# Semi-industrial trucks

# **MSI 40 H MSI 50 H**

- Rated capacity: 4,000 and 5,000 kg
- Hydrostatic transmission
- Joystick with built-in reverse control
- Enclosed cab





## MSI 40/50 H: Easily ma

The MSI is a compact truck featuring large-diameter wheels and high ground clearance that provide it with an excellent ability to ride over obstacles and outstanding manoeuvrability for both warehouse and yard operations.

The MSI can easily access every corner of your yard, whether hard or soft standing, thereby utilising every square metre of storage space.



The low-pressure tyres absorb the shock of driving over obstacles and give perfect grip on slippery surfaces. In addition, the front axle is fitted with a differential lock as standard.



### noeuvrable both indoors and outdoors



• A broader range of application

The lateral stability of the MSI, optimised by the track width to wheelbase ratio, makes it possible to handle long loads or several pallets at a time in complete safety.

More stable than a conventional forklift, the MSI can handle a bigger load, thus reducing the number of trips.



In aisles, its compactness and very tight turning circle due to a steering axle with built-in cylinder provides incredible manoeuvrability.

### MSI 40/50 H : Co

### **Perfect ergonomics**

Every detail of the cab has been ergonomically designed to reduce operator fatigue and improve productivity.

The main lever combines all controls: up, down, tilt, and reverse.

This mean the driver can carry out all handling operations while keeping one hand on the steering wheel at all times.



Cycle times are reduced by the increased speed of hydraulic movements.

The cab of the MSI is remarkably spacious and has wide windows.

Depending on the weather, the operator can work with the door open or closed. In the open position, the door still falls within the counter balance width. In addition, the right-hand window can be opened completely or left ajar.



### mfortable and safe



### **Visibly safer**

The cab is easy, quick and safe to access. Once seated, the operator enjoys all-round visibility throughout.

> Full visibility of the forks on the ground when picking up pallets and through the mast when loading.

- All-round visibility putting the operator in full control to reduce the risk of accidents.



 The full-view roof window optimizes upward field of vision.



The operator has a total command of all his manoeuvres and stays aware of his surroundings.

The MSI offers optimum safety conditions for materials handling.

# MSI 40/50 H : Sim



### olified maintenance

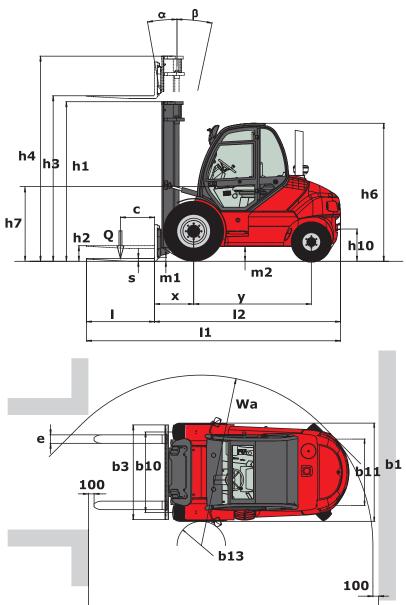


			_		
Description	1.1	Manufacturer		MANITOU	MANITOU
	1.2	Type of model		MSI 40 H	MSI 50 H
	1.3	Power source: battery, diesel, petrol, LPG, mains		Diesel	Diesel
ript	1.4	Driving position: manual, walking alongside, standing, seated		Seated	Seated
esci	1.5	Rated capacity load / Load on forks (basic capacity)	Q (t)	4	5
۵	1.6	Centre of gravity of the load	c (mm)	500	600
	1.8	Distance from load bearing surface to centre of front axle	x (mm)	691	701
l	1.9	Wheelbase	y (mm)	2075	2075
	2.1	Kerb weight of truck	kg	7075	8200
Weight	2.2	Front axle load laden	kg	9695	11510
	2.2.1	Rear axle load laden	kg	1380	1690
×	2.3	Front axle load unladen	kg	3400	3380
	2.3.1	Rear axle load unladen	kg	3675	4820
	3.1	Tyre equipment: bandage(V), superelastic(SE), pneumatic(L)	j	L	L
ge	3.2	Size of front wheels	" or mm	315/70 R22,5	315/70 R22,5
Running carriage	3.3	Size of rear wheels	" or mm	225/75 R15	225/75 R15
Ca	3.5	Number of front wheels (x = drive wheel)		2x	2x
ing	3.5.1	Number of rear wheels (x = drive wheel)		2	2
ğ	3.6	Front wheel track (middle of wheels)	b10 (mm)	1420	1420
~	3.7	Rear wheel track (middle of wheels)	b11 (mm)	1157	1157
	4.1	Tilt of mast forward	α (°)	10	10
ł	4.1.1	Tilt of mast backward	β (°)	12	12
ł	4.2	Height mast lowered	h1 (mm)	2775	2775
	4.2	Normal free lift	h2 (mm)	-	-
-					
-	4.4	Height of lift	h3 (mm)	3750	3760
	4.5	Height mast extended	h4 (mm)	4677	4672
	4.7	Height of driver protection (cab)	h6 (mm)	2434	2434
	4.8	Height of seat	h7 (mm)	1300	1300
	4.12	Height of towing bar	h10 (mm)	540	540
<u>s</u>	4.19	Overall length	l1 (mm)	4494	4574
ion	4.20	Length at fork heels	12 (mm)	3294	3374
ens	4.21	Total width (overall)	b1 (mm)	1732	1732
Dimensions	4.22	Section of fork arms	s (mm)	50	60
- I		Width of fork arms	e (mm)	150	150
		Length of fork arms	I (mm)	1200	1200
		Fork carriage to DIN 15173 A/B		FEM3A	FEM4A
	4.24	Width of fork carriage	b3 (mm)	1670	1670
	4.31	Ground clearance of mast	m1 (mm)	185	185
	4.32	Ground clearance at centre of wheel-base	m2 (mm)	220	220
	4.33	Width of aisle for pallet 1000x1200 crossways	Ast (mm)	4756	5041
l	4.34	Width of aisle for pallet 800x1200 lengthways	Ast (mm)	4956	5241
l	4.35	Turning radius (position down/up)	Wa (mm)	2865	2950
	4.36	Inner turning radius	b13 (mm)	125	125
	5.1	Speed of travel laden	km/h	22	22
	5.1.1	Speed of travel unladen	km/h	21.5	21.5
	5.2	Speed of raise laden	m/s	0.58	0.49
		Speed of raise unladen	m/s	0.59	0.51
0	5.3	Speed of lowering laden	m/s	0.48	0.4
nce		Speed of lowering unladen	m/s	0.43	0.35
Performance	5.5	Nominal towing power laden	N N	3350	3350
rfor	5.5.1	Nominal towing power indeen	N	2200	2200
Pe	5.7	Slope laden	%	30	22
	5.7.1	Slope inladen	%	35	33
	5.9	Acceleration time laden	S 5	-	-
			S	-	-
		Δcceleration time unladen			
	5.9.1	Acceleration time unladen		Hydroctatic	
	5.9.1 5.10	Service brake		Hydrostatic	Hydrostatic
O	5.9.1 5.10 7.1	Service brake Manufacturer / Type of engine		Perkins/1104C-44	Perkins/1104C-44
gine	5.9.1 5.10 7.1 7.2	Service brake Manufacturer / Type of engine Power delivery according to ISO/TR 14396	kW	Perkins/1104C-44 61.5	Perkins/1104C-44
Engine	5.9.1 5.10 7.1 7.2 7.3	Service brake Manufacturer / Type of engine Power delivery according to ISO/TR 14396 Rated speed	kW rpm	Perkins/1104C-44 61.5 2200	Perkins/1104C-44 61.5 2200
Engine	5.9.1 5.10 7.1 7.2 7.3 7.4	Service brake  Manufacturer / Type of engine  Power delivery according to ISO/TR 14396  Rated speed  Number of pistons / Cubic capacity	kW	Perkins/1104C-44 61.5 2200 4/4400	Perkins/1104C-44 61.5 2200 4/4400
	5.9.1 5.10 7.1 7.2 7.3 7.4 8.1	Service brake  Manufacturer / Type of engine  Power delivery according to ISO/TR 14396  Rated speed  Number of pistons / Cubic capacity  Speed control	kW rpm cm3	Perkins/1104C-44 61.5 2200 4/4400 Hydrostatic	Perkins/1104C-44 61.5 2200 4/4400 Hydrostatic
	5.9.1 5.10 7.1 7.2 7.3 7.4 8.1 8.2	Service brake  Manufacturer / Type of engine  Power delivery according to ISO/TR 14396  Rated speed  Number of pistons / Cubic capacity  Speed control  Hydraulic pressure to serve accessories	kW rpm cm3	Perkins/1104C-44 61.5 2200 4/4400 Hydrostatic 230	Perkins/1104C-44 61.5 2200 4/4400 Hydrostatic 230
Miscell. Engine	5.9.1 5.10 7.1 7.2 7.3 7.4 8.1	Service brake  Manufacturer / Type of engine  Power delivery according to ISO/TR 14396  Rated speed  Number of pistons / Cubic capacity  Speed control	kW rpm cm3	Perkins/1104C-44 61.5 2200 4/4400 Hydrostatic	Perkins/1104C-44 61.5 2200 4/4400 Hydrostatic

	Lifting mast	Heig free	ht of lift	Height of mast when				Height at maximum capacity (mm)		Capacity at maximum height (kg)	
	mm	H2		lowered H1		raised H4				cdg 500 mm	cdg 600 mm
		MSI40	MSI50	MSI40	MSI50	MSI40	MSI50	MSI40	MSI50	MSI40	MSI50
	3000	-	-	2425	2425	3977	3972	3000	3000	4000	5000
<del>-</del>	3300	-	-	2575	2575	4277	4272	3300	3300	4000	5000
tot it	3500	-	-	2675	2675	4477	4472	3500	3500	4000	5000
Duplex total visibility	3700	-	-	2775	2775	4677	4672	3700	3700	4000	5000
ld u	4000	-	-	2925	2925	4977	4972	4000	4000	4000	5000
Δ	4500	-	-	3175	3175	5477	5472	4500	4000	4000	4800
	5000	-	-	3425	3425	5977	5972	5000	4000	4000	4800
	3000	1532	1541	2425	2450	3968	3972	3000	3000	4000	5000
ĕ≝	3300	1682	1691	2575	2600	4268	4272	3300	3300	4000	5000
Duplex free lift	3500	1782	1791	2675	2700	4468	4472	3500	3500	4000	5000
تِ ت	3700	1882	1891	2775	2800	4668	4672	3700	3700	4000	5000
	4000	2032	2041	2925	2950	4977	4972	4000	4000	4000	5000
	3700	1258	1263	2175	2175	4667	4672	3700	3700	4000	4900
	4000	1358	1363	2275	2275	4967	4972	4000	4000	4000	4900
×±	4300	1458	1463	2375	2375	5267	5272	4300	4300	4000	4900
p e ⊟	4500	1533	1538	2450	2450	5467	5472	4500	4300	4000	4800
Triplex free lift	4700	1593	1598	2510	2510	5667	5672	4500	4300	3800	4600
_	5000	1708	1713	2625	2625	5967	5972	4500	4300	3700	4400
	5500	1858	1863	2775	2775	6467	6472	4500	4300	3500	3800
	6000	2033	2038	2950	2950	6967	6972	4500	4300	3400	3100

### Standard equipment:

- Enclosed cab with tinted glass
- Fabric seat
- Adjustable steering column
- Heater
- Front and rear wipers, front screen wa
- Left and right external rear-view mirro
- Rear road lights
- Cross-shaped lever with built-in revers
- Load absorber
- Electro-hydraulic lifting of the cab
- Wiper and washer on roof light
- Sun visor over roof
- Differential lock



		Tread
d tyre	FRONT	315/70 R 22,5 RHS
Standard tyre	REAR	225/75 R15 XZM
	FRONT	445/65 R 19,5 XZY 165 K
		12.5 R 20 MPT 80 16 PR
a		12.5 R 20 MPT 80 22 PR
Optional tyre		16/70 - 20 14 PR
0		FLEXIBLE SOLID TYRE
		10.00 X 20 CSE
	REAR	FLEXIBLE SOLID TYRE 28-9 X 15 CSE

#### **Options:**

- Headlights
- Rotating beacon
- Reverse alarm
- Double front working lights
- Single rear working light
- Air conditioning and roof light
- Internal rear-view mirror
- Radio

shers

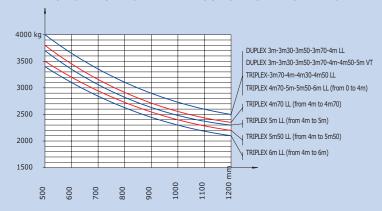
e control

- Sun blind for windscreen
- Various accessories such as sideshift, clamps, double sideshift, mono-multiforks.

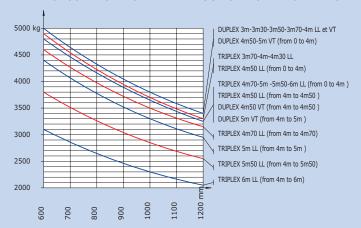
Tyre width (mm)	Overall vehicle width (mm)	Design
312	1732	
220	1377	25
455	1945	S A
340	1730	
451	1951	5
265	1695	
222	1379	

CYRICA 710

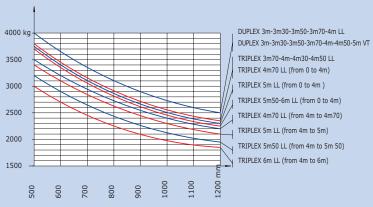
#### MSI40H: LOAD CHART WITHOUT SIDESHIFT CARRIAGE



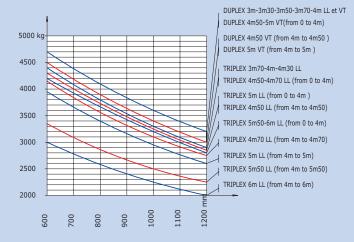
#### MSI 50H: LOAD CHART WITHOUT SIDESHIFT CARRIAGE



#### MSI40H: LOAD CHART WITH SIDESHIFT CARRIAGE



#### MSI50H: LOAD CHART WITH SIDESHIFT CARRIAGE



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