lifting speed, laden/unladen
400/500(mm/s)

Compatible With Various Pallet Types

MiMA's electric scissors reach trucks are designed to adapt to a wide range of pallet types, including Euro, US, and Asian pallets, ensuring maximum versatility in diverse working environments. Whether you're handling standard wooden pallets, plastic pallets, or custom-sized pallets, MiMA forklifts are designed with flexibility to accommodate your specific needs.

With features like side-shift and precision alignment, MiMA forklifts allow effortless handling of various load types, improving efficiency and reducing the need for multiple handling equipment. From narrow aisles to high-density storage, MiMA ensures that your pallet handling is quick, safe, and reliable.

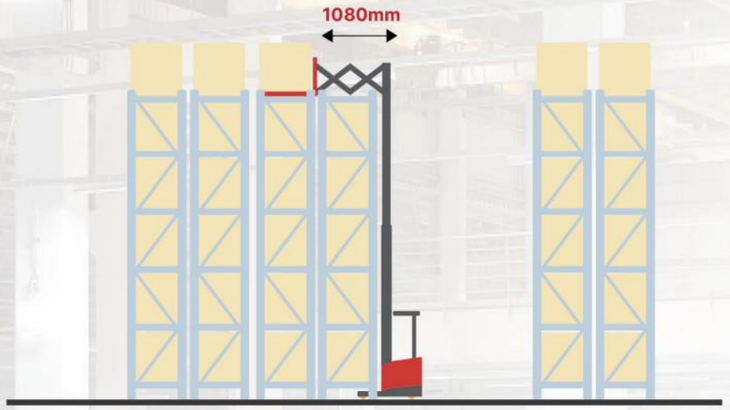
US Pallet
1219 mm x 1016 mm
(48 x 40inch)

Euro Pallet
1200 mm x 800 mm

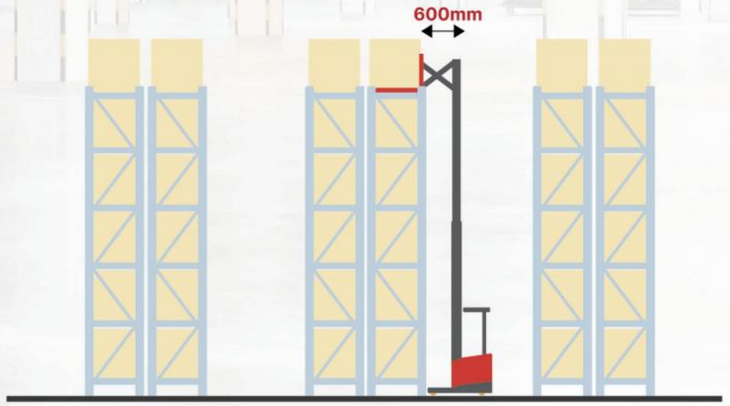
Asian Pallet
1100 mm x 1100 mm

Increasing Storage Capacity

Double-deep racking is ideal for maximizing space, making it greatly useful in areas like refrigerated or freezer storage. It's also effective for storing similar items, fast-moving products, or bulk goods, as it follows the First-In, Last-Out (FILO) method.



Double-deep pallet racking



Single-deep pallet racking

Stability

- The battery is positioned low in the forklift, ensuring a low center of gravity for enhanced stability, smooth cornering, and comfortable driving control.

- High redundant capacity mast: High-precision mast, no-load loss below 8000mm, and the ability is equally good when carrying ultra-high loads.

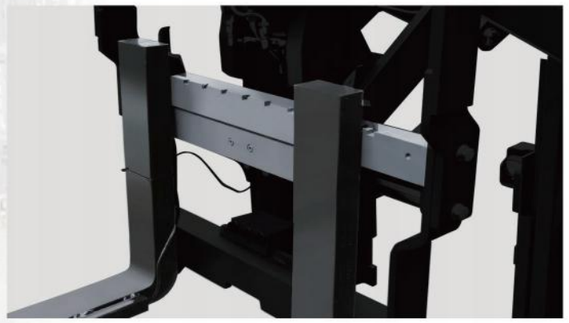
- With a four-pivot structure, the truck has good stability when performing a high lift.

- The integrated mechanical, electrical, and hydraulic control realizes the step-less speed regulation of truck traveling and fork movement, more precisely and stably.

High Efficiency

- The truck can be operated efficiently in ultra-narrow aisles thanks to the small turning radius.
- The flexible scissor reach mechanism allows the forks to efficiently reach into racking for easy pallet loading and unloading.

- The standard hydraulic system with a side shifter can adjust the fork position more flexibly and move the pallets more efficiently.



Safety

-Operators need to step on both pedals to start the operation. Two safety pedals can effectively reduce the risk of accidental operation.

-Equipped with active driver presence safety monitoring OPS system, which effectively improves operation safety.

-The optimized design of the wide-view mast enables the operator to get a better view and improves operation safety.

-HD Camera in the middle of the fork and a big display screen(featuring power display, hour meter, and fault diagnosis) make picking up pallets at high positions more intuitive and efficient.

-Equipped with headlights and warning lights, it offers low energy consumption, safety, and reliableworking illumination.

Headlights
& Warning lights

Display Screen
(Featuring Power display,
hour meter, and fault diagnosis)

HD Camera
in the middle of the fork

OPS system

Comfort

- The ergonomically arranged integrated handle, steering wheel, backrest, instruments, and emergency stop switches for safety make operations more comfortable, flexible, and worry-free.

- The new large-screen LED instrument features a power display, hour meter, and fault diagnosis functions. The user-friendly interface is easy to read and offers excellent visibility.

- A new optimized lifting system enables the operator's wider view through the mast and excellent line of sight.

- The integrated handle helps minimize hand movement and muscle fatigue and greatly improves efficiency and operating

- Electric power steering (EPS) offers precise and fast steering response, improving operation comfort and safety, and bringing operators effortless steering experience.

- The spacious driving space and ergonomically backrest greatly improve riding comfort and reduce operator fatigue from long-term driving.

MFE15

Characteristics		
Manufacturer		MiMA
Model		MFE15
Power type		Battery
Operation		Stand on
Load capacity	Q (t)	1.5
Load center distance	C (mm)	600
Front overhang	x(mm)	272
Wheelbase	y(mm)	1560
Front overhang	x1(mm)	808
Weights		
Service weight (incl.battery)	kg	refer to the mast and weight specification
Weights		
Tyre type,front/rear		Polyurethane
Tyre size, front	mm	4×φ152×105
Tyre size, rear	mm	φ343×140
Additional wheels	mm	φ203×101
Wheels,number front/rear (X=driven)		4/1X/1
Track width, front	b10(mm)	1212
Track width, rear	b11(mm)	771
Dimensions		
Mast/Fork tilt angle front/rear	α/β(°)	3/4
Mast retracted height	h1(mm)	refer to the mast and weight specification
Free lift height	h2(mm)	refer to the mast and weight specification
Lift height	h3(mm)	refer to the mast and weight specification
Mast extended height	h4(mm)	refer to the mast and weight specification
Overhead guard height	h6(mm)	refer to the mast and weight specification
Seat/Platform height	h7(mm)	240
Support arms height	h8(mm)	150
Overall length	l1 (mm)	Refer to the battery,stacking aisle width specification
Length to fork face	l2 (mm)	Refer to the battery,stacking aisle width specification
Overall width	b1/b2(mm)	1080/1364
Fork dimensions	s/e/l(mm)	40/100/1070
Fork carriage width	b3 (mm)	894
Fork outside spread	b5 (mm)	445~700
Support arms inner width	b4 (mm)	1060
Reach distance	l4 (mm)	1080
Side shift distance	b7 (mm)	±50
Ground clearance, fully loaded, under mast	m1 (mm)	57
Ground clearance, center of wheelbase	m2 (mm)	45
Aisle width	Ast (mm)	Refer to the battery,stacking aisle width specification
Turning radius	Wa (mm)	Refer to the battery,stacking aisle width specification
Body to support arms length	l7 (mm)	Refer to the battery,stacking aisle width specification
Performance		
Driving speed,laden/unladen,fork direction	km/h	9/9
Driving speed,laden/unladen,driving wheel direction	km/h	10/10
Lifting speed,laden/unladen	mm/s	400/500
Lowering speed, laden/unladen	mm/s	550/500
Reaching speed, laden/unladen	mm/s	180/190
Gradeability, laden/unladen	%	10
Service brake		Electromagnetic
Drive		
Drive motor,rating,S2=60	kW	5.8
Lift motor,rating,S3=15%	kW	14
Battery voltage/nominal capacity K5	(V)/(Ah)	48/550
Battery weight	kg	Refer to the battery,stacking aisle width specification
Noise level at operator's ear	dB(A)	75

Note: 1. The parameters such as driving speed, lifting and lowering speed, and climbing ability in the above table are for the standard model with three-section mast;
2. The data of other non-standard models will vary depending on the configuration;

MFE20

Characteristics		
Manufacturer		MiMA
Model		MFE20
Power type		Battery
Operation		Stand on
Load capacity	Q (t)	2
Load center distance	C (mm)	600
Front overhang	x(mm)	302
Wheelbase	y(mm)	1480
Front overhang	x1(mm)	294
Weights		
Service weight (incl.battery)	kg	refer to the mast and weight specification
Weights		
Tyre type,front/rear		Polyurethane
Tyre size, front	mm	4×φ152×105
Tyre size, rear	mm	φ343×140
Additional wheels	mm	φ203×101
Wheels,number front/rear (X=driven)		4/1X/1
Track width, front	b10(mm)	1212
Track width, rear	b11(mm)	771
Dimensions		
Mast/Fork tilt angle front/rear	α/β(°)	3/4
Mast retracted height	h1(mm)	refer to the mast and weight specification
Free lift height	h2(mm)	refer to the mast and weight specification
Lift height	h3(mm)	refer to the mast and weight specification
Mast extended height	h4(mm)	refer to the mast and weight specification
Overhead guard height	h6(mm)	refer to the mast and weight specification
Seat/Platform height	h7(mm)	240
Support arms height	h8(mm)	150
Overall length	l1 (mm)	Refer to the battery,stacking aisle width specification
Length to fork face	l2 (mm)	Refer to the battery,stacking aisle width specification
Overall width	b1/b2(mm)	1080/1364
Fork dimensions	s/e/l(mm)	40/100/1070
Fork carriage width	b3 (mm)	894
Fork outside spread	b5 (mm)	445~700
Support arms inner width	b4 (mm)	1060
Reach distance	l4 (mm)	596
Side shift distance	b7 (mm)	±50
Ground clearance, fully loaded, under mast	m1 (mm)	57
Ground clearance, center of wheelbase	m2 (mm)	45
Aisle width	Ast (mm)	Refer to the battery,stacking aisle width specification
Turning radius	Wa (mm)	Refer to the battery,stacking aisle width specification
Body to support arms length	l7 (mm)	Refer to the battery,stacking aisle width specification
Performance		
Driving speed,laden/unladen,fork direction	km/h	9/9
Driving speed,laden/unladen,driving wheel direction	km/h	10/10
Lifting speed,laden/unladen	mm/s	400/500
Lowering speed, laden/unladen	mm/s	500/480
Reaching speed, laden/unladen	mm/s	160/190
Gradeability, laden/unladen	%	10
Service brake		Electromagnetic
Drive		
Drive motor,rating,S2=60	kW	5.8
Lift motor,rating,S3=15%	kW	14
Battery voltage/nominal capacity K5	(V)/(Ah)	48/550
Battery weight	kg	Refer to the battery,stacking aisle width specification
Noise level at operator's ear	dB(A)	75

Note: 1. The parameters such as driving speed, lifting and lowering speed, and climbing ability in the above table are for the standard model with three-section mast;
2. The data of other non-standard models will vary depending on the configuration;

LOAD PARAMETER MFE15

Mast type	Mast model	lifting height	load capacity					
		mm	kg					
	C(mm)＞@		600	700	800	900	1000	1100
Triplex full free mast	101T	10160	1200	1120	1050	980	930	880
	97T	9750	1230	1150	1080	1010	940	900
	96T	9650	1250	1160	1090	1020	950	910
	95T	9550	1260	1170	1100	1030	960	920
	94T	9450	1270	1180	1110	1040	970	930
	92T	9295	1290	1200	1120	1050	980	940
	86T	8660	1370	1270	1190	1120	1050	1000
	83T	8380	1400	1310	1220	1150	1080	1030
	82T	8230	1420	1325	1230	1160	1090	1040
	81T	8150	1430	1330	1240	1170	1100	1050
	80T	8000	1500	1350	1260	1190	1120	1060
	76T	7620	1500	1350	1260	1190	1120	1060
	75T	7515	1500	1350	1260	1190	1120	1060
	73T	7305	1500	1350	1260	1190	1120	1060
	71T	7110	1500	1350	1260	1190	1120	1060
	70T	7010	1500	1350	1260	1190	1120	1060
	68T	6855	1500	1350	1260	1190	1120	1060
	64T	6400	1500	1350	1260	1190	1120	1060
	63T	6350	1500	1350	1260	1190	1120	1060
	63T	6320	1500	1350	1260	1190	1120	1060
	62T	6245	1500	1350	1260	1190	1120	1060
	60T	6095	1500	1350	1260	1190	1120	1060
	57T	5715	1500	1350	1260	1190	1120	1060
	53T	5330	1500	1350	1260	1190	1120	1060
	50T	5025	1500	1350	1260	1190	1120	1060

Note:1.The comprehensive load capacity of other accessories must be calculated.2.The unloaded height of the MFE15 model is 8000mm.

LOAD PARAMETER MFE20

Mast type	Mast model	lifting height	load capacity					
		mm	kg					
	C(mm)＞@		600	700	800	900	1000	1100
Triplex full free mast	101T	10160	1400	1260	1150	1050	970	900
	97T	9750	1470	1330	1210	1110	1000	950
	96T	9650	1500	1350	1240	1130	1020	970
	95T	9550	1530	1380	1260	1150	1040	990
	94T	9450	1560	1410	1280	1170	1060	1010
	92T	9295	1610	1550	1320	1210	1100	1040
	86T	8660	1800	1620	1480	1350	1240	1160
	83T	8380	1890	1700	1550	1410	1300	1220
	82T	8230	1930	1740	1580	1450	1340	1250
	81T	8150	1950	1760	1600	1470	1360	1260
	80T	8000	2000	1800	1640	1500	1390	1290
	76T	7620	2000	1800	1640	1500	1390	1290
	75T	7515	2000	1800	1640	1500	1390	1290
	73T	7305	2000	1800	1640	1500	1390	1290
	71T	7110	2000	1800	1640	1500	1390	1290
	70T	7010	2000	1800	1640	1500	1390	1290
	68T	6855	2000	1800	1640	1500	1390	1290
	64T	6400	2000	1800	1640	1500	1390	1290
	63T	6350	2000	1800	1640	1500	1390	1290
	63T	6320	2000	1800	1640	1500	1390	1290
	62T	6245	2000	1800	1640	1500	1390	1290
	60T	6095	2000	1800	1640	1500	1390	1290
	57T	5715	2000	1800	1640	1500	1390	1290
	53T	5330	2000	1800	1640	1500	1390	1290
	50T	5025	2000	1800	1640	1500	1390	1290

Note:1.The comprehensive load capacity of other accessories must be calculated.2.The unloaded height of the MFE20 model is 8000mm.

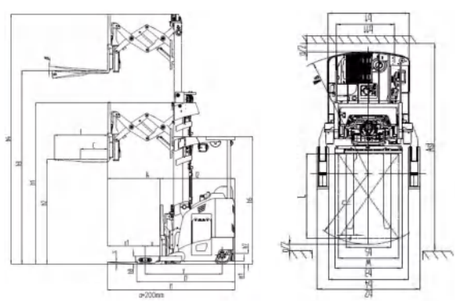
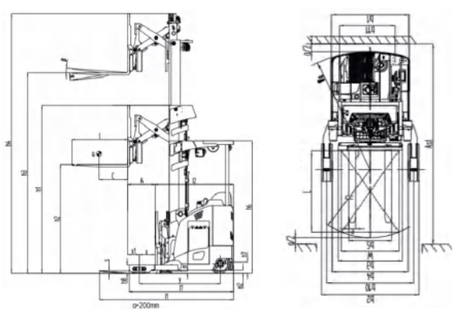
MAST AND WEIGHT SPECIFICATION 1MFE15～1MFE20

Mast type	Mast model	lifting height	Mast retracted height	Mast extended height	Free lift height (With standard carriage)	Overhead guard height	Service weight (incl.battery)	
		h3(mm)	h1(mm)	h4(mm)	h2(mm	h6(mm)	±3% kg	
	Model: MFE15/MFE20						MFE15	1MFE20
Triplex full free mast	101T	10160	4365	11240	3285	2415	4930	4830
	97T	9750	4245	10830	3165	2415	4785	4685
	96T	9650	4205	10730	3125	2415	4765	4665
	95T	9550	4165	10630	3085	2415	4745	4645
	94T	9450	4135	10530	3055	2415	4725	4625
	92T	9295	4060	10375	2980	2415	4690	4590
	86T	8660	3785	9740	2705	2415	4565	4465
	83T	8380	3695	9460	2615	2415	4500	4400
	82T	8230	3645	9310	2565	2415	4480	4380
	81T	8150	3560	9230	2480	2415	4465	4365
	80T	8000	3505	9080	2425	2415	4435	4335
	76T	7620	3330	8700	2250	2415	4360	4260
	75T	7515	3295	8595	2215	2415	4340	4240
	73T	7305	3225	8385	2145	2415	4300	4200
	71T	7110	3160	8190	2080	2415	4255	4155
	70T	7010	3125	8090	2045	2415	4235	4135
	68T	6855	3025	7935	1945	2415	4205	4105
	64T	6400	2870	7480	1790	2415	4115	4015
	63T	6350	2855	7430	1775	2415	4105	4005
	63T	6320	2845	7400	1765	2415	4100	4000
	62T	6245	2820	7325	1740	2415	4080	3980
	60T	6095	2720	7175	1640	2415	4050	3950
	57T	5715	2590	6795	1510	2415	3980	3880
	53T	5330	2415	6410	1335	2415	3900	3800
	50T	5025	2260	6105	1180	2260	3840	3740

THE BATTERY,STACKING AISLE WIDTH SPECIFICATION 1MFE15 / 1MFE20

Configuration	Battery kind	capacity	dimension (mm)	weight (kg)	Wheelbase (mm)y		Aisle width with pallet (mm)Ast			
							1MFE15			
					1MFE15	1MFE20	pallet 800×1200 600mm load center	pallet 1000×1200 600mm load center	pallet 1200×1200 600mm load center	pallet 800×1200 600mm load center
Standard battery	Lead acid	48V 550AH	975×395×745	820	1560	1480	3032	3077	3132	2932
Optional battery 1	Lead acid	48V 660AH	975×455×745	950	1620	1540	3092	3137	3192	2992
Optional battery 2	Lead acid	48V 770AH	975×520×745	1100	1685	1605	3157	3202	3257	3057
Optional battery 3	Lithium	48V 460AH	975×395×695	855	1560	1480	3032	3077	3132	2932

2D VIEW MFE15



2D VIEW MFE20