

Technical sheet :

# **MSI 35 ST5**

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 **MANITOU**  
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Technical characteristics			Metric
1.1	Manufacturer		Manitou
1.2	Model Name		MSI 35 ST5
1.3	Power source		Diesel
1.4	Operator type		Seated
1.5	Max. capacity	Q	3500 kg
1.6	Load center of gravity	c	500 mm
1.8	Load distance, centre of drive axle to fork	x	631 mm
1.9	Wheelbase	y	1900 mm
	Standard mast reference of the machine		FVD 33
Weight			
2.1	Service weight		4780 kg
2.2	Weight on front axle (laden) / rear axle (laden)		7350 kg / 850 kg
2.3	Weight on front axle (Unladen) / rear axle (Unladen)		1710 kg / 3070 kg
Wheels			
3.1	Tires type		Pneumatic
3.2	Dimensions of front wheels		300-15/18 6T P43
3.3	Dimensions of rear wheels		7.00-12/12 ED PLUS
3.5	Number of front wheels / rear wheels		2 / 2
3.5.2	Number of drive wheels		2
3.6	Front wheel gauge	b10	1044 mm
3.7	Rear wheel gauge	b11	1108 mm
Dimensions			
4.7	Height of overhead guard (cabin)	h6	2095 mm
4.8	Seat height/stand height	h7	972 mm
4.19	Overall length	l1	4289 mm
4.20	Length to face of forks	l2	3139 mm
4.21	Overall width	b1	1330 mm
4.22	Forks section / width / length	s / e / l	45 mm x 125 mm x 1200 mm
4.23	Fork carriage ISO 2328 (class/form) A/B		3A
4.24	Fork carriage width	b3	1260 mm
4.31	Ground clearance below mast	m1	260 mm
4.32	Ground clearance at centre of wheelbase	m2	238 mm
4.33	Aisle Width for pallets 1000 x 1200 crossways	Ast	4711 mm
4.35	Turning radius	Wa	2680 m
Performances			
5.1	Travel speed (laden / unladen)		21 km/h-21 km/h
5.2	Lifting speed (laden / unladen)		0.50 m/s-0.50 m/s
5.3	Lowering speed (laden / unladen)		0.50 m/s-0.30 m/s
5.5	Drawbar pull (Laden)		1900 daN
5.7	Gradeability (laden)		24 %
5.10	Service brake		Hydraulic brakes by loss of pressure
Engine			
7.1	Engine brand / model		Kubota / D1803 CRT E5B
7.2	I.C. Engine power rating		37 kW
7.3	Rated speed		2700 rpm
7.4	Number of cylinders / Capacity of cylinders		3 - 1826 cm³
Miscellaneous			
8.1	Type of drive control		Electronic
8.2	Working hydraulic pressure for attachments		230 bar
8.3	Oil flow rate for attachments		45 l/min
8.4	Sound level at the driver's ear according to DIN 12 053		81 dB

MSI 35 ST5 - Dimensional drawing



## Characteristics of masts and residual capacities

Full Visibility Duplex (FVD)		FVD 30	FVD 33	FVD 37	FVD 40	FVD 45
α - Mast/fork carriage tilt, forward	°	12	12	12	12	12
β - Mast/fork carriage tilt, backward	°	10	10	10	10	10
h1 - Mast lowered height	mm	2136	2286	2546	2736	2986
h2 - Mast free lift	mm	90	90	90	90	90
h3 - Mast lifting height	mm	3000	3300	3700	4000	4500
h4 - Mast extended height	mm	3738	4038	4438	4738	5238
Residual capacity at max height	kg	3500	3500	3500	3500	3500
Residual capacity with hooked-on side shift at max height	kg	3500	3500	3500	3500	3500
Height at max capacity	mm	3000	3300	3700	4000	4500
Height at max capacity with hooked-on sideshift	mm	3000	3300	3700	4000	4500

Free Lift Triplex (FLT)		FLT 34	FLT 37	FLT 40	FLT 43	FLT 47	FLT 55	FLT 60
α - Mast/fork carriage tilt, forward	°	12	12	12	12	12	6	6
β - Mast/fork carriage tilt, backward	°	10	10	10	10	10	6	6
h1 - Mast lowered height	mm	1936	2036	2136	2286	2386	2736	2986
h2 - Mast free lift	mm	1208	1308	1408	1558	1658	2008	2258
h3 - Mast lifting height	mm	3400	3700	4000	4300	4700	5500	6000
h4 - Mast extended height	mm	4184	4484	4784	5084	5484	6284	6784
Residual capacity at max height	kg	3500	3500	3500	2600	1800		
Residual capacity with hooked-on side shift at max height	kg	3500	3500	3500	3200	1800		
Height at max capacity	mm	3400	3700	4000	4000	3500	2500	2500
Height at max capacity with hooked-on sideshift	mm	3400	3700	4000	4000	3500		



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