



The MCC16-U is a man-up, 3-way turret truck built for very narrow aisle (VNA) applications, offering exceptional efficiency and control in high-density warehouse environments. With a rated capacity of 1.6 tonnes, it features a main lift height of 4.5–12.5 metres and an auxiliary lift of 1.7 metres, allowing for seamless operation at height. Its rotating fork carriage with 180° rotation and left-right side shift enables pallet stacking and retrieval on both sides of the aisle — all without turning the truck body. The elevating cab supports high-level picking, stacking, and inventory tasks, while offering both standing and seated modes for operator comfort and adaptability.

Ideal for:

Ultra-narrow aisle racking Medium to high-level stacking and order picking Operations requiring precision, visibility, and ergonomic flexibility

Specification						
Characteristics	1.1	Manufacturer		MIMA	MIMA	MIMA
	1.2	Model		MCC16	MCC16SQ	MCC16H[1]
	1.3	Power type		Battery	Battery	Battery
	1.4	Operation		Stand on/Seated (man-up)	Stand on/Seated (man-up)	Stand on/Seated (man-up)
	1.5	Load capacity	Q(kg)	1600	1600	1600
	1.6	Load center distance	C(mm)	600	600	600
	1.7	Wheelbase	y(mm)	1950	2025	2250
Weights	2.1	Service weight(incl.battery)	kg	/	/	/
Wheel	3.1	Tyre type,front/rear		Polyurethane	Polyurethane	Polyurethane
	3.2	Tyre size, front	mm	φ380×192	φ380×192	φ380×192
	3.3	Tyre size, rear	mm	φ400×160	φ400×160	φ400×160
	3.4	Wheels,number front/rear (X=driven)+caster wheel		2 / 1X	2 / 1X	2 / 1X
	3.5	Track width, front	b10(mm)	1310	1310	1310
Dimension	4.1	Mast retracted height	h1(mm)	Refer to the mast specification	Refer to the mast specification	Refer to the mast specification
	4.2	Free Lift height (standard)	h2(mm)	Refer to the mast specification	Refer to the mast specification	Refer to the mast specification
	4.3	Lift height	h3(mm)	Refer to the mast specification	Refer to the mast specification	Refer to the mast specification
	4.4	Mast extended height	h4(mm)	Refer to the mast specification	Refer to the mast specification	Refer to the mast specification
	4.5	Overall lift height	h3+h9(mm)	Refer to the mast specification	Refer to the mast specification	Refer to the mast specification
	4.6	Max. picking height	h12+1600(mm)	Refer to the mast specification	Refer to the mast specification	Refer to the mast specification
	4.7	Overhead guard height	h6(mm)	2590	2590	2590
	4.8	Platform height	h7(mm)	445	445	445
	4.9	Additional lift height	h9(mm)	1700[2]	1700[2]	1700[2]
	4.1	Platform height, raised	h12(mm)	Refer to the mast specification	Refer to the mast specification	Refer to the mast specification
	4.11	Overall length	l1(mm)	3725	3800	4025
	4.12	Overall width	b1/ b2(mm)	1244/1502	1244/1502	1244/1502
	4.13	Fork dimensions	l/e/s(mm)	1200/125/50	1200/125/50	1200/125/50
	4.14	Installation level(ISO2328)		II	II	II
	4.15	Fork carriage width	b3(mm)	790	790	790
	4.16	Fork outside distance	b5(mm)	390~750	390~750	390~750
	4.17	Width over guide rollers	b6(mm)	1575	1575	1575
	4.18	Side shift distance	b7(mm)	1300	1300	1300
	4.19	Ground clearance below mast, laden	m1(mm)	45	45	45
	4.2	Ground clearance, center of wheelbase, laden	m2(mm)	80	80	80
	4.21	Right angle stacking aisle width (1200×1000)	Ast(mm)	1650[3]	1650[3]	1650[3]
	4.22	Turning radius	Wa(mm)	2235	2310	2535
	4.23	Distance from the fork rotation axis	l8(mm)	1120	1120	1120
	4.24	Main aisle width	mm	≥(4100+400)[4]	≥(4175+400)[4]	≥(4400+400)[4]

Performance	5.1	Travel Speed, laden/unladen	km/h	10/10	10/10	10/10
	5.2	Lifting Speed, laden/unladen	mm/s	320/320	320/320	320/320
	5.3	Lowering Speed, laden/unladen	mm/s	400/380	400/380	400/380
	5.4	Max straight gradeability, laden/unladen	%(tan θ)	5/8	5/8	5/8
	5.5	Service brake		Electromagnetic brake/Regenerative brake	Electromagnetic brake/Regenerative brake	Electromagnetic brake/Regenerative brake
	5.6	Parking brake		Electromagnetic brake	Electromagnetic brake	Electromagnetic brake
Drive	6.1	Drive motor, rating S2=60	kw	8 AC	8 AC	9.5 AC
	6.2	Lift motor, rating S3=15%	kw	21 AC	21 AC	21 AC
	6.3	Battery voltage/nominal capacity K5	(V) / (Ah)	80/560[5]	80/560[5]	80/700[6]
	6.4	Battery weight	kg	1530	1530	1840
Others	7.1	Battery replacement method		Side pull	Side pull	Side pull
	7.2	Steering system		Electrical steering	Electrical steering	Electrical steering

**This parameter table provides technical data for standard models only. For non-standard and other height series models, please consult Barytong Science & Technology Developing Co., Ltd. Specifications and configurations are subject to change without prior notice.

[1]: H indicates a long wheelbase three-stage gantry model;

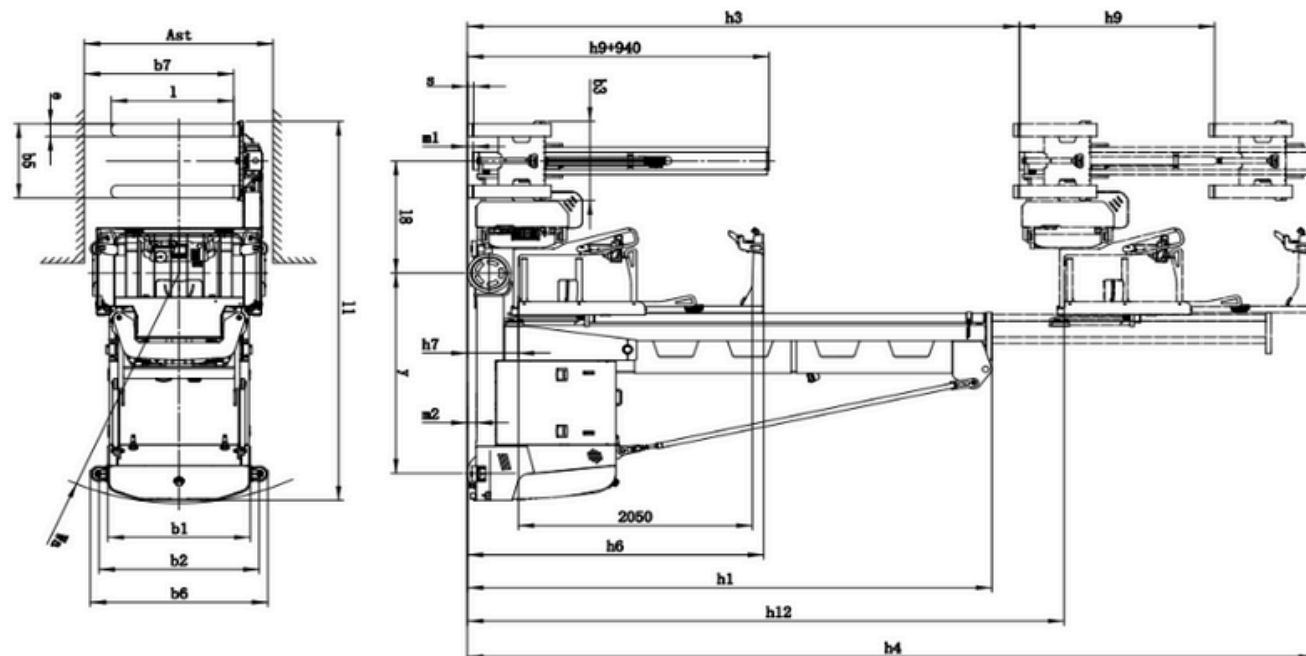
[2]: Optional auxiliary lifting height series: 2000mm, 2200mm, 2500mm;

[3]: The clear channel width is applicable to standard mechanical guide model (magnetic guide model, stacking clear channel width + 50mm). The above data varies according to the use conditions.;

[4]: The safety margin of the width of the main aisle of the magnetic guide model needs to be +900mm, and the mechanical guide model needs to be +400mm, the above data varies according to the size of the pallet;

[5]: Optional lead-acid battery Specifications: 80V/460Ah or 80V/600Ah;

[6]: Optional lithium battery Specifications: 80V/600Ah.



Mast parameter MCC16/MCC16SQ/MCC16H

Mast type	Mast model	Lifting height	Total lifting height	Max. picking height	Mast retracted height	Mast extended height	Free lifting height
		mm					
	Model MCC16						
Duplex mast	95L	9500	11200	11545	6165	12130	/
	90L	9000	10700	11045	5915	11630	/
	85L	8500	10200	10545	5665	11130	/
	80L	8000	9700	10045	5415	10630	/
	75L	7500	9200	9545	5165	10130	/
	70L	7000	8700	9045	4915	9630	/
	65L	6500	8200	8545	4665	9130	/
	60L	6000	7700	8045	4415	8630	/
	55L	5500	7200	7545	4165	8130	/
	50L	5000	6700	7045	3915	7630	/
	45L	4500	6200	6545	3665	7130	/
	Model MCC16SQ/MCC16H						
Triplex full free mast	95SQ	9500	11200	11545	4655	12130	2025
	90SQ	9000	10700	11045	4475	11630	1845
	85SQ	8500	10200	10545	4295	11130	1665
	80SQ	8000	9700	10045	4125	10630	1495
	75SQ	7500	9200	9545	3955	10130	1325
	70SQ	7000	8700	9045	3785	9630	1155
	65SQ	6500	8200	8545	3615	9130	985
	60SQ	6000	7700	8045	3445	8630	815
	55SQ	5500	7200	7545	3275	8130	645
	50SQ	5000	6700	7045	3105	7630	475
	45SQ	4500	6200	6545	2935	7130	305
Triplex full free mast	Model MCC16H						
	125SQ	12500	14200	14545	5735	15130	3105
	120SQ	12000	13700	14045	5555	14630	2925
	115SQ	11500	13200	13545	5375	14130	2745
	110SQ	11000	12700	13045	5195	13630	2565
	105SQ	10500	12200	12545	5015	13130	2385
	100SQ	10000	11700	12045	4835	12630	2205

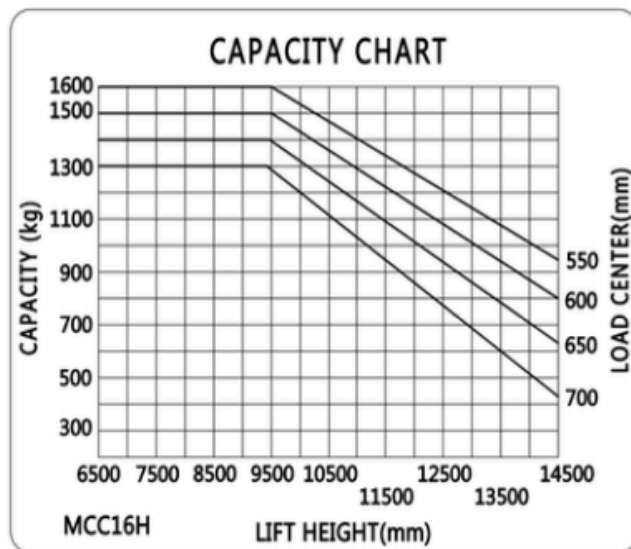
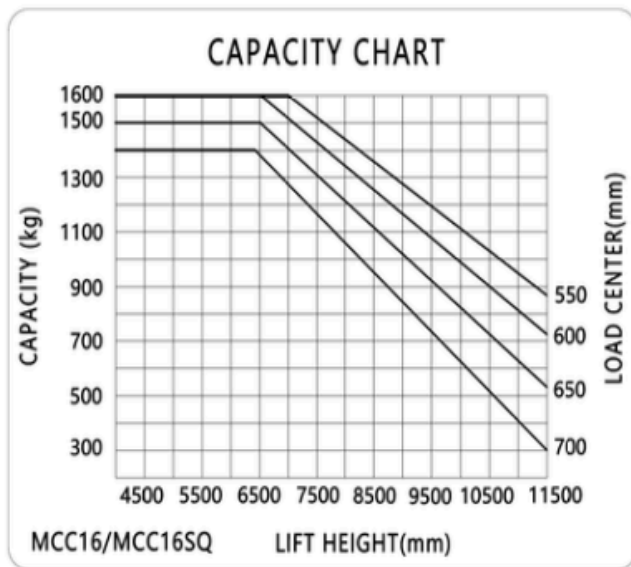
Note: The data in the above table refers to standard models. For customized specifications, please contact us.

Load parameter MCC16/MCC16SQ

Mast type	Mast model	Total lift height	Load capacity			
		mm	kg			
	C(mm)➤@		550	600	650	700
Duplex mast/ Triplex full free mast	95L/95SQ	11200	930	800	600	380
	90L/90SQ	10700	1020	880	700	480
	85L/85SQ	10200	1100	980	800	600
	80L/80SQ	9700	1180	1060	900	700
	75L/75SQ	9200	1250	1150	1000	820
	70L/70SQ	8700	1320	1220	1080	920
	65L/65SQ	8200	1420	1320	1180	1020
	60L/60SQ	7700	1500	1400	1280	1140
	55L/55SQ	7200	1580	1500	1380	1250
	50L/50SQ	6700	1600	1580	1480	1350
	45L/45SQ	6200	1600	1600	1500	1400
Note :		1. The data in the table applies to the standard model;				
		2.The data in the table is for reference only. The load capacity of the man-up type three-way stacker forklift is influenced by many factors. For specific load capacities under different conditions, please contact us.				

Load parameter MCC16H

Mast type	Mast model	Total lift height	Load capacity			
		mm	kg			
	C(mm)➤@		550	600	650	700
Triplex full free mast	125SQ	14200	980	850	680	500
	120SQ	13700	1060	920	750	580
	115SQ	13200	1120	980	840	660
	110SQ	12700	1180	1050	920	750
	105SQ	12200	1250	1120	950	850
	100SQ	11700	1320	1200	1000	920
	95SQ	11200	1380	1280	1070	1000
	90SQ	10700	1450	1330	1220	1080
	85SQ	10200	1520	1400	1300	1180
	80SQ	9700	1580	1480	1380	1280
	75SQ	9200	1600	1500	1400	1300
	70SQ	8700	1600	1500	1400	1300
	65SQ	8200	1600	1500	1400	1300
	60SQ	7700	1600	1500	1400	1300
	55SQ	7200	1600	1500	1400	1300
	50SQ	6700	1600	1500	1400	1300
	45SQ	6200	1600	1500	1400	1300
Note :		1.The data in the table applies to the mechanical guide rail H series model with a front wheel outer distance of 1652mm and a net aisle width of 1800mm;				
		2.The data in the table is for reference only. The load capacity of the man-up type three-way stacker forklift is influenced by many factors. For specific load capacities under different conditions, please contact us.				



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