

Technical sheet :

ME 430 US



 **MANITOU**
HANDLING YOUR WORLD

Technical characteristics		Imperial	
1.1	Manufacturer		Manitou
1.2	Model Name		ME 430 US
1.3	Power source		Electrical
1.4	Operator type		Seated
1.5	Max. capacity	Q	6614 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	69 in
Weight			
2.1	Service weight		11574 lb
2.2	Weight on front axle (laden) / rear axle (laden)		16182 lb / 2161 lb
2.3	Weight on front axle (Unladen) / rear axle (Unladen)		5670 lb / 5684 lb
Wheels			
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
Dimensions			
4.7	Height of overhead guard (cabin)	h6	88 in
4.8	Seat height/stand height	h7	47 in
4.12	Height of towing bar (coupling height)	h10	25 in
4.19	Overall length	l1	144 in
4.20	Length to face of forks	l2	98 in
4.21	Overall width	b1	50 in
4.22	Forks section / width / length	s / e / l	2 in x 5 in x 45 in
4.23	Fork carriage ISO 2328 (class/form) A/B		3A
4.24	Fork carriage width	b3	43 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	159 in
4.34	Aisle width for 800 x 1200 pallet lengthways	Ast	167 in
4.35	Turning radius	Wa	94 in
4.36	Internal turning radius (over tyres)	b13	29 in
Performances			
5.1	Travel speed (laden / unladen)		12 mph-12 mph
5.2	Lifting speed (laden / unladen)		1 ft/s-2 ft/s
5.3	Lowering speed (laden / unladen)		2 ft/s-1 ft/s
5.5	Drawbar pull (Laden / Unladen)		1740 daN / 1680 daN
5.7	Gradeability (laden / unladen)		14 % / 20 %
5.10	Service brake		Oil bath
Engine			
6.1	Drive motor rating S2 60 min		18.50 kW
6.2	Lift motor rating at S3 15%		25.40 kW
6.3	Battery according to DIN 43531/35/36 A, B, C		DIN43536 A
6.4	Battery voltage / capacity		80 V / 700 Ah
6.6	Energy consumption according to VDI cycle (kWh/h)		11.50 kWh
Miscellaneous			
8.1	Type of drive control		Electronic
8.2	Working hydraulic pressure for attachments		3046 PSI
8.3	Oil flow rate for attachments		17 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 430 US - Dimensional drawing



Characteristics of masts and residual capacities

Full Visibility Duplex (FVD)	FVD 30	FVD 33	FVD 35	FVD 37	FVD 40	FVD 43	FVD 45	FVD 48	FVD 50
α - Mast/fork carriage tilt, forward	5	5	5	5	5	5	5	5	5
β - Mast/fork carriage tilt, backward	8	8	8	8	8	5	5	5	5
h1 - Mast lowered height	88	93.9	97.8	11.2	111.6	117.5	121.5	127.4	131.3
h2 - Mast free lift	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
h3 - Mast lifting height	118.1	129.9	137.8	145.7	157.5	169.3	177.2	189	196.9
h4 - Mast extended height	151.1	162.9	170.8	178.7	190.5	202.3	210.2	222	229.8
Residual capacity at max height	6614	6614	6614	6614	6614	6614	6614	6614	6614
Residual capacity with integrated side shift at max height	6614	6614	6614	6614	6614	6614	6614	6614	6614
Residual capacity with hooked-on side shift at max height	6614	6614	6614	6614	6614	6614	6504	6393	6173
Height at max capacity	118.1	129.9	137.8	145.7	157.5	169.3	177.2	189	196.9
Height at max capacity with integrated sideshift	118.1	129.9	137.8	145.7	157.5	169.3	177.2	189	196.9

Free Lift Duplex (FLD)	FLD 30	FLD 33	FLD 37	FLD 40
α - Mast/fork carriage tilt, forward	5	5	5	5
β - Mast/fork carriage tilt, backward	8	8	8	8
h1 - Mast lowered height	84.1	90	97.8	105.7
h2 - Mast free lift	50.2	56.1	64	71.9
h3 - Mast lifting height	118.1	129.9	145.7	157.5
h4 - Mast extended height	152	163.8	179.5	191.3
Residual capacity at max height	6614	6614	6614	6614
Residual capacity with integrated side shift at max height	6614	6614	6614	6614
Residual capacity with hooked-on side shift at max height	6614	6614	6614	6614
Height at max capacity	118.1	129.9	145.7	157.5
Height at max capacity with integrated sideshift	118.1	129.9	145.7	157.5

Free Lift Triplex (FLT)	FLT 40	FLT 43	FLT 48	FLT 50	FLT 55	FLT 60
α - Mast/fork carriage tilt, forward	5	5	5	5	5	5
β - Mast/fork carriage tilt, backward	5	5	5	5	5	5
h1 - Mast lowered height	80.1	84.1	90	93.9	101.8	111.6
h2 - Mast free lift	49.2	53.1	59.1	63	70.9	80.7
h3 - Mast lifting height	157.5	169.3	189	196.9	216.5	236.2
h4 - Mast extended height	188.4	200.2	219.9	227.8	247.4	267.1
Residual capacity at max height	6614	6614	6614	6614	6393	5952
Residual capacity with integrated side shift at max height	6614	6614	6614	6393	6173	5842
Residual capacity with hooked-on side shift at max height	6393	6393	6283	6063	5622	5401
Height at max capacity	157.5	169.3	189	196.9	157.5	157.5
Height at max capacity with integrated sideshift	157.5	169.3	189	157.5	157.5	157.5



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