



MH/MSI SERIES

SEMI-INDUSTRIAL HANDLING SOLUTIONS





SUCCESS THROUGH IMAGINATIVE POWER

MANITOU, the world's largest manufacturer of all-terrain forklift trucks, began its roots in a family tradition of innovation and imaginative power. For generations, the Braud family has dedicated themselves to creating innovative products for the lifting and handling markets.

Manufacturing its first truck in 1957, MANITOU is a pioneer in the rough terrain forklift market. By responding to market trends, MANITOU offers a complete line of rough terrain handling equipment adapted to the specific needs and challenges of each industry.

The long history of reliable, relevant equipment has led to more than 500,000 MANITOU Group machines sold to more than 120 countries. This worldwide presence is backed up by a MANITOU dealer network staffed with trained mechanics and sales specialists to help you with your material handling requirements.

MULTI-APPLICATION PERFORMANCE

The MANITOU Semi-Industrial Forklifts, combine the capabilities of an average industrial forklift, with the ability to travel and handle material outdoors.

The MH/MSI machines make clearing obstacles easy with their quick maneuverability and stability in most types of terrain. This hybrid design coupled with a hydrostatic transmission allow the Manitou semi-industrial forklifts to provide pin-point load accuracy and smooth travel on uneven ground, making them capable of performing where other forklifts can not.



MH 25-4 T

5,000 lbs. (2268 kg) lift capacity
21'5" (6.53 m) lift height
59 hp (44 kW)
4-wheel drive



MSI 30 T

6,000 lbs. (2722 kg) lift capacity
15'5" (4.70 m) lift height
59 hp (44 kW)
2-wheel drive



ALL-NEW!

MSI 35 T

7,000 lbs. (3175 kg) lift capacity
15'5" (4.70 m) lift height
59 hp (44 kW)
2-wheel drive



ALL-NEW!

MSI 40 T

8,179 lbs. (3710 kg) lift capacity
15'5" (4.70 m) lift height
74 hp (55 kW)
2-wheel drive



ALL-NEW!

MSI 50 T

11,023 lbs. (5000 kg) lift capacity
15'5" (4.70 m) lift height
74 hp (55 kW)
2-wheel drive

COMPETITIVE ADVANTAGES

HYBRID PERFORMANCE

- Large diameter front wheels for semi-rough terrain performance.
- Adaptive to indoor and outdoor working environments.
- Ability to handle long loads or several pallets at a time.



EASY TO MAINTAIN

- Operator's cab tilts forward for complete access to the engine and maintenance components.
- Faster service and routine checks allows more time for productivity.



INCREASED ERGONOMICS

- Ideal for working on tight, confined jobsites, and semi-rough conditions.
- Standard comfort with increased cabin space, 360 degree visibility, adjustable seat, and dual entrance on the MH 25-4, MSI 30 and MSI 35.
- Hydraulic shock absorber protection.



HYDROSTATIC TRANSMISSION

- Dynamic power and quick response time.
- Automatic transmission controlling speed, torque, power, and rotation.
- Eliminates the need for clutch and throttle.



UNIQUE APPLICATIONS

- Agri-Business
- Wood Industry
- Oyster Culture
- Transport Logistics
- Brick and Block
- Scrap/Recycling
- Environment and more.

PERFORMANCE

POWER and PERFORMANCE

FAST, EFFICIENT, AND PRODUCTIVE

HYDROSTATIC TRANSMISSION

The MH and MSI Series forklifts feature a hydrostatic transmission with an electro-hydraulic reversing shift, providing more power and machine control.

The automatic transmission allows for ease of operation without the need for a clutch or throttle, creating less time to complete and maneuver handling tasks. Designed with one speed forward and one speed in reverse, the maximum travel speed reaches up to 13.7 mph (22 kph) on the MSI 40/50 models.

MAXIMUM LIFT HEIGHTS UP TO

21' 5" [6.53m]



MAST TILT

10° / 12°
FORWARD / BACKWARD



NARROW AISLE WIDTH AS LOW AS

3' 5" [1.05m]

MH 25-4 3'10" (1.16 m)
MSI 30/35 3'5" (1.05 m)
MSI 40/50 4'8" (1.42 m)

LIFT CAPACITIES UP TO

11,023 lbs. [5000 kg]

4-WHEEL DRIVE / 2-WHEEL DRIVE

MH 25-4

MSI RANGE

COMPACT SIZE!

MACHINE WIDTH

MH 25-4 **4'**

MSI 30/35 **4'**

MSI 40/50 **5'**

■ TURBO-DIESEL ENGINES



TIER IV-CERTIFIED

The Tier IV MH/MSI Series engines utilize Diesel Particulate Filter (DPF) technology with **no fuel additives** and an automatic regeneration system. This technology provides **clean emissions** with little to no input from the operator, removing soot and automatically turning it into ash. This increases the overall life-span of the machine allowing for better, more efficient **performance without clogged filters**.

■ PANORAMIC CAB = **360°** VISIBILITY



GROUND CLEARANCE UP TO
10.6" [270 mm]

WIDTH
9" [1.45 m]
4" [1.32 m]
8" [1.73 m]

■ MACHINE HEIGHT - UP TO MAST
MH 25-4 **6'0" [1.83 m]**
MSI 30/35 **7'7" [2.30 m]**
MSI 40/50 **9'1" [2.77 m]**

■ EXCELLENT GRADEABILITY

+/- 8°



■ OSCILLATING REAR AXLE

Ensures the tires remain on the ground while traveling over semi-rough terrain.

■ HYDRAULIC SHOCK ABSORBER

The standard hydraulic shock absorber prevents shock and vibration from affecting the load as well as the operator, providing safer travel on uneven ground.



■ SHORT TURNING RADIUS AS LOW AS
8'8" [2.63 m]

OPERATOR'S CAB

■ CONTROLS and ■ ERGONOMICS



MSI 40/50 Enclosed Cab model with JSM control displayed above

“High precision, and load control”

■ **SEMI-ENCLOSED AND FULLY-ENCLOSED CAB**
Select from two cabin options, the semi-enclosed cab without doors and the fully-enclosed cab. The semi-enclosed cab is offered as the base unit for the MH 25-4, MSI 30 and MSI 35. The fully-enclosed cab is available for all models offered with heat and defrost or heat, defrost and air conditioning if needed.

Features include an adjustable vinyl seat, front, rear and top glass wipers, interior rearview mirror, and exterior left and right mirrors. The fully-enclosed cab will add doors, an electric driver's side window, and has a different cab layout/dashboard.

■ **SPACIOUS INTERIOR WITH DIRECT ACCESS**
The spacious ergonomic cab provides extra comfort with easy access from both sides on the MH 25-4, MSI 30, and MSI 35 models. All fully-enclosed machines have the capability to operate with the door fully open, for enhanced comfort and visibility.

■ **DIFFERENTIAL LOCK IS STANDARD (MH 25-4, MSI 40 AND MSI 50)**

■ **ADJUSTABLE SEAT WITH HYDRAULIC SHOCK ABSORBER AND TINTED FRONT/REAR WINDOWS**

FEATURES



INTUITIVE EASY TO USE CONTROLS

The MH/MSI forklifts come standard with a single joystick control, as shown above, which controls the functions of the boom (*Up, Down and Tilt*) and driving direction. An option to upgrade to the Manitou JSM Joystick, Switch and Move is available on all semi-industrial models. (*JSM joystick control shown on page 6*)



FORWARD / NEUTRAL / REVERSE

Directional drive is located on the right side to easily select drive modes. (*single joystick lever configuration shown*)

MH/MSI STANDARD FEATURES

ENGINE

- Kubota 59 hp (44kW) MH 25-4 and MSI 30/35
- Perkins 74 hp (55 kW) MSI 40/50

TRANSMISSION

- Hydrostatic Transmission
- Electro-Hydraulic Forward/Reversing Shift
- Number of Gears: 1/1

HYDRAULICS

- Hydro-Proportional Control Levers
- Value: 3 Double Action and 1 Single Action
- Hydraulic Gear Pump

OPERATOR'S CAB

- Semi-Enclosed Cab - MH 25-4 and MSI 30/35
- Fully-Enclosed Cab with Heat/Defrost - MSI 40/50
- Adjustable Seat with Hydraulic Shock Absorber
- Tinted Front and Rear Windows
- Front, Rear and Top Glass Wipers
- Horn and Back-up Alarm
- Exterior Left and Right Mirrors
- Interior Rearview Mirror
- Single Joystick Controls Up/Down/Tilt/and Drive

BRAKES

- Service Brake
- Parking Brake

OTHER

- Automatic Acceleration System for Lifting
- 12 V Battery
- Rubber Mounted Electrically Hoisted Cab
- Engine Block Heater
- Full Instrumentation
- Insulated Lockable Engine Compartment
- Mast Tilt 10° Forward /12° Backward
- Power Assisted Steering

MH/MSI OPTIONAL FEATURES

- **Fully-Enclosed Cab for MH 25-4 and MSI 30/35**
- **Fully Enclosed Cab including A/C**
- **JSM (Joystick, Switch & Move) Controls**
- **Air Suspension Seat**
- **Complete Road Lights**
- **Working Lights**
- **Side Shifter**
- **Telehandler Interface (MH 25-4 and MSI 30/35)**
- **Variety of Attachments**
- **Tire Options Available**

MAST SELECTIONS AND EXTRA OPTIONS

2-STAGE FULL VISIBILITY

Mast sizes for 2-Stage Visibility range from 130" (10'10") to 177" (14'9") or 3.3m to 4.5m.

3-STAGE FREE LIFT

Mast sizes for 3-Stage Free Lift range from 146" (12'2") to 257" (21'5") or 3.7m to 6.5m.

MULTIPLE TIRE OPTIONS

Multiple tire options are available. Low pressure tires absorb shocks when driving over stones, potholes, and provide grip on slippery surfaces.



TIRE CHAINS CAN BE FITTED

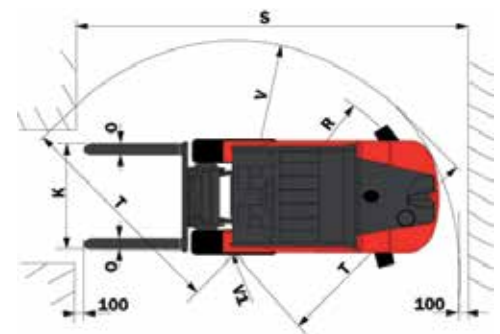
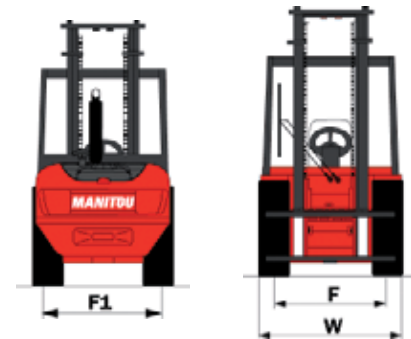
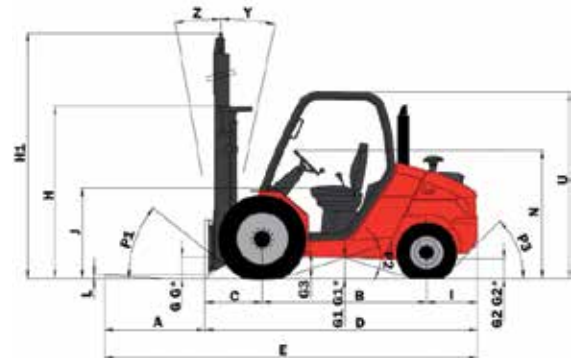
The design of the chassis allows chains to be fitted to the tires when full traction is necessary.



DIMENSION REFERENCE DIAGRAMS

Load charts based on 24" load center per ANSI/ITSDF B56.1

(mm)	MH 25-4	MSI 30	MSI 35	MSI 40	MSI 50
A	48" (1200)	48" (1200)	48" (1200)	48" (1200)	48" (1200)
B	70.9" (1800)	70.9" (1800)	70.9" (1800)	81.7" (2075)	81.7" (2075)
C	24.6" (625)	24.8" (630)	24.8" (630)	27.2" (691)	27.6" (701)
D	9'8" (2945)	9'9" (2980)	9'11" (3030)	10'10" (3294)	11'1" (3384)
E	13'3" (4045)	13'5" (4080)	13'7" (4130)	14'9" (4494)	15'0.5" (4584)
F	45.7" (1160)	41.2" (1046)	41.2" (1046)	55.9" (1420)	55.9" (1420)
F1	45.8" (1164)	43.4" (1102)	43.4" (1102)	45" (1142)	45" (1142)
G	10.4" (265)	10.6" (270)	10.6" (270)	7.3" (185)	7.3" (185)
G*	9.3" (235)	9.4" (240)	9.4" (240)	5.5" (140)	5.5" (140)
G1	10.2" (260)	10.2" (260)	10.2" (260)	8.7" (220)	8.7" (220)
G1*	10.2" (260)	10.2" (260)	10.2" (260)	8.1" (205)	8.1" (205)
G2	8.5" (215)	8.5" (215)	8.5" (215)	8.9" (225)	8.9" (225)
G2*	9.1" (230)	9.1" (230)	9.1" (230)	9.7" (247)	9.7" (247)
G3	10.6" (270)	10.6" (270)	10.6" (270)	13.4" (340)	13.4" (340)
H	72.2" (1835)	90.6" (2300)	90.6" (2300)	109.3" (2775)	109.3" (2775)
H1	160.2" (4070)	165" (4193)	165" (4193)	184.1" (4677)	183.9" (4672)
I	20.5" (520)	21.7" (550)	23.6" (600)	20.8" (528)	23.9" (608)
J	40.4" (1025)	40.4" (1025)	40.4" (1025)	51.2" (1300)	51.2" (1300)
K	49.6" (1260)	49.6" (1260)	49.6" (1260)	65.7" (1670)	65.7" (1670)
L	1.6" (40)	1.8" (45)	1.8" (45)	2" (50)	2.4" (60)
N	57.1" (1450)	57.1" (1450)	57.1" (1450)	70.8" (1799)	70.8" (1799)
O	3.9" (100)	3.9" (100)	4.9" (125)	5.9" (150)	5.9" (150)
P1	49.5°	49.5°	49.5°	29°	29°
P2	40.5°	40.5°	40.5°	27°	27°
P3	44°	40°	40°	53°	42°
R	119.9" (3045)	90.9" (2310)	91.7" (2330)	106.9" (2715)	106.9" (2715)
S	200.4" (5090)	180" (4560)	180.9" (4595)	109.3" (2775)	112.6" (2860)
T	98.4" (2500)	101.6" (2580)	102" (2590)	195.1" (4956)	206.3" (5241)
U**	6'7" (1990)	6'11" (2105)	6'11" (2105)	8'0" (2440)	8'0" (2440)
V	10'9" (3265)	8'8" (2635)	8'9" (2665)	9'5" (2865)	9'8" (2950)
V1	42.5" (1080)	5.9" (150)	3.9" (100)	4.9" (125)	4.9" (125)
W	4'9" (1450)	4'4" (1323)	4'4" (1323)	5'8" (1732)	5'8" (1732)
Y	12°	12°	12°	12°	12°
Z	10°	10°	10°	10°	10°

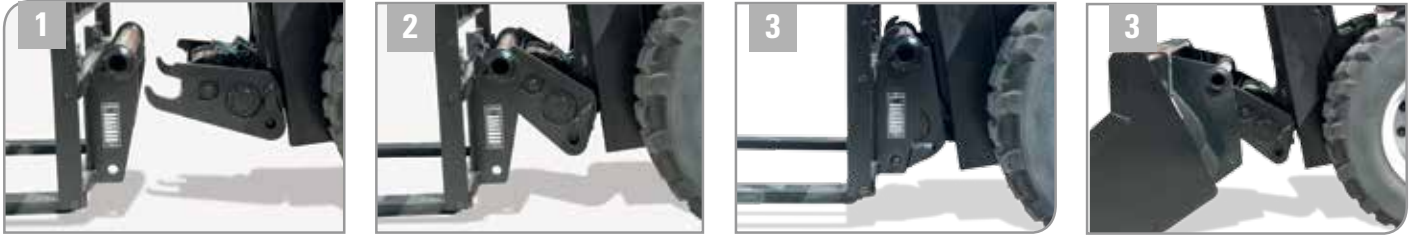


* Rated Loaded **Cab height will increase on models that include A/C

ATTACHMENT SELECTION AND OPTIONS

○ THE NEW OPTIONAL TELEHANDLER INTERFACE TILTING CARRIAGE ATTACHMENT

The NEW TI Tilting Carriage allows "quick fitting" of attachments as well as interchanging attachments with the operator inside the cab. This unique solution is available for the MH 25-4, MSI 30 and MSI 35.



Attached with Bucket

COMPATIBILITY REQUIREMENTS

- ITA Class II TI (Telehandler Interface) Carriage
- 2-Stage Full-Visibility Mast Selection
- MH 25-4, MSI 30 or MSI 35 models



○ ATTACHMENT SELECTION FOR MH/MSI SERIES SEMI-INDUSTRIAL FORKLIFTS

		MH 25-4	MSI 30	MSI 35	MSI 40	MSI 50
FORKS	Pallet Forks ITA Class II or III or IV, Classes vary per Machine	●	●	●	●	●
	Lumber Forks	●	●	●	●	
	Brick / Block Forks	●	●			
BUCKETS	Dirt/Construction 59" wide, 20.5 cu. ft. with Smooth Edge	●	●	●		
	Grain/Light Material 59" wide, 31.0 cu. ft. with Smooth Edge	●	●	●		
OTHER	Side Shifter 4" in each direction for ITA Class Carriages	●	●	●	●	●
	Side Shifting Fork Positioner	●				
	Load Backrests	●	●	●	●	●
	TI- (Telehandler Interface) Tilting Carriage Quick Attach Requires TI - ITA Class II Carriage, 2-Stage Mast ONLY	●	●	●		
	Hydraulic Quick Fit for Side Shift or Standard Carriages 3-Stage Mast				●	●



PROTECTION

SAFETY and SERVICEABILITY

EXCELLENT 360 DEGREE VISIBILITY

The panoramic cab provides optimal visibility of the forks for precise placement of loads using all fields of vision including the roof window. Left and right side mirrors, and an interior rearview mirror come standard on the Semi-Industrial forklifts, enhancing the operator view of the jobsite allowing for accurate machine maneuverability.



FULL MAINTENANCE ACCESS

The cab tilts forward fail-safe with the press of a button for full access to the engine compartment and faster serviceability.

FULLY-ENCLOSED UNDERCARRIAGE

All MH/MSI machine components, engine, valves, hoses, etc. are protected in the fully-enclosed undercarriage. There are three removable covers underneath the machine for oil change and extra access.

INTEGRATED AIRFLOW

The solid chassis design allows for the cooling ducts to be integrated into the undercarriage, providing consistent airflow to cool the engine.

FOPS CERTIFIED

The cab has been designed for operator protection, satisfying FOPS requirements for falling object protection.



TRANSPORT LOGISTICS //



MATERIALS //



ENVIRONMENT //



BRICK / BLOCK //



WOOD //

EXTENDED SERVICE
Available up to 5 years or 6,000 hours



ManiplusTM



ESSENTIAL Coverage
Powertrain coverages








2 offers

TOTAL Coverage
All machine components



*Contact your local dealer for more information.

MH/MSI SERIES SEMI-INDUSTRIAL FORKLIFT SPECIFICATIONS

		MH 25-4	MSI 30	MSI 35	MSI 40	MSI 50
 LIFTING CAPACITIES	Lift Capacity- 24" Load Center (kg)	5,000 lbs. (2268)	6,000 lbs. (2722)	7,000 lbs. (3175)	8,179 lbs. (3710)	11,023 lbs. (5000)
	Lift Height (Standard Mast) (m)	10'10" (3.3)	10'10" (3.3)	10'10" (3.3)	12'2" (3.70)	12'2" (3.70)
	Maximum Lift Height (m)	21'5" (6.53)	15'5" (4.70)	15'5" (4.70)	15'5" (4.70)	15'5" (4.70)
	Capacity at Max. Lift Height (kg)	5,000 lbs. (2268)	6,000 lbs. (2722)	7,000 lbs. (3175)	8,179 lbs. (3710)	11,023 lbs. (5000)
 ENGINE	Manufacturer	Kubota	Kubota	Kubota	Perkins	Perkins
	Model	V2403 Turbo EPA Tier IV	V2403 Turbo EPA Tier IV	V2403 Turbo EPA Tier IV	854F-E34T Turbo EPA Tier IV	854F-E34T Turbo EPA Tier IV
	Power (kW)	59 hp (44)	59 hp (44)	59 hp (44)	74 hp (55)	74 hp (55)
	Displacement (cm ³)	4 cyl. 148.5 cu.in. (2434)	4 cyl. 148.5 cu.in. (2434)	4 cyl. 148.5 cu.in. (2434)	4 cyl. 207.5 cu.in. (3400)	4 cyl. 207.5 cu.in. (3400)
	Aspiration	Turbocharged Diesel	Turbocharged Diesel	Turbocharged Diesel	Turbocharged Diesel	Turbocharged Diesel
	Torque (Nm)	122 ft.-lbs. (165) @1600 rpm	122 ft.-lbs. (165) @1600 rpm	122 ft.-lbs. (165) @1600 rpm	235 ft.-lbs. (318) @1400 rpm	235 ft.-lbs. (318) @1400 rpm
 TRANSMISSION	Transmission Type	Hydrostatic	Hydrostatic	Hydrostatic	Hydrostatic	Hydrostatic
	Reversing Shift	Electro-Hydraulic	Electro-Hydraulic	Electro-Hydraulic	Electro-Hydraulic	Electro-Hydraulic
	Maximum Travel Speed (km/hr)	8.7 mph (14)	12.4 mph (20)	12.4 mph (20)	13.7 mph (22)	13.7 mph (22)
	Number of Gears - Forward/Reverse	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
 HYDRAULICS	Pump Type	Gear	Gear	Gear	Gear	Gear
	Pressure (bar)	2,465 psi (170)	2,683 psi (185)	2,755 (190)	3,335 psi (230)	3,335 psi (230)
	Flow Rate (L/min)	20.3 gpm (77)	20.3 gpm (77)	20.3 gpm (77)	36.2 gpm (137)	36.2 gpm (137)
 COMPONENTS	Tires- Drive/Steer	Drive - 280/80 R20 133 AE XMCL Steer - 27.10-12 14PR IC30	Drive - 275/70 R22.5 148/145M Steer - 7.00-12 14PR IC40	Drive - 275/70 R22.5 148/145M Steer - 7.00-12 14PR IC40	Drive - 315/70 R22.5 154/150L Steer - 225/75 R15 XZM	Drive - 315/70 R22.5 154/150L Steer - 225/75 R15 XZM
	Brakes - Service/Parking	Hydraulic	Hydraulic	Hydraulic	Mechanical	Mechanical
	Forks Length (mm)	48" (1200)	48" (1200)	48" (1200)	48" (1200)	48" (1200)
	Forks Width x Thickness (mm)	4" / 1.5" (102/38)	4" / 1.75" (102/44)	6" / 2" (152/50)	6" / 2" (152/50)	6" / 2.4" (152/60)
 SERVICE CAPACITIES	Cooling System (L)	2.6 gal. (10)	2.6 gal. (10)	2.6 gal. (10)	3.2 gal. (12)	3.2 gal. (12)
	Engine Oil (L)	8.8 qt. (8.3)	8.8 qt. (8.3)	8.8 qt. (8.3)	7.9 qt. (7.5)	7.9 qt. (7.5)
	Hydraulic Oil - Reservoir (L)	25 gal. (95)	25 gal. (95)	25 gal. (95)	34.9 gal. (132)	34.9 gal. (132)
	Fuel Tank (L)	19.4 gal. (73.5)	19.4 gal. (73.5)	19.4 gal. (73.5)	23.3 gal. (88)	23.3 gal. (88)
 GENERAL SPECIFICATIONS	Apprx.Weight w/o Mast or Forks (kg)	9,568 lbs. (4340)	9,568 lbs. (4340)	10,682 lbs. (4845)	15,388 lbs. (6980)	18,563 lbs. (8420)
	Overall Width (m)	49" (1.45)	44" (1.32)	44" (1.32)	58" (1.73)	58" (1.73)
	Overall Height (m)	67" (2.00)	6'11" (2.11)	6'11" (2.11)	8'0" (2.44)	8'0" (2.44)
	Turning Radius Outside Wheels (m)	10'8.5" (3.26)	8'8" (2.63)	8'9" (2.66)	9'5" (2.86)	9'8" (2.95)
	Overall Length Less Forks (m)	9'8" (2.94)	9'9" (2.98)	9'11" (3.03)	10'10" (3.29)	11'1" (3.38)
	Ground Clearance (mm)	10.2" (260)	10.6" (270)	10.6" (270)	7.3" (185)	7.3" (185)
	Mast Tilt (Forward/Backward)	10° / 12°	10° / 12°	10° / 12°	10° / 12°	10° / 12°
	Aisle Width (mm)	3'10" (1.16)	3'5" (1.05)	3'5" (1.05)	4'8" (1.42)	4'8" (1.42)
	Carriage Type	ITA Class II	ITA Class III	ITA Class III	ITA Class III	ITA Class IV
	Draw Bar Pull (kN)	7,531 lbf (33.5)	5,530 lbf (24.6)	5,935 lbf (26.4)	6,542 lbf (29.1)	7,194 lbf (32)

This publication in no way constitutes an offer and the company reserves the right to alter specification without notice. For compatibility conditions and restrictions, please contact your Manitou dealer or reference the forklift manual. Options may vary from illustrations provided.

