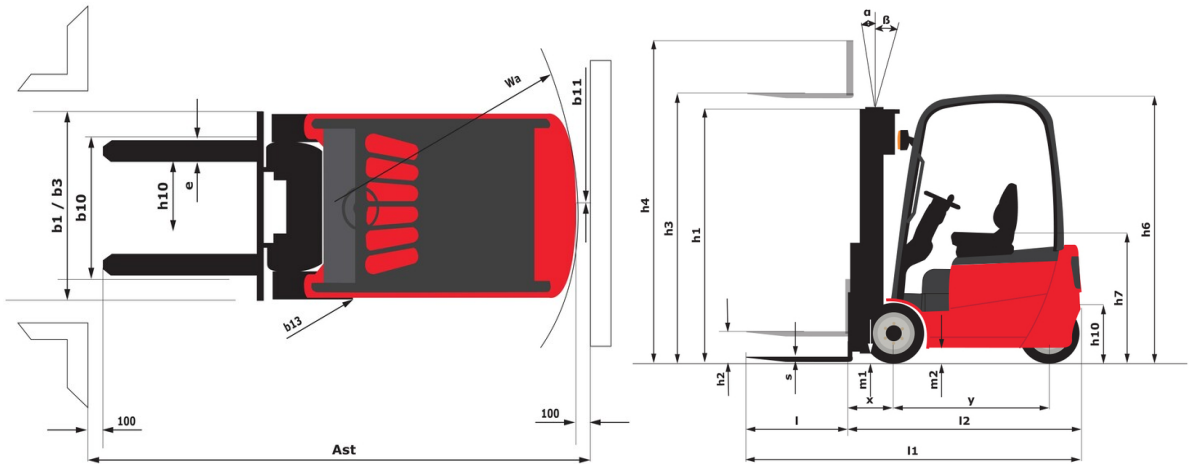
Technical sheet :

ME 445

MANITOU
HANDLING YOUR WORLD

	Technical characteristics		Metric	Imperial
1.1	Manufacturer		Manitou	Manitou
1.2	Model Name		ME 445	ME 445
1.3	Power source		Electrical	Electrical
1.4	Operator type		Seated	Seated
1.5	Max. capacity	Q	4500 kg	9921 lb
1.6	Load center of gravity	c	500 mm	20 in
1.8	Load distance, centre of drive axle to fork	x	550 mm	22 in
1.9	Wheelbase	y	2000 mm	79 in
	Weight			
2.1	Service weight		6800 kg	14991 lb
2.2	Weight on front axle (laden) / rear axle (laden)		9950 kg / 1350 kg	21936 lb / 2976 lb
2.3	Weight on front axle (Unladen) / rear axle (Unladen)		3950 kg / 2850 kg	8708 lb / 6283 lb
	Wheels			
3.1	Tires type		Solid tires	Solid tires
3.2	Dimensions of front wheels		250/15	250/15
3.3	Dimensions of rear wheels		7.00-12	7.00-12
3.5	Number of front wheels / rear wheels		2 / 2	2 / 2
3.5.2	Number of drive wheels		2	2
3.6	Front wheel gauge	b10	1130 mm	44 in
3.7	Rear wheel gauge	b11	1100 mm	43 in
	Dimensions			
4.7	Height of overhead guard (cabin)	h6	2300 mm	91 in
4.8	Seat height/stand height	h7	1235 mm	49 in
4.12	Height of towing bar (coupling height)	h10	460 mm	18 in
4.19	Overall length	l1	4165 mm	164 in
4.20	Length to face of forks	l2	3015 mm	119 in
4.21	Overall width	b1	1380 mm	54 in
4.22	Forks section / width / length	s / e / l	150 mm x 1150 mm x 50 mm	6 in x 45 in x 2 in
4.23	Fork carriage ISO 2328 (class/form) A/B		3A	3A
4.24	Fork carriage width	b3	1100 mm	43 in
4.31	Ground clearance below mast	m1	110 mm	4 in
4.32	Ground clearance at centre of wheelbase	m2	219 mm	9 in
4.33	Aisle Width for pallets 1000 x 1200 crossways	Ast	4470 mm	176 in
4.34	Aisle width for 800 x 1200 pallet lengthways	Ast	4670 mm	184 in
4.35	Turning radius	Wa	2720 mm	107 in
4.36	Internal turning radius (over tyres)	b13	805 mm	32 in
	Performances			
5.1	Travel speed (laden / unladen)		13.50 km/h-14 km/h	8 mph-9 mph
5.2	Lifting speed (laden / unladen)		0.26 m/s-0.40 m/s	0.85 ft/s-1 ft/s
5.3	Lowering speed (laden / unladen)		0.50 m/s-0.30 m/s	2 ft/s-0.98 ft/s
5.5	Drawbar pull (Laden)		2600 daN	2600 daN
5.7	Gradeability (laden / unladen)		15 % / 16 %	15 % / 16 %
5.10	Service brake		Hydraulic	Hydraulic
	Engine			
6.1	Drive motor rating S2 60 min		16.60 kW	16.60 kW
6.2	Lift motor rating at S3 15%		25.40 kW	25.40 kW
6.3	Battery according to DIN 43531/35/36 A, B, C		DIN43536 A	DIN43536 A
6.4	Battery voltage / capacity		80 V / 700 Ah	80 V / 700 Ah
6.6	Energy consumption		13.10 kWh	13.10 kWh
	Miscellaneous			
8.1	Type of drive control		Electronic	Electronic
8.2	Working hydraulic pressure for attachments		210 bar	3046 PSI
8.3	Oil flow rate for attachments		65 l/min	17 US gpm
8.4	Measured/guaranteed mean noise level at the ear of the operator		< 78 dB	< 78 dB

ME 445 - Dimensional drawing



Characteristics of masts and residual capacities

Full Visibility Duplex (FVD)		FVD 30	FVD 33	FVD 35	FVD 40	FVD 43	FVD 45	FVD 48	FVD 50
Mast/fork carriage tilt, forward	°	6	6	6	6	6	6	6	6
Mast/fork carriage tilt, backward	°	12	12	12	12	6	6	6	6
h1 - Mast lowered height	in (mm)	86 (2185)	91.9 (2335)	95.9 (2435)	107.7 (2735)	114.2 (2900)	118.5 (3010)	125 (3175)	129.3 (3285)
h2 - Mast free lift	in (mm)	5.9 (150)	5.9 (150)	5.9 (150)	5.9 (150)	5.9 (150)	5.9 (150)	5.9 (150)	5.9 (150)
h3 - Mast lifting height	in (mm)	118.1 (3000)	129.9 (3300)	137.8 (3500)	157.5 (4000)	169.3 (4300)	177.2 (4500)	189 (4800)	196.9 (5000)
h4 - Mast extended height	in (mm)	148.4 (3770)	160.2 (4070)	168.1 (4270)	187.8 (4770)	199.6 (5070)	207.5 (5270)	219.3 (5570)	227.2 (5770)
Residual capacity at max height	lb (kg)	9921 (4500)	9921 (4500)	9921 (4500)	9921 (4500)	9921 (4500)	9921 (4500)	9811 (4450)	9700 (4400)
Residual capacity with integrated side shift at max heigth	lb (kg)	9921 (4500)	9921 (4500)	9921 (4500)	9921 (4500)	9921 (4500)	9921 (4500)	9700 (4400)	9590 (4350)
Residual capacity with hooked-on side shift at max heigth	lb (kg)	9480 (4300)	9480 (4300)	9480 (4300)	9480 (4300)	9480 (4300)	9480 (4300)	9259 (4200)	9039 (4100)
Height at max capacity	in (mm)	118.1 (3000)	129.9 (3300)	137.8 (3500)	157.5 (4000)	169.3 (4300)	177.2 (4500)	189 (4800)	157.5 (4000)
Height at max capacity with integrated sideshift	in (mm)	118.1 (3000)	129.9 (3300)	137.8 (3500)	157.5 (4000)	169.3 (4300)	177.2 (4500)	157.5 (4000)	157.5 (4000)

Free Lift Duplex (FLD)		FLD 30	FLD 33	FLD 40
Mast/fork carriage tilt, forward	°	6	6	6
Mast/fork carriage tilt, backward	°	12	12	12
h1 - Mast lowered height	in (mm)	85.3 (2166)	91.2 (2316)	105 (2666)
h2 - Mast free lift	in (mm)	53.7 (1365)	59.6 (1515)	73.4 (1865)
h3 - Mast lifting height	in (mm)	118.1 (3000)	129.9 (3300)	157.5 (4000)
h4 - Mast extended height	in (mm)	149.8 (3805)	161.6 (4105)	189.2 (4805)
Residual capacity at max height	lb (kg)	9921 (4500)	9921 (4500)	9921 (4500)
Residual capacity with integrated side shift at max heigth	lb (kg)	9921 (4500)	9921 (4500)	9921 (4500)
Residual capacity with hooked-on side shift at max heigth	lb (kg)	9480 (4300)	9480 (4300)	9480 (4300)
Height at max capacity	in (mm)	118.1 (3000)	129.9 (3300)	157.5 (4000)
Height at max capacity with integrated sideshift	in (mm)	118.1 (3000)	129.9 (3300)	157.5 (4000)

Free Lift Triplex (FLT)		FLT 43	FLT 48	FLT 50	FLT 55	FLT 60
Mast/fork carriage tilt, forward	°	6	6	6	3	3
Mast/fork carriage tilt, backward	°	6	6	6	6	6
h1 - Mast lowered height	in (mm)	83.5 (2120)	89.8 (2280)	92.5 (2350)	99 (2515)	107.5 (2730)
h2 - Mast free lift	in (mm)	51.9 (1318)	58.2 (1478)	60.9 (1548)	67.3 (1710)	75.9 (1928)
h3 - Mast lifting height	in (mm)	169.3 (4300)	189 (4800)	196.9 (5000)	216.5 (5500)	236.2 (6000)
h4 - Mast extended height	in (mm)	201 (5105)	220.7 (5605)	228.5 (5805)	248.2 (6305)	267.9 (6805)
Residual capacity at max height	lb (kg)	9370 (4250)	9259 (4200)	9039 (4100)	8378 (3800)	8157 (3700)
Residual capacity with integrated side shift at max heigth	lb (kg)	9259 (4200)	9039 (4100)	8378 (3800)	8157 (3700)	7937 (3600)
Residual capacity with hooked-on side shift at max heigth	lb (kg)	8818 (4000)	8598 (3900)	7937 (3600)	7716 (3500)	7496 (3400)
Height at max capacity	in (mm)	98.4 (2500)	98.4 (2500)	98.4 (2500)	98.4 (2500)	98.4 (2500)

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