

Technical sheet :

# ME 425C US

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 **MANITOU**  
HANDLING YOUR WORLD

	Technical characteristics		Imperial
1.1	Manufacturer		Manitou
1.2	Model Name		ME 425C US
1.3	Power source		Electrical - Lead
1.4	Operator type		Seated
1.5	Max. capacity	Q	5512 lb
1.6	Load center of gravity	c	20 in
1.8	Load distance, centre of drive axle to fork	x	18 in
1.9	Wheelbase	y	58 in
	<b>Weight</b>		
2.1	Service weight		9480 lb
2.2	Weight on front axle (laden) / rear axle (laden)		13360 lb / 1631 lb
2.3	Weight on front axle (Unladen) / rear axle (Unladen)		4321 lb / 5159 lb
	<b>Wheels</b>		
3.1	Tires type		Solid tires
3.2	Dimensions of front wheels		23 x 9-10
3.3	Dimensions of rear wheels		18 x 7-8
3.5	Number of front wheels / rear wheels		2 / 2
3.5.2	Number of drive wheels		2
3.6	Front wheel gauge	b10	42 in
3.7	Rear wheel gauge	b11	38 in
	<b>Dimensions</b>		
4.7	Height of overhead guard (cabin)	h6	85 in
4.8	Seat height/stand height	h7	42 in
4.12	Height of towing bar (coupling height)	h10	12 in
4.19	Overall length	l1	137 in
4.20	Length to face of forks	l2	92 in
4.21	Overall width	b1	50 in
4.22	Forks section / width / length	s / e / l	5 in x 45 in x 2 in
4.23	Fork carriage ISO 2328 (class/form) A/B		2A
4.24	Fork carriage width	b3	41 in
4.31	Ground clearance below mast	m1	4 in
4.32	Ground clearance at centre of wheelbase	m2	5 in
4.33	Aisle Width for pallets 1000 x 1200 crossways	Ast	147 in
4.34	Aisle width for 800 x 1200 pallet lengthways	Ast	155 in
4.35	Turning radius	Wa	82 in
4.36	Internal turning radius (over tyres)	b13	29 in
	<b>Performances</b>		
5.1	Travel speed (laden / unladen)		9 mph-9 mph
5.2	Lifting speed (laden / unladen)		0.75 ft/s-1 ft/s
5.3	Lowering speed (laden / unladen)		1 ft/s-0.72 ft/s
5.5	Drawbar pull (Laden / Unladen)		1800 daN / 1700 daN
5.7	Gradeability (laden / unladen)		11 % / 12 %
5.10	Service brake		Hydraulic
	<b>Engine</b>		
6.1	Drive motor rating S2 60 min		11 kW
6.2	Lift motor rating at S3 15%		8.60 kW
6.3	Battery according to DIN 43531/35/36 A, B, C		DIN43531 B
6.4	Battery voltage / capacity		48 V / 700 Ah
6.6	Energy consumption according to VDI cycle (kWh/h)		5.80 kWh/h
	<b>Miscellaneous</b>		
8.1	Type of drive control		Electronic
8.2	Working hydraulic pressure for attachments		2538 PSI
8.3	Oil flow rate for attachments		9 US gpm
8.4	Measured/guaranteed mean noise level at the ear of the operator		< 72 dB
8.4	Sound level at the driver's ear according to DIN 12 053		72 dB

## ME 425C US - Dimensional drawing



# Characteristics of masts and residual capacities

Full Visibility Duplex (FVD)		FVD 27	FVD 30	FVD 33	FVD 36	FVD 40	FVD 43	FVD 45
α - Mast/fork carriage tilt, forward	°	5	5	5	5	5	5	5
β - Mast/fork carriage tilt, backward	°	6	10	10	10	10	6	6
h1 - Mast lowered height	in	73	78.9	85.4	90.7	100.6	107.5	111.4
h2 - Mast free lift	in	5.5	5.5	5.5	5.5	5.5	5.5	5.5
h3 - Mast lifting height	in	106.3	118.1	129.9	141.7	157.5	169.3	177.2
h4 - Mast extended height	in	131.9	143.7	156.7	167.3	183.1	195.7	202.8
Residual capacity at max height	lb	5512	5512	5512	5512	5512	5512	5401
Residual capacity with integrated side shift at max heigh	lb	5512	5512	5512	5512	5512	5401	5291
Residual capacity with hooked-on side shift at max heigh	lb	5512	5512	5512	5401	5291	5181	5071
Height at max capacity	in	106.3	118.1	129.9	141.7	157.5	169.3	177.2
Height at max capacity with integrated sideshift	in	106.3	118.1	129.9	141.7	157.5	157.5	157.5

Free Lift Duplex (FLD)		FLD 27	FLD 30	FLD 33	FLD 36	FLD 40
α - Mast/fork carriage tilt, forward	°	5	5	5	5	5
β - Mast/fork carriage tilt, backward	°	6	10	10	10	10
h1 - Mast lowered height	in	73.5	78	83.9	89.8	99.6
h2 - Mast free lift	in	49.2	53.1	59.1	65	74.8
h3 - Mast lifting height	in	106.3	118.1	129.9	141.7	157.5
h4 - Mast extended height	in	132.7	143.1	156.3	168.1	182.5
Residual capacity at max height	lb	5512	5512	5512	5512	5512
Residual capacity with integrated side shift at max heigh	lb	5512	5512	5512	5512	5512
Residual capacity with hooked-on side shift at max heigh	lb	5512	5512	5512	5401	5291
Height at max capacity	in	106.3	118.1	129.9	141.7	157.5
Height at max capacity with integrated sideshift	in	106.3	118.1	129.9	141.7	157.5

Free Lift Triplex (FLT)		FLT 40	FLT 43	FLT 45	FLT 48	FLT 50	FLT 55	FLT 60	FLT 65
α - Mast/fork carriage tilt, forward	°	5	5	5	5	5	3	3	3
β - Mast/fork carriage tilt, backward	°	6	6	6	6	6	6	6	6
h1 - Mast lowered height	in	75.8	79.7	82.5	86.4	89	95.5	104.1	111
h2 - Mast free lift	in	49.4	53.3	56.1	60	62.6	69.1	77.8	84.6
h3 - Mast lifting height	in	157.5	169.3	177.2	189	196.9	216.5	236.2	255.9
h4 - Mast extended height	in	184.3	196.1	205.9	215.7	223.6	203.9	263.4	282.7
Residual capacity at max height	lb	5512	5401	5181	4960	4740	4519	3638	2976
Residual capacity with integrated side shift at max heigh	lb	5401	5401	5071	4850	4630	4409	3527	2866
Residual capacity with hooked-on side shift at max heigh	lb	5181	5071	4960	4630	4519	4189	3307	2646
Height at max capacity	in	157.5	169.3	157.5	157.5	157.5	157.5	157.5	157.5
Height at max capacity with integrated sideshift	in	157.5	169.3	157.5	157.5	157.5	157.5	157.5	157.5



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