

Technical sheet :

MI 80 D ST5



Technical characteristics			Metric	Imperial
1.1	Manufacturer		MANITOU	MANITOU
1.2	Model Name		MI 80 D ST5	MI 80 D ST5
1.3	Power source		Diesel	Diesel
1.4	Operator type		Seated	Seated
1.5	Max. capacity	Q	8000 kg	17637 lb
1.6	Load center of gravity	c	600 mm	24 in
1.8	Load distance, centre of drive axle to fork	x	714 mm	28 in
1.9	Wheelbase	y	2600 mm	102 in
	Standard mast reference of the machine		FVD 30	FVD 30
Weight				
2.1	Service weight		12540 kg	27646 lb
2.2	Weight on front axle (laden) / rear axle (laden)		18340 kg / 2200 kg	40433 lb / 4850 lb
2.3	Weight on front axle (Unladen) / rear axle (Unladen)		5180 kg / 7360 kg	11420 lb / 16226 lb
Wheels				
3.1	Tires type		Pneumatic	Pneumatic
3.2	Dimensions of front wheels		9.00-20-14PR	9.00-20-14PR
3.3	Dimensions of rear wheels		9.00-20-14PR	9.00-20-14PR
3.5	Number of front wheels / rear wheels		4 / 2	4 / 2
3.5.2	Number of drive wheels		4	4
3.6	Front wheel gauge	b10	1628 mm	64 in
3.7	Rear wheel gauge	b11	1700 mm	67 in
Dimensions				
4.8	Seat height/stand height	h7	1350 mm	53 in
4.7	Height of overhead guard (cabin)	h6	2580 mm	102 in
4.12	Height of towing bar (coupling height)	h10	505 mm	20 in
4.19	Overall length	l1	5524 mm	217 in
4.20	Length to face of forks	l2	4004 mm	158 in
4.21	Overall width	b1	2165 mm	85 in
4.21	Overall width - Twinned wheels	b1	2165 mm	85 in
4.22	Forks section / width / length	s / e / l	75 mm x 160 mm x 1520 mm	3 in x 6 in x 60 in
4.23	Fork carriage ISO 2328 (class/form) A/B		4A	4A
4.24	Fork carriage width	b3	2100 mm	83 in
4.31	Ground clearance below mast	m1	250 mm	10 in
4.32	Ground clearance at centre of wheelbase	m2	339 mm	13 in
4.33	Aisle Width for pallets 1000 x 1200 crossways	Ast	5644 mm	222 in
4.34	Aisle width for 800 x 1200 pallet lengthways	Ast	5844 mm	230 in
4.35	Turning radius	Wa	3730 mm	147 in
4.36	Internal turning radius (over tyres)	b13	1327 mm	52 in
Performances				
5.1	Travel speed (laden / unladen)		26 km/h-27 km/h	16 mph-17 mph
5.2	Lifting speed (laden / unladen)		0.38 m/s-0.40 m/s	1 ft/s-1 ft/s
5.3	Lowering speed (laden / unladen)		0.43 m/s-0.39 m/s	1 ft/s-1 ft/s
5.5	Drawbar pull (Laden / Unladen)		6500 daN / 4500 daN	6500 daN / 4500 daN
5.7	Gradeability (laden / unladen)		35 % / 35 %	35 % / 35 %
5.10	Service brake		Hydraulic	Hydraulic
Engine				
7.1	Engine brand / model / nom		Deutz / TCD 3.6 / Stage V	Deutz / TCD 3.6 / Stage V
7.2	Engine power (Hp / kW)		116 Hp/85 kW	116 Hp/85 kW
7.3	Rated speed		2200 rpm	2200 rpm
7.4	Number of cylinders / Capacity of cylinders		4 - 3600 cm³	4 - 220 in³
Miscellaneous				
8.2	Working hydraulic pressure for attachments		195 bar	2828 PSI
8.3	Oil flow rate for attachments		55 l/min	15 US gpm
8.4	Measured/guaranteed mean noise level at the ear of the operator		< 84 dB	< 84 dB

MI 80 D ST5 - Dimensional drawing



Characteristics of masts and residual capacities

Full Visibility Duplex (FVD)		FVD 30	FVD 33	FVD 36	FVD 40	FVD 45	FVD 50
α - Mast/fork carriage tilt, forward	°	6.20	6.20	6.20	6.20	6.20	6.20
β - Mast/fork carriage tilt, backward	°	12.20	12.20	12.20	12.20	6.20	6.20
h1 - Mast lowered height	in (mm)	106.3 (2700)	112.2 (2850)	118.1 (3000)	126 (3200)	137.8 (3500)	147.6 (3750)
h2 - Mast free lift	in (mm)	7.9 (200)	7.9 (200)	7.9 (200)	7.9 (200)	7.9 (200)	7.9 (200)
h3 - Mast lifting height	in (mm)	118.1 (3000)	129.9 (3300)	141.7 (3600)	157.5 (4000)	177.2 (4500)	196.9 (5000)
h4 - Mast extended height	in (mm)	165.7 (4210)	177.6 (4510)	189.4 (4810)	205.1 (5210)	224.8 (5710)	244.5 (6210)
Residual capacity at max height	lb (kg)	17637 (8000)	17637 (8000)	17637 (8000)	17637 (8000)	17637 (8000)	17637 (8000)
Height at max capacity	in (mm)	118.1 (3000)	129.9 (3300)	141.7 (3600)	157.5 (4000)	177.2 (4500)	196.9 (5000)
Height at max capacity with integrated sideshift	in (mm)	118.1 (3000)	129.9 (3300)	141.7 (3600)	157.5 (4000)	177.2 (4500)	196.9 (5000)

Free Lift Triplex (FLT)		FLT 45	FLT 48	FLT 50	FLT 55	FLT 60
α - Mast/fork carriage tilt, forward	°	6.20	6.20	6.20	3.20	3.20
β - Mast/fork carriage tilt, backward	°	6.20	6.20	6.20	6.20	6.20
h1 - Mast lowered height	in (mm)	108.3 (2750)	112.2 (2850)	116.1 (2950)	122 (3100)	128 (3250)
h2 - Mast free lift	in (mm)	58.5 (1485)	62.4 (1585)	63 (1600)	70.9 (1800)	78.1 (1985)
h3 - Mast lifting height	in (mm)	177.2 (4500)	189 (4800)	196.9 (5000)	216.5 (5500)	236.2 (6000)
h4 - Mast extended height	in (mm)	227.4 (5775)	239.2 (6075)	250.4 (6360)	268.1 (6810)	286.4 (7275)
Residual capacity at max height	lb (kg)	15432 (7000)	15432 (7000)	14330 (6500)	13448 (6100)	12346 (5600)
Height at max capacity	in (mm)	177.2 (4500)	189 (4800)	196.9 (5000)	216.5 (5500)	236.2 (6000)
Height at max capacity with integrated sideshift	in (mm)	177.2 (4500)	189 (4800)	196.9 (5000)	216.5 (5500)	236.2 (6000)



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