

# RBN Series

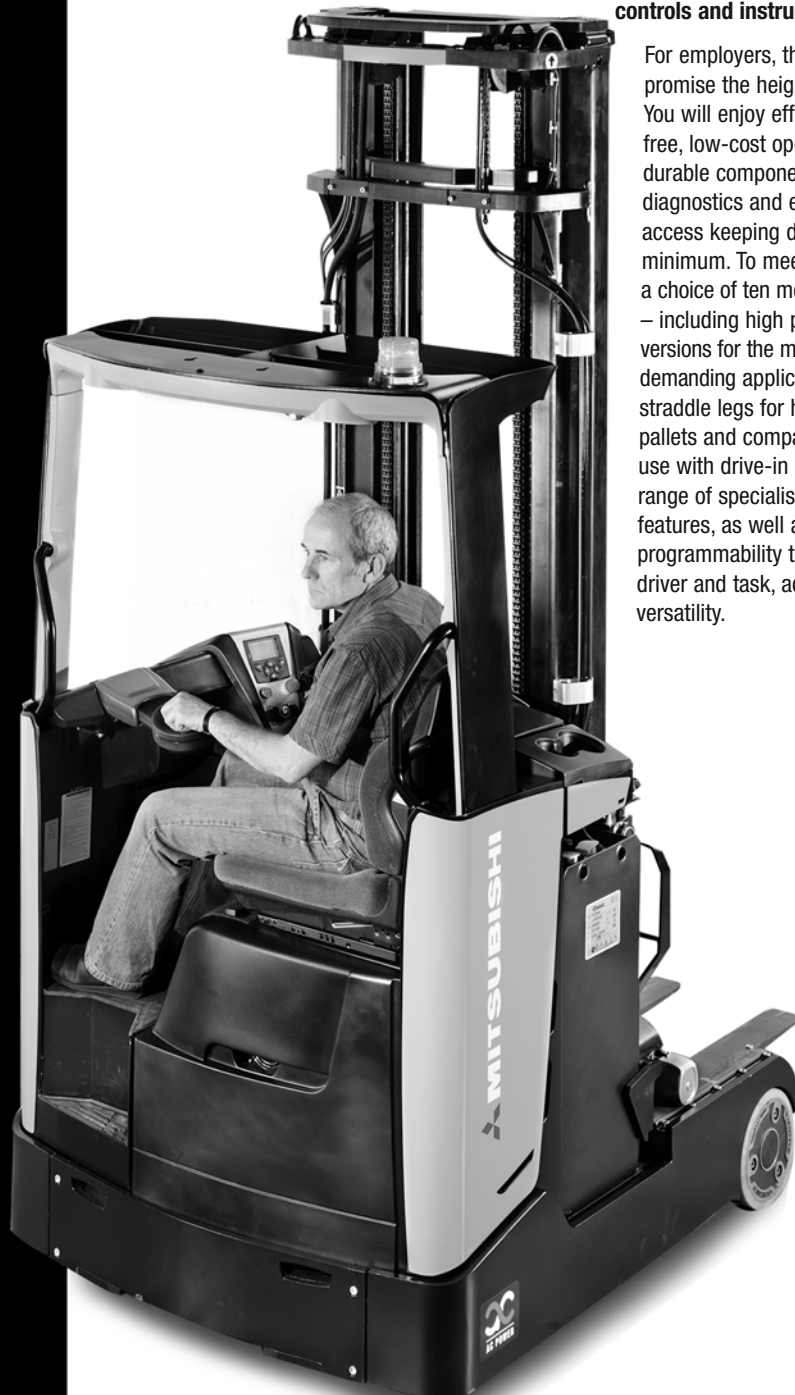
Reach Truck • AC Power  
1.4 - 2.5 tonnes

## Taking care of your driver – and your business

This outstanding reach truck range brings together a tremendous package of features that will keep your driver happy. And a happy driver is a productive driver! AC technology and advanced electronic systems combine to make all fork movement, travel and

manoeuvring quiet, smooth and precise. From a spacious, comfortable operator compartment, with an amazingly clear all-round view and a host of features for the driver's convenience, the truck's power is directed via the latest in user-friendly controls and instruments.

For employers, these trucks promise the height of reliability. You will enjoy efficient, worry-free, low-cost operation, with durable components, electronic diagnostics and easy service access keeping downtime to a minimum. To meet every need, a choice of ten models is offered – including high performance versions for the most demanding applications, straddle legs for handling wider pallets and compact chassis for use with drive-in racking. A range of specialised optional features, as well as full programmability to suit every driver and task, add further versatility.



**RB14N**  
**RB14NH**  
**RB16NC**  
**RB16NHC**  
**RB16NS**  
**RB16NHS**  
**RB16N**  
**RB16NH**  
**RB20NH**  
**RB25NH**

### Frame and body

- **Ergonomic overhead guard** *maximises upward and all-round view – as well as driver protection.*

### Mast and fork assembly

- **Revolutionary Visionmast** *offers unrivalled forward vision and superb lifting ability.*
- **Clear-view fork carriage** *improves visibility of forks at first stacking level.*

### Drive

- **Powerful AC drive motor** *provides high torque, even at fast speeds, for rapid acceleration and smooth, quiet, controlled, efficient operation – and lowers service costs.*

### Steering system

- **Unlimited 360-degree electric steering** *gives precise control with minimal effort.*
- **Progressive steering** *enables easy manoeuvring at low speeds and steady control when moving fast.*

### Brakes

- **Highly efficient regenerative braking** *means effective control and reduced brake wear.*
- **Load wheel brakes** *add extra braking power (on H models).*

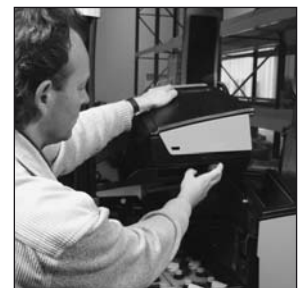
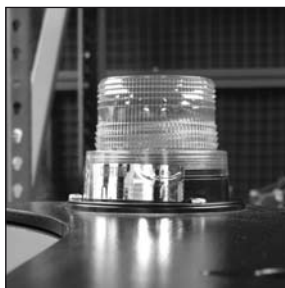
# RBN Series

## Reach Truck • AC Power

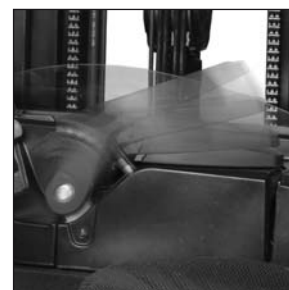
### 1.4 - 2.5 tonnes

Characteristics						
1.1	Manufacturer (abbreviation)			Mitsubishi	Mitsubishi	
1.2	Manufacturer's model designation			RB14N	RB14NH	
1.3	Power source: (battery, diesel, LP gas, petrol)			Electric	Electric	
1.4	Operator type: pedestrian, (operator)-standing, -seated			Seated	Seated	
1.5	Load capacity	Q	(kg)	1400	1400	
1.6	Load center distance	c	(mm)	600	600	
1.8	Load wheel axle to fork face (forks lowered)	x	(mm)	See Table	See Table	
1.9	Wheelbase	y	(mm)	1300	1300	
Weight						
2.1	Truck weight with maximum battery weight		kg	3525	4252	
2.3	Axle loadings without load & with maximum battery weight, drive/load side		kg	2065/1460	2348/1904	
2.4	Axle loading, mast forward, with nominal load, drive/load side (lowest lift height)			745/4180	844/4808	
2.5	Axle loading, mast retracted, with nominal load, drive/load side (lowest lift height)			1730/3195	2013/3639	
Wheels, Drive Train						
3.1	Tyres: PT=Power Thane, Vul=Vulkollan, drive/load side			Vulkollan	Vulkollan	
3.2	Tyre dimensions, drive side		(mm)	Ø285x75	Ø285x75	
3.3	Tyre dimensions, load side		(mm)	Ø360x140	Ø360x140	
3.5	Number of wheels, drive/load side (x=driven)			2/1x	2/1x	
3.7	Track width (center of tyres), load side	b11	(mm)	1195	1195	
Dimensions						
4.1	Fork tilt, forwards / backwards	$\alpha/\beta$	°	2/4	2/4	
4.2	Height with mast lowered (see tables)	h1	(mm)	See Table	See Table	
4.3	Free lift (see tables)	h2	(mm)	See Table	See Table	
4.4	Lift height (see tables)	h3	(mm)	See Table	See Table	
4.5	Overall height with mast raised	h4	(mm)	See Table	See Table	
4.7	Height to top of overhead guard	h6	(mm)	2200	2200	
4.8	Seat- or stand height	h7	(mm)	1100	1100	
4.10	Height of load legs	h8	(mm)	360	360	
4.15	Fork height, fully lowered	h13	(mm)	50	50	
4.19	Overall length	l1	(mm)	See Table	See Table	
4.20	Length to fork face (includes fork thickness)	l2	(mm)	See Table	See Table	
4.21	Overall width	b1/b2	(mm)	1270	1270	
4.22	Fork dimensions (thickness, width, length)	s / e / l	(mm)	40/100	40/100	
4.23	Fork carriage to DIN 15 173 A/B/no			FEM 2A	FEM 2A	
4.24	Fork carriage width	b3	(mm)	720	720	
4.25	Outside width over forks (minimum/maximum)	b5	(mm)	315-710	315-710	
4.26	Innerwidth of load legs	b4	(mm)	1070	1070	
4.28	Mast reach	l4	(mm)	See Table	See Table	
4.32	Ground clearance at center of wheelbase, (forks lowered)	m2	(mm)	75	75	
4.33	Working aisle width (Ast) with 1000 x1200 mm pallets, load crosswise	Ast	(mm)	See Table	See Table	
4.34	Working aisle width (Ast) with 800 x1200 mm pallets, load lengthwise	Ast	(mm)	See Table	See Table	
4.35	Turning circle radius	Wa	(mm)	1547	1547	
4.37	Truck length over load legs	l7	(mm)	1693	1693	
Performance						
5.1	Travel speed, with/without load		km/h	10/10	12/12	
5.2	Lifting speed, with/without load		m/s	0,35/0,55	0,44/0,65	
5.3	Lowering speed, with/without load		m/s	0,55/0,50	0,55/0,50	
5.4	Reach speed, with/without load		m/s	0,20/0,20	0,20/0,20	
5.8	Maximum gradeability, with/without load		%	10/15	10/15	
5.9	Acceleration time (10 metres) with/without load		s	5,0/4,5	5,0/4,5	
5.10	Service brakes (mechanical/hydraulic/electric/pneumatic)			Electric	Electric	
Electric motors						
6.1	Drive motor capacity (60 min. short duty)		kW	7,5	7,5	
6.2	Lift motor output at 15% duty factor		kW	10	14	
6.4	Battery voltage/capacity at 5-hour discharge		V /Ah	48/ 465, 620, 775	48/ 620, 775	
6.5	Battery weight		kg	700, 900, 1100	900, 1100	
Miscellaneous						
8.1	Type of drive control			Stepless	Stepless	
8.4*	Noise level, mean value at operator's ear (EN 12053)		dB(A)	67	71	

\* Accuracy 4 dB (A)



Mitsubishi RB16N Electric Seated 1600 600 See Table 1350	Mitsubishi RB16NH Electric Seated 1600 600 See Table 1350	Mitsubishi RB16NS Electric Seated 1600 600 See Table 1400	Mitsubishi RB16NHS Electric Seated 1600 600 See Table 1400	Mitsubishi RB16NC Electric Seated 1600 600 See Table 1400	
3799 2135/1665 756/4643 1766/3633	4526 2415/2111 859/5267 2046/4080	3547 2065/1481 730/4417 1710/3437	4252 2348/1904 808/5044 2077/3775	3463 1980/1484 650/4413 1624/3440	
Vulkollan Ø285x130 Ø360x140 2/1x 1140	Vulkollan Ø285x130 Ø360x140 2/1x 1140	Vulkollan Ø285x75 Ø360x140 2/1x 1195	Vulkollan Ø285x75 Ø360x140 2/1x 1195	Vulkollan Ø285x75 Ø360x140 2/1x 1025	
2/4 See Table See Table See Table See Table 2200 1100 360 50 See Table See Table 1270 40/100 FEM 2A 720 315-710 900 See Table 75 See Table See Table 1594 1743	2/4 See Table See Table See Table See Table 2200 1100 360 50 See Table See Table 1270 40/100 FEM 2A 720 315-710 900 See Table 75 See Table See Table 1594 1743	2/4 See Table See Table See Table See Table 2200 1100 360 50 See Table See Table 1270 40/100 FEM 2A 720 315-710 1070 See Table 75 See Table See Table 1640 1793	2/4 See Table See Table See Table See Table 2200 1100 360 50 See Table See Table 1270 40/100 FEM 2A 720 315-710 1070 See Table 75 See Table See Table 1547 1693	2/4 See Table See Table See Table See Table 2200 1100 360 50 See Table See Table 1100 40/100 FEM 2A 720 315-710 900 See Table 75 See Table See Table 1629 1793	
10/10 0,35/0,55 0,55/0,50 0,20/0,20 10/15 5,0/4,5 Electric	12/12 0,40/0,65 0,55/0,50 0,20/0,20 8/12 5,4/4,7 Electric	10/10 0,35/0,55 0,55/0,50 0,20/0,20 10/15 5,0/4,5 Electric	12/12 0,40/0,65 0,55/0,50 0,20/0,20 10/15 5,0/4,5 Electric	10/10 0,35/0,55 0,55/0,50 0,20/0,20 10/15 5,0/4,5 Electric	
7,5 10 48/ 465, 620, 775 700, 900, 1100	7,5 14 48/ 620, 775 900, 1100	7,5 10 48/ 465, 620, 775 700, 900, 1100	7,5 14 48/ 620, 775 900, 1100	7,5 10 48/ 465, 620 700, 900	
Stepless 67	Stepless 71	Stepless 67	Stepless 71	Stepless 67	



	Mitsubishi RB16NHC	Mitsubishi RB20NH	Mitsubishi RB25NH
	Electric	Electric	Electric
	Seated	Seated	Seated
	1600	2000	2500
	600	600	600
	See Table	See Table	See Table
	1400	1500	1500
	4193	4324	4410
	2254/1940	2337/1986	2371/2040
	754/5039	816/5508	580/6330
	1899/3895	1923/4401	1852/5058
	Vulkollan	Vulkollan	Vulkollan
	Ø285x75	Ø285x130	Ø285x130
	Ø360x140	Ø360x140	Ø360x140
	2/1x	2/1x	2/1x
	1025	1140	1310
	2/4	2/4	2/4
	See Table	See Table	See Table
	See Table	See Table	See Table
	See Table	See Table	See Table
	See Table	See Table	See Table
	2200	2200	2200
	1100	1100	1100
	360	360	360
	50	60	60
	See Table	See Table	See Table
	See Table	See Table	See Table
	1100	1270	1440
	40/100	50/100	50/100
	FEM 2A	FEM 2A	FEM 2A
	720	720	720
	315-710	315-710	315-710
	900	900	1070
	See Table	See Table	See Table
	75	75	75
	See Table	See Table	See Table
	See Table	See Table	See Table
	1629	1735	1749
	1793	1893	1893
	12/12	12/12	12/12
	0,40/0,65	0,35/0,65	0,30/0,65
	0,55/0,50	0,55/0,50	0,55/0,50
	0,20/0,20	0,20/0,20	0,20/0,20
	10/15	8/12	7/12
	5,0/4,5	5,6/4,7	5,9/4,7
	Electric	Electric	Electric
	7,5	7,5	7,5
	14	14	14
	48/ 620	48/ 620, 775, 930	48/ 620, 775, 930
	900	900, 1100, 1300	900, 1100, 1300
	Stepless	Stepless	Stepless
	71	71	71



Standard seat



Luxury seat



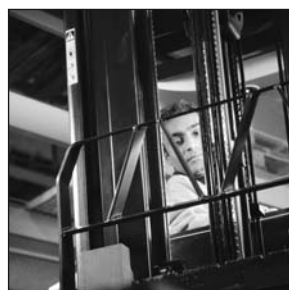
Luxury seat - optional armrest

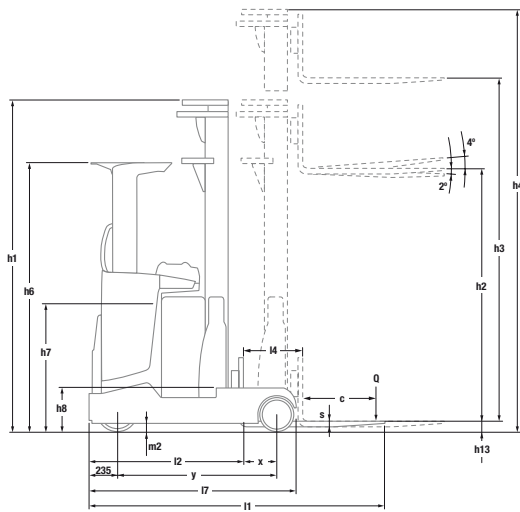


Optional spotlights

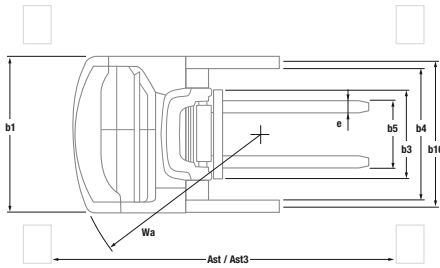


Optional reading light





- h1 Height with mast lowered
- h2 Standard free lift
- h3 Lift height
- h4 Height with mast raised
- h5 Full free lift
- Q Lifting capacity, rated load
- c Load centre (distance)



- Ast = Wa + R + a
- Ast = Working aisle width
- Wa = Turning radius
- a = Safety clearance = 2 x 100 mm
- R =  $\sqrt{(l6 - x)^2 + (b12 / 2)^2}$
- l6 = Pallet length (1200 mm)
- b12 = Pallet width (800 or 1000 mm)

RB14N, RB16N, RB16NS, RB16NC				
Mast type	h3*	h1	h2*	h4**
Triplex	4800	2210	1560	5630
	5400	2410	1760	6230
	5700	2510	1860	6530
	5900	2577	1927	6730
	6300	2710	2060	7130
	7000	2943	2293	7830
	7500	3110	2460	8330

RB14NH, RB16NHS,				
Mast type	h3*	h1	h2*	h4**
Triplex	8000	3297	2647	8830
	8500	3463	2813	9330
	9000	3785	3135	9830

RB16NH				
Mast type	h3*	h1	h2*	h4**
Triplex	8000	3297	2647	8830
	8500	3463	2813	9330
	9000	3785	3135	9830
	9500	3952	3302	10330
	10000	4118	3468	10830
	10500	4285	3635	11330
	11000	4452	3802	11830
	11500	4618	3968	12330

RB20NH, RB25NH				
Mast type	h3*	h1	h2*	h4**
Triplex	4800	2230	1580	5630
	5400	2430	1780	6230
	5700	2530	1880	6530
	5900	2597	1947	6730
	6300	2730	2080	7130
	7000	2963	2313	7830
	7500	3130	2480	8330
	8000	3297	2647	8830
	8500	3463	2813	9330
	9000	3785	3135	9830
	9500	3952	3302	10330
	10000	4118	3468	10830
	10500	4285	3635	11330
11000	4452	3802	11830	
11500	4618	3968	12330	

\* Fork height is 50mm or 60mm higher, depending on lowered fork height (h13)  
 \*\* Including load backrest

Model	Battery capacity (Ah)	Battery weight (kg)	4.33 (1000x1200mm width)		4.34 (1200x800mm length)		L4 4.28 (mm)	L2 4.20 (mm)	L1* 4.19 (mm)	x 1.8 (mm)
			Ast (mm)	Ast3** (mm)	Ast (mm)	Ast3** (mm)				
RB14N	465	700	2684	2466	2750	2666	463	1254	2404	281
	620	900	2740	2538	2816	2738	391	1326	2476	209
	775	1100	2798	2610	2883	2810	319	1398	2548	137
RB14NH	620	900	2748	2548	2825	2748	382	1336	2486	199
	775	1100	2806	2620	2892	2820	310	1408	2558	127
RB16N	465	700	2693	2463	2751	2663	513	1254	2404	331
	620	900	2748	2535	2817	2735	441	1326	2476	259
	775	1100	2804	2607	2883	2807	369	1398	2548	187
RB16NH	620	900	2755	2545	2826	2745	432	1336	2486	249
	775	1100	2813	2617	2892	2817	360	1408	2558	177
RB16NS	465	700	2702	2459	2752	2659	563	1254	2404	381
	620	900	2755	2531	2817	2731	491	1326	2476	309
	775	1100	2811	2603	2883	2803	491	1398	2548	237
RB16NHS	620	900	2748	2548	2825	2748	382	1336	2486	199
	775	1100	2806	2620	2892	2820	310	1408	2558	127
RB16NC	465	700	2731	2502	2789	2702	510	1308	2458	327
	620	900	2800	2592	2872	2792	420	1398	2548	237
RB16NHC	620	900	2807	2602	2881	2802	410	1408	2558	228
RB20NH	620	900	2784	2536	2830	2736	582	1336	2486	399
	775	1100	2837	2608	2895	2808	510	1408	2558	327
	930	1300	2892	2680	2961	2880	438	1480	2630	255
RB25NH	620	900	2805	2560	2853	2760	572	1346	2496	389
	775	1100	2858	2632	2918	2832	500	1418	2568	317
	930	1300	2913	2704	2984	2904	428	1490	2640	245

\*\* With fork length 1150mm  
 \*\* Ast3 does not take the load diagonal into account. Only to be used for intrusive stacking.



Fingertip hydraulic controls



Spacious driver compartment



Foldable steering console

when  
**reliability**  
is **everything**

Developed for outstanding performance and genuine value for money, the awardwinning\* range of Mitsubishi forklift trucks and warehouse equipment is built to a higher specification to maximize productivity and ensure utter reliability... whatever the application.

It's what you'd expect from one of the world's largest corporations whose companies are at the leading edge of technologies where performance, quality and dependability can never be compromised.

It means that, from a single safe source, we can meet 98% of all handling requirements, supplied to you via a range of competitive finance options including outright purchase, rental or leasing. So your local dealer can advise you on precisely the right product for your application... and your budget.

Moreover, because we understand how much you depend on your Mitsubishi forklift truck, we deliver the highest levels of customer support.

Through a network of carefully selected dealerships, we provide quality maintenance and customer care programmes including a choice of warranties that give complete peace of mind. Every dealership holds extensive stocks of manufacturer-approved parts, backed by a central store that holds literally millions of items constantly in stock and achieves a first-pick fulfilled rate of 97%. So your truck can be fixed first time, virtually every time.



\* Mitsubishi Forklift Trucks has won **four** separate Fork Lift Truck Association Annual Awards for Excellence covering the areas of **Ergonomics**, the **Environment** and **Innovation**.

## Hydraulics

- **Powerful AC hydraulic motor** – with extra-strength pump on H models – provides high torque for rapid but smooth – and controlled – lifting and lowering.

## Electrical and control systems

- **New generation control system** – with PIN code starter pad and emergency (slow travel) code – programmes over 25 parameters to suit load, application and driver precisely.
- **CAN-bus system** reduces wiring and makes fault finding quick and simple.
- **Maintenance interval calculator** encourages correct servicing, for optimum component life and minimum downtime.
- **Temperature control** – in drive and lift motors and controllers – prevents damage from overheating.
- **Smooth, quiet mast movement** – including mast damping, stepless staging and jolt-free reaching – enhances driver comfort and precision.
- **Automatic, stepless speed reduction system** constantly monitors lift height and steering angle and adjusts speed to ensure safe, controlled performance.
- **Seat switch** prevents all fork movement and truck travel if the driver is not seated.
- **Tilting battery cover** gives quick, easy access for maintenance and charging.
- **Battery rollers** make changes quick, easy and safe.

## Operator environment and controls

- **Spacious driver compartment** offers comfort and protection.
- **Folding steering wheel console** – with adjustment for column length and angle – lifts up for easy access and ensures optimum position for each driver.
- **Secure storage spaces** include specially designed pockets and locking devices for litter bin, bottles, cups, pens, scissors, tape dispenser, writing pad, phone etc.
- **Full-suspension, fully adjustable seat** keeps driver safe, comfortable and alert through the longest of shifts. (Luxury seat with lumbar support, air suspension and electrical height adjustment available as option.)
- **Fingertip hydraulic controls** – integrated into fully adjustable, comfortable armrest – allow effortless precision.
- **Multi-function display** – optimally placed for easy viewing – keeps driver and service engineer fully informed.
- **Grab handles** – and low step – permit easy entry and exit.

## Options

- **Extra hydraulic valve and hosing** to fork carriage
- **Telescopic forks** for double-deep pallet handling
- **Camera on forks** (and monitor with colour display)
- **Lifting height indicator and -pre selector**
- **Side shift and tilt centering**
- **Fork positioner**
- **Scale** (tolerance +/- 50 kg)
- **Quick battery locking system**, foot operated
- **PC support and power supply**
- **Cold store cabin**
- **Modification for hot environments**
- **Customer name/logo/artwork** on side panels
- **Paintwork** in customer's company colours



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NOTE: Performance specifications may vary depending on standard manufacturing tolerances, vehicle condition, types of tyres, floor or surface conditions, applications or operating environment. Trucks may be shown with non-standard options. Specific performance requirements and locally available configurations should be discussed with your distributor of Mitsubishi forklift trucks. Mitsubishi follows a policy of continual product improvement. For this reason, some materials, options and specifications could change without notice.