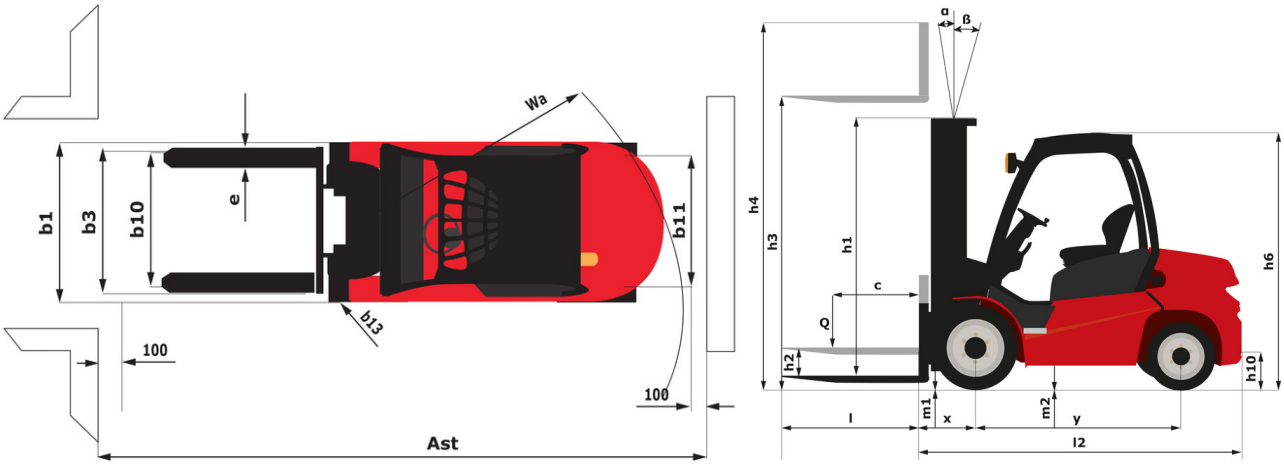
Technical sheet :

MI 20 G ST5

MANITOU
HANDLING YOUR WORLD

	Technical characteristics		Metric	Imperial
1.1	Manufacturer		MANITOU	MANITOU
1.2	Model Name		MI 20 G ST5	MI 20 G ST5
1.3	Power source		Lpg	Lpg
1.4	Operator type		Seated	Seated
1.5	Max. capacity	Q	2000 kg	4409 lb
1.6	Load center of gravity	c	500 mm	20 in
1.8	Load distance, centre of drive axle to fork	x	465 mm	18 in
1.9	Wheelbase	y	1600 mm	63 in
	Weight			
2.1	Service weight		3620 kg	7981 lb
2.2	Weight on front axle (laden) / rear axle (laden)		4930 kg / 690 kg	10869 lb / 1521 lb
2.3	Weight on front axle (Unladen) / rear axle (Unladen)		1720 kg / 1900 kg	3792 lb / 4189 lb
	Wheels			
3.1	Tires type		Super Elastic	Super Elastic
3.2	Dimensions of front wheels		7.00-12 12	7.00-12 12
3.3	Dimensions of rear wheels		6.00-9 10	6.00-9 10
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	965 mm	38 in
3.7	Rear wheel gauge	b11	973 mm	38 in
	Dimensions			
4.7	Height of overhead guard (cabin)	h6	2115 mm	83 in
4.8	Seat height/stand height	h7	1190 mm	47 in
4.12	Height of towing bar (coupling height)	h10	355 mm	14 in
4.19	Overall length	l1	3615 mm	142 in
4.20	Length to face of forks	l2	2465 mm	97 in
4.21	Overall width	b1	1155 mm	45 in
4.21	Overall width - Single wheels	b1	1155 mm	45 in
4.21	Overall width - Twinned wheels	b1	1595 mm	63 in
4.22	Forks section / width / length	s / e / l	40 mm x 122 mm x 1150 mm	2 in x 5 in x 45 in
4.23	Fork carriage ISO 2328 (class/form) A/B		2A	2A
4.24	Fork carriage width	b3	1038 mm	41 in
4.31	Ground clearance below mast	m1	115 mm	5 in
4.32	Ground clearance at centre of wheelbase	m2	175 mm	7 in
4.33	Aisle Width for pallets 1000 x 1200 crossways	Ast	3865 mm	152 in
4.34	Aisle width for 800 x 1200 pallet lengthways	Ast	4065 mm	160 in
4.35	Turning radius	Wa	2200 mm	87 in
4.36	Internal turning radius (over tyres)	b13	145 mm	6 in
	Performances			
5.1	Travel speed (laden / unladen)		18.80 km/h-19.40 km/h	12 mph-12 mph
5.2	Lifting speed (laden / unladen)		0.55 m/s-0.64 m/s	2 ft/s-2 ft/s
5.3	Lowering speed (laden / unladen)		0.48 m/s-0.50 m/s	2 ft/s-2 ft/s
5.5	Drawbar pull (Laden / Unladen)		1940 daN / 1040 daN	1940 daN / 1040 daN
5.7	Gradeability (laden / unladen)		20 % / 20 %	20 % / 20 %
5.10	Service brake		Hydraulic	Hydraulic
	Engine			
7.1	Engine brand / model		GCT (ex-Nissan) / GK25 LPG	GCT (ex-Nissan) / GK25 LPG
7.2	Engine power according to ISO 1585		43.40 kW	43.40 kW
7.3	Rated speed		2700 rpm	2700 rpm
7.4	Number of cylinders / Capacity of cylinders		4 - 2488 cm³	4 - 152 in³
	Miscellaneous			
8.2	Working hydraulic pressure for attachments		160 bar	2321 PSI
8.3	Oil flow rate for attachments		35 l/min	9 US gpm
8.4	Measured/guaranteed mean noise level at the ear of the operator		< 80 dB	< 80 dB

MI 20 G ST5 - Dimensional drawing



Characteristics of masts and residual capacities

Full Visibility Duplex (FVD)		FVD 33	FVD 37	FVD 40
Mast/fork carriage tilt, forward	°	6	6	6
Mast/fork carriage tilt, backward	°	12	12	12
h1 - Mast lowered height	in (mm)	86 (2185)	95.9 (2435)	103.7 (2635)
h2 - Mast free lift	in (mm)	5.5 (140)	5.5 (140)	5.5 (140)
h3 - Mast lifting height	in (mm)	129.9 (3300)	145.7 (3700)	157.5 (4000)
h4 - Mast extended height	in (mm)	155.9 (3960)	171.7 (4360)	183.5 (4660)
Residual capacity at max height	lb (kg)	4409 (2000)	4409 (2000)	4409 (2000)
Residual capacity with integrated side shift at max heigth	lb (kg)	4409 (2000)	4409 (2000)	4409 (2000)
Height at max capacity	in (mm)	129.9 (3300)	145.7 (3700)	157.5 (4000)
Height at max capacity with integrated sideshift	in (mm)	129.9 (3300)	145.7 (3700)	157.5 (4000)

Free Lift Duplex (FLD)		FLD 33	FLD 37	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 (2160)	92.9 (2360)	100.8 (2560)
h2 - Mast free lift	in (mm)	58.3 (1480)	66.1 (1680)	74 (1880)
h3 - Mast lifting height	in (mm)	129.9 (3300)	145.7 (3700)	157.5 (4000)
h4 - Mast extended height	in (mm)	156.7 (3980)	170.5 (4330)	184.3 (4680)
Residual capacity at max height	lb (kg)	4409 (2000)	4409 (2000)	4409 (2000)
Residual capacity with integrated side shift at max heigth	lb (kg)	4409 (2000)	4409 (2000)	4409 (2000)
Height at max capacity	in (mm)	129.9 (3300)	145.7 (3700)	157.5 (4000)
Height at max capacity with integrated sideshift	in (mm)	129.9 (3300)	145.7 (3700)	157.5 (4000)

Free Lift Triplex (FLT)		FLT 43	FLT 45	FLT 47	FLT 48	FLT 50	FLT 55	FLT 60	FLT 65
Mast/fork carriage tilt, forward	°	6	6	6	6	6	3	3	3
Mast/fork carriage tilt, backward	°	6	6	6	6	6	6	6	6
h1 - Mast lowered height	in (mm)	82.7 (2100)	84.6 (2150)	86.6 (2200)	88.6 (2250)	90.6 (2300)	98.4 (2500)	108.3 (2750)	114.2 (2900)
h2 - Mast free lift	in (mm)	55.1 (1400)	57.9 (1470)	59.8 (1520)	61.8 (1570)	63.8 (1620)	71.7 (1820)	81.5 (2070)	86.6 (2200)
h3 - Mast lifting height	in (mm)	169.3 (4300)	177.2 (4500)	185 (4700)	189 (4800)	196.9 (5000)	216.5 (5500)	236.2 (6000)	255.9 (6500)
h4 - Mast extended height	in (mm)	196.9 (5000)	205.9 (5230)	211.8 (5380)	215.7 (5480)	223.6 (5680)	243.3 (6180)	265 (6730)	283.5 (7200)
Residual capacity at max height	lb (kg)	4079 (1850)	3968 (1800)	3858 (1750)	3858 (1750)	3748 (1700)	2866 (1300)	1984 (900)	1764 (800)
Residual capacity with integrated side shift at max heigth	lb (kg)	3858 (1750)	3748 (1700)	3638 (1650)	3638 (1650)	3527 (1600)	2646 (1200)	1764 (800)	1543 (700)
Height at max capacity	in (mm)	98.4 (2500)	98.4 (2500)	98.4 (2500)	98.4 (2500)	98.4 (2500)	98.4 (2500)	98.4 (2500)	98.4 (2500)

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