

Technical sheet :

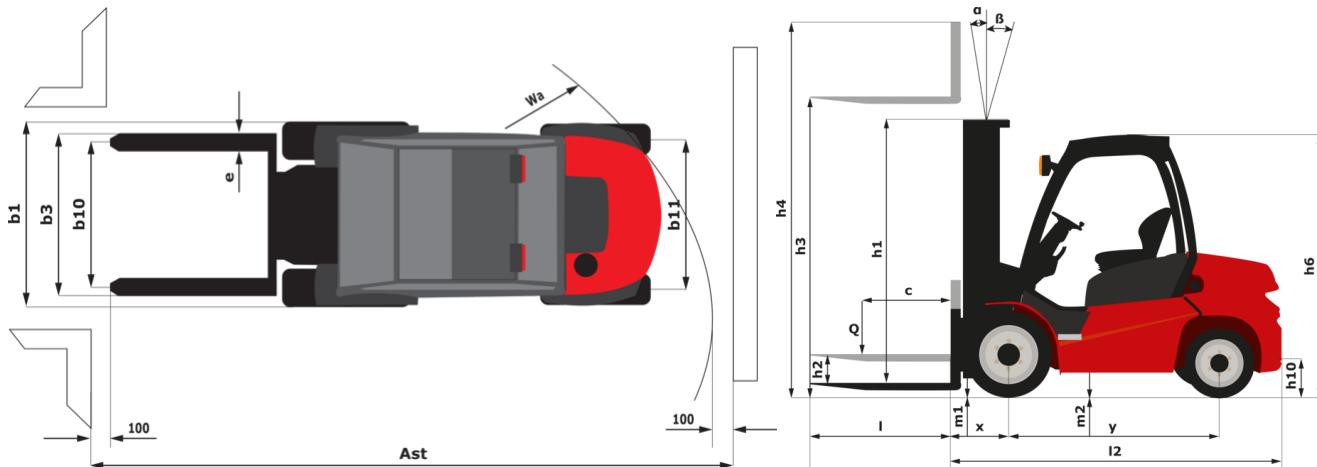
# MSI 50 ST5



 **MANITOU**  
HANDLING YOUR WORLD

Technical characteristics		Metric	
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	5000 kg	
1.6	Load center of gravity	600 mm	
1.8	Load distance, centre of drive axle to fork	701 mm	
1.9	Wheelbase	2075 mm	
	Standard mast reference of the machine	FVD 37	
Weight		Weight	
2.1	Service weight	8420 kg	
2.2	Weight on front axle (laden) / rear axle (laden)	11470 kg / 1660 kg	
2.3	Weight on front axle (Unladen) / rear axle (Unladen)	3490 kg / 4820 kg	
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	1420 mm	
3.7	Rear wheel gauge	1142 mm	
Dimensions		Dimensions	
4.8	Seat height/stand height	1435 mm	
4.7	Height of overhead guard (cabin)	2440 mm	
4.12	Height of towing bar (coupling height)	605 mm	
4.19	Overall length	4584 mm	
4.20	Length to face of forks	3384 mm	
4.21	Overall width	1732 mm	
4.22	Forks section / width / length	60 mm x 150 mm x 1200 mm	
4.23	Fork carriage ISO 2328 (class/form) A/B	4A	
4.24	Fork carriage width	1670 mm	
4.31	Ground clearance below mast	185 mm	
4.32	Ground clearance at centre of wheelbase	220 mm	
4.33	Aisle Width for pallets 1000 x 1200 crossways	5241 mm	
4.35	Turning radius	2950 mm	
Performances		Performances	
5.1	Travel speed (laden / unladen)	20 km/h-20 km/h	
5.2	Lifting speed (laden / unladen)	0.37 m/s-0.39 m/s	
5.3	Lowering speed (laden / unladen)	0.48 m/s-0.34 m/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 - 2900 cm <sup>3</sup>	
Miscellaneous		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 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	10
β - Mast/fork carriage tilt, backward °	12	12	12	12	12	12	12
h1 - Mast lowered height mm	2425	2575	2675	2775	2925	3175	3425
h3 - Mast lifting height mm	3000	3300	3500	3700	4000	4500	5000
h4 - Mast extended height mm	3972	4272	4472	4672	4972	5472	5972
Residual capacity at max height kg	5000	5000	5000	5000	5000	5000	5000
Residual capacity with hooked-on side shift at max height kg	5000	5000	5000	5000	5000	5000	5000
Height at max capacity mm	3000	3300	3500	3700	4000	4500	5000
Height at max capacity with hooked-on sideshift mm	3000	3300	3500	3700	4000	4500	5000

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	10
β - Mast/fork carriage tilt, backward °	12	12	12	12	12	12	12	12
h1 - Mast lowered height mm	2175	2275	2375	2450	2510	2625	2775	2950
h2 - Mast free lift mm	1258	1358	1458	1533	1593	1708	1858	2033
h3 - Mast lifting height mm	3700	4000	4300	4500	4700	5000	5500	6000
h4 - Mast extended height mm	4672	4972	5272	5472	5672	5972	6472	6972
Residual capacity at max height kg	5000	5000	5000	5000	5000	5000	5000	4300
Residual capacity with hooked-on side shift at max height kg	5000	5000	5000	5000	5000	5000	5000	5000
Height at max capacity mm	3700	4000	4300	4500	2500	2500	2500	2500
Height at max capacity with hooked-on sideshift mm	3700	4000	4300	4500	2500	2500	2500	2500



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