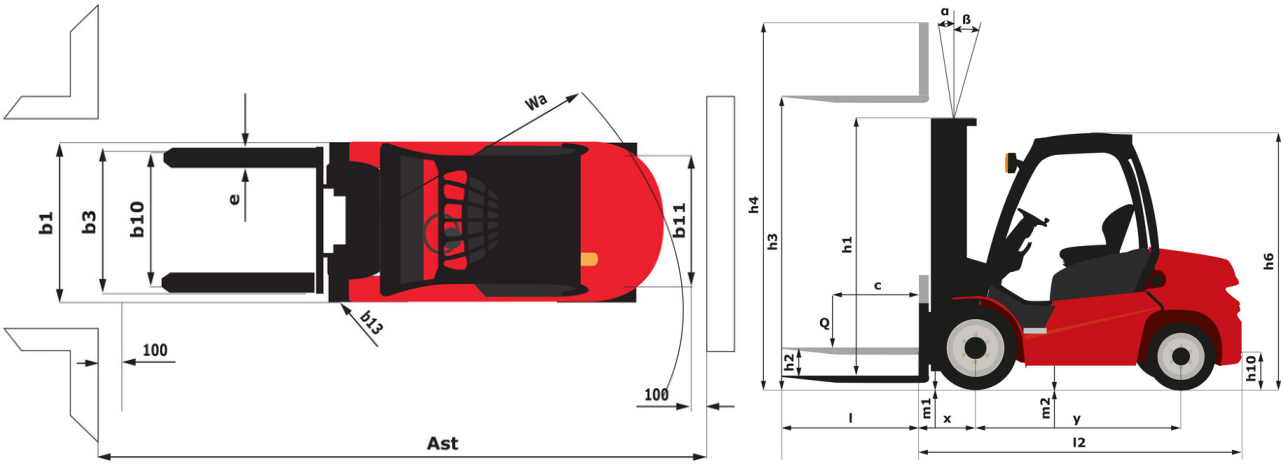
Technical sheet :

MI 20 D ST5

MANITOU
HANDLING YOUR WORLD

	Technical characteristics		Metric
1.1	Manufacturer		MANITOU
1.2	Model Name		MI 20 D ST5
1.3	Power source		Diesel
1.4	Operator type		Seated
1.5	Max. capacity	Q	2000 kg
1.6	Load center of gravity	c	500 mm
1.8	Load distance, centre of drive axle to fork	x	465 mm
1.9	Wheelbase	y	1600 mm
	Weight		
2.1	Service weight		3725 kg
2.2	Weight on front axle (laden) / rear axle (laden)		5005 kg / 720 kg
2.3	Weight on front axle (Unladen) / rear axle (Unladen)		1765 kg / 1960 kg
	Wheels		
3.1	Tires type		Solid tires
3.2	Dimensions of front wheels		7.00-12 12
3.3	Dimensions of rear wheels		6.00-9 10
3.5	Number of front wheels / rear wheels		2 / 2
3.5.2	Number of drive wheels		2
3.6	Front wheel gauge	b10	965 mm
3.7	Rear wheel gauge	b11	973 mm
	Dimensions		
4.7	Height of overhead guard (cabin)	h6	2115 mm
4.8	Seat height/stand height	h7	1190 mm
4.12	Height of towing bar (coupling height)	h10	355 mm
4.19	Overall length	l1	3615 mm
4.20	Length to face of forks	l2	2465 mm
4.21	Overall width	b1	1155 mm
4.21	Overall width - Single wheels	b1	1155 mm
4.21	Overall width - Twinned wheels	b1	1595 mm
4.22	Forks section / width / length	s / e / l	40 mm x 122 mm x 1150 mm
4.23	Fork carriage ISO 2328 (class/form) A/B		2A
4.24	Fork carriage width	b3	1038 mm
4.31	Ground clearance below mast	m1	115 mm
4.32	Ground clearance at centre of wheelbase	m2	175 mm
4.33	Aisle Width for pallets 1000 x 1200 crossways	Ast	3865 mm
4.34	Aisle width for 800 x 1200 pallet lengthways	Ast	4065 mm
4.35	Turning radius	Wa	2200 mm
4.36	Internal turning radius (over tyres)	b13	145 mm
	Performances		
5.1	Travel speed (laden / unladen)		18 km/h-18.50 km/h
5.2	Lifting speed (laden / unladen)		0.60 m/s-0.65 m/s
5.3	Lowering speed (laden / unladen)		0.48 m/s-0.55 m/s
5.5	Drawbar pull (Laden / Unladen)		1800 daN / 1230 daN
5.7	Gradeability (laden / unladen)		20 % / 20 %
5.10	Service brake		Hydraulic
	Engine		
7.1	Engine brand / model / norm		Kubota / V2607-CR-E5B / Stage V
7.2	Engine power (Hp / kW)		51 Hp/37.40 kW
7.3	Rated speed		2400 rpm
7.4	Number of cylinders / Capacity of cylinders		4 - 2615 cm³
	Miscellaneous		
8.2	Working hydraulic pressure for attachments		160 bar
8.3	Oil flow rate for attachments		35 l/min
8.4	Measured/guaranteed mean noise level at the ear of the operator		< 84 dB

MI 20 D ST5 - Dimensional drawing



Characteristics of masts and residual capacities

Full Visibility Duplex (FVD)		FVD 37	FVD 40
α - Mast/fork carriage tilt, forward	°	6	6
β - Mast/fork carriage tilt, backward	°	12	12
h1 - Mast lowered height	mm	2435	2635
h2 - Mast free lift	mm	140	140
h3 - Mast lifting height	mm	3700	4000
h4 - Mast extended height	mm	4360	4660
Residual capacity at max height	kg	2000	2000
Residual capacity with integrated side shift at max heigth	kg	2000	2000
Height at max capacity	mm	3700	4000
Height at max capacity with integrated sideshift	mm	3700	4000

Free Lift Duplex (FLD)		FLD 33	FLD 37	FLD 40	FLT 60	FVD 33
α - Mast/fork carriage tilt, forward	°	6	6	6	3	6
β - Mast/fork carriage tilt, backward	°	12	12	12	6	12
h1 - Mast lowered height	mm	2160	2360	2560	2750	2185
h2 - Mast free lift	mm	1480	1680	1880	2070	140
h3 - Mast lifting height	mm	3300	3700	4000	6000	3300
h4 - Mast extended height	mm	3980	4330	4680	6730	3960
Residual capacity at max height	kg	2000	2000	2000	900	2000
Residual capacity with integrated side shift at max heigth	kg	2000	2000	2000	800	2000
Height at max capacity	mm	3300	3700	4000	2500	3300
Height at max capacity with integrated sideshift	mm	3300	3700	4000		3300

Free Lift Triplex (FLT)		FLT 43	FLT 45	FLT 47	FLT 48	FLT 50	FLT 55	FLT 65
α - Mast/fork carriage tilt, forward	°	6	6	6	6	6	3	3
β - Mast/fork carriage tilt, backward	°	6	6	6	6	6	6	6
h1 - Mast lowered height	mm	2100	2150	2200	2250	2300	2500	2900
h2 - Mast free lift	mm	1400	1470	1520	1570	1620	1820	2200
h3 - Mast lifting height	mm	4300	4500	4700	4800	5000	5500	6500
h4 - Mast extended height	mm	5000	5230	5380	5480	5680	6180	7200
Residual capacity at max height	kg	1850	1800	1750	1750	1700	1300	800
Residual capacity with integrated side shift at max heigth	kg	1750	1700	1650	1650	1600	1200	700
Height at max capacity	mm	2500	2500	2500	2500	2500	2500	2500

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