

Technical sheet :

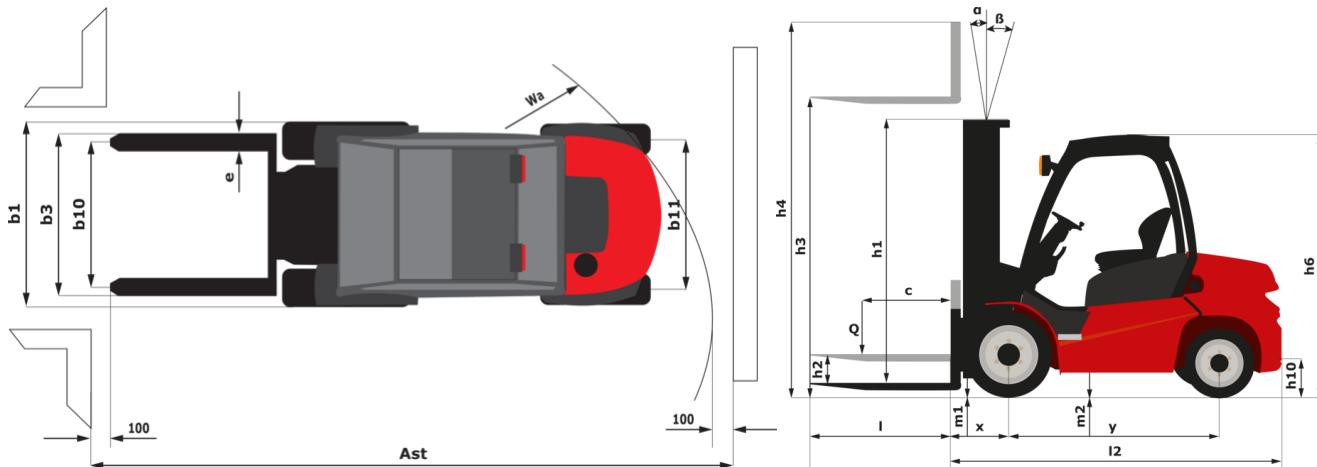
MSI 50 ST5



 **MANITOU**
HANDLING YOUR WORLD

Technical characteristics		Imperial	
1.1	Manufacturer	MANITOU	
1.2	Model Name	MSI 50 ST5	
1.3	Power source	Diesel	
1.4	Operator type	Seated	
1.5	Max. capacity	11023 lb	
1.6	Load center of gravity	24 in	
1.8	Load distance, centre of drive axle to fork	28 in	
1.9	Wheelbase	82 in	
	Standard mast reference of the machine	FVD 37	
Weight		Weight	
2.1	Service weight	18563 lb	
2.2	Weight on front axle (laden) / rear axle (laden)	25287 lb / 3660 lb	
2.3	Weight on front axle (Unladen) / rear axle (Unladen)	7694 lb / 10626 lb	
Wheels		Wheels	
3.1	Tires type	Pneumatic	
3.2	Dimensions of front wheels	315/70 R22,5 KMAX S	
3.3	Dimensions of rear wheels	225/75 R15 XZM	
3.5	Number of front wheels / rear wheels	2 / 2	
3.5.2	Number of drive wheels	2	
3.6	Front wheel gauge	56 in	
3.7	Rear wheel gauge	45 in	
Dimensions		Dimensions	
4.8	Seat height/stand height	56 in	
4.7	Height of overhead guard (cabin)	96 in	
4.12	Height of towing bar (coupling height)	24 in	
4.19	Overall length	180 in	
4.20	Length to face of forks	133 in	
4.21	Overall width	68 in	
4.22	Forks section / width / length	2 in x 6 in x 47 in	
4.23	Fork carriage ISO 2328 (class/form) A/B	4A	
4.24	Fork carriage width	66 in	
4.31	Ground clearance below mast	7 in	
4.32	Ground clearance at centre of wheelbase	9 in	
4.33	Aisle Width for pallets 1000 x 1200 crossways	206 in	
4.35	Turning radius	116 in	
Performances		Performances	
5.1	Travel speed (laden / unladen)	12 mph-12 mph	
5.2	Lifting speed (laden / unladen)	1 ft/s-1 ft/s	
5.3	Lowering speed (laden / unladen)	2 ft/s-1 ft/s	
5.5	Drawbar pull (Laden / Unladen)	3393 daN / 2471 daN	
5.7	Gradeability (laden / unladen)	32 % / 29 %	
5.10	Service brake	Hydraulic	
	Transmission type	Hydrostatic	
Engine		Engine	
7.1	Engine brand / model / norm	Deutz / TCD 2,9L / Stage V	
7.2	Engine power (Hp / kW)	75 Hp/55 kW	
7.3	Rated speed	2200 rpm	
7.4	Number of cylinders / Capacity of cylinders	4 - 177 in ³	
Miscellaneous		Miscellaneous	
8.1	Type of drive control	Electronic	
8.2	Working hydraulic pressure for attachments	3336 PSI	
8.3	Oil flow rate for attachments	12 US gpm	
8.4	Sound level at the driver's ear according to DIN 12 053	81 dB	

MSI 50 ST5 - Dimensional drawing



Characteristics of masts and residual capacities

Full Visibility Duplex (FVD)	FVD 30	FVD 33	FVD 35	FVD 37	FVD 40	FVD 45	FVD 50
α - Mast/fork carriage tilt, forward	°	10	10	10	10	10	10
β - Mast/fork carriage tilt, backward	°	12	12	12	12	12	12
h1 - Mast lowered height	in	95.5	101.4	105.3	109.3	115.2	125
h3 - Mast lifting height	in	118.1	129.9	137.8	145.7	157.5	177.2
h4 - Mast extended height	in	156.4	168.2	176.1	183.9	195.7	215.4
Residual capacity at max height	lb	11023	11023	11023	11023	11023	11023
Residual capacity with hooked-on side shift at max height	lb	11023	11023	11023	11023	11023	11023
Height at max capacity	in	118.1	129.9	137.8	145.7	157.5	177.2
Height at max capacity with hooked-on sideshift	in	118.1	129.9	137.8	145.7	157.5	177.2

Free Lift Triplex (FLT)	FLT 37	FLT 40	FLT 43	FLT 45	FLT 47	FLT 50	FLT 55	FLT 60
α - Mast/fork carriage tilt, forward	°	10	10	10	10	10	10	10
β - Mast/fork carriage tilt, backward	°	12	12	12	12	12	12	12
h1 - Mast lowered height	in	85.6	89.6	93.5	96.5	98.8	103.3	109.3
h2 - Mast free lift	in	49.5	53.5	57.4	60.4	62.7	67.2	73.1
h3 - Mast lifting height	in	145.7	157.5	169.3	177.2	185	196.9	216.5
h4 - Mast extended height	in	183.9	195.7	207.6	215.4	223.3	235.1	274.5
Residual capacity at max height	lb	11023	11023	11023	11023			9480
Residual capacity with hooked-on side shift at max height	lb	11023	11023	11023	11023			
Height at max capacity	in	145.7	157.5	169.3	177.2	98.4	98.4	98.4
Height at max capacity with hooked-on sideshift	in	145.7	157.5	169.3	177.2			



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