

MHT SERIES



HEAVY CAPACITY telescopic handlers





SUCCESS THROUGH IMAGINATIVE POWER

MANITOU, the world's largest manufacturer of all-terrain material handling equipment, 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.



SUPERIOR STRENGTH

The MANITOU MHT Series heavy capacity telescopic handlers are designed to handle the most demanding jobs in the most extreme conditions.

These heavy-duty machines have the power and precision necessary for work in the mining, quarrying, large-industrial, infrastructure, recycling, and construction industries. The MHT Series heavy capacity telescopic handlers offer a wide-range of accessories designed and customized for multiple applications providing an array of solutions on the jobsite.



MHT 1490

20,000 lbs. (9072 kg) lift capacity 46' (14 m) lift height 176 hp (129 kW) FINAL Tier IV

> The MHT Series are built for heavy-duty work in rough terrain applications. These machines are designed with a strong rectangular two-section and three-section boom structure, handling a capacity range from 20,000 to 50,000 lbs. (9,072-23,000 kg).

COMPETITIVE ADVANTAGES

HEAVY-DUTY LIFTII

JSM JOYSTICK CONTROLS

Machines are operated with the Manitou single joystick JSM (Joystick, Switch and Move) controls, where machine functions as well as Directional Drive are located in one place for easier access and maneuverability.

ATTACHMENT SAVVY

Attachments are a key component to the full performance of the MHT Series and to utilize it for many applications including; Quarries, Mining, Energy, Utility, Heavy Construction, Steel Structures etc. Some of these attachments are: Forks, Winch, Tire Handler, Cylinder Handler, and Platforms.

LOAD MANAGEMENT & VISIBILITY

Load Moment Systems and Attachment Recognition System (E-RECO) are offered on the MHT Series to ensure safety on the jobsite and reduce risks of incidents. The low boom design, large windows on all sides and glazed roof panel allow for 360 degree visibility from the cab.

COMFORT IS STANDARD

Spacious, easy to access enclosed ergonomic cab. Comes with heat and air conditioning, soundproofing materials to lower noise levels, adjustable steering column and suspension seat.

NEW! **MHT 10230**

> 50.000 lbs. (23.000 kg) lift capacity 31'8" (9.65 m) lift height 176 hp (129 kW) FINAL Tier IV

PERFORMANCE

POWER and PRECISION

TURBO-DIESEL ENGINES

The MHT Series machines are powered with Mercedes-Benz 176 hp (129 kW) diesel engines, providing 553 ft. lbs. (750 Nm) of maximum torque for heavy handling.

HYDROSTATIC TRANSMISSION

Coupled with a two speed gearbox, this system provides optimum power and control of travel for precise placement of the machine.

LIFT CAPACITIES UP TO **50,000** lbs. 23000_{kg}

1490 20,000 lbs. (9072 kg)

10130 28,000 lbs. (13000 kg)

10180 40,000 lbs. (18000 kg)

10230 50,000 lbs. (23000 kg)

LIFT HEIGHTS UP TO 46'0" [14_m]

1490 46' 0" (14m)

10130 31' 6" (9.62m)

10180 31' 7" (9.63m)

10230 31' 8" (9.65 m)



■ HIGH GROUND CLEARANCE

1490/10130/10180 17" (0.44 m)

10230 19" (0.49 m)

LOW BOOM DESIGN = 360° VISIBILITY

DURABLE CROSS SECTION BOOM Rectangular boom design with components protected inside. Built for heavy loading, lifting and to weather tough

working conditions.

ON ALL MODELS



MACHINE HI

1490/10130/ 10180

10230



CAPACITY AT MAXIMUM FORWARD REACH **14,000** lbs. [6400 kg]

1490 7,700 lbs. (3493 kg)

10130 5,500 lbs. (2500 kg)

10180 9,900 lbs. (4500 kg)

10230 14,000 lbs. (6400 kg)

FORWARD REACH TO **31'0"** [9.45_m]

1490 31'0" (9.45 m) **10180** 18' 3" (5.56 m)

10130 16'11" (5.17 m) **10230** 19'0" (5.80 m)

Four wheel steer enables three different steering modes; All Wheel, Crab, or Front Wheel, to provide maneuverability depending upon the job travel, task, and location.

Four wheel drive enables rough terrain performance

while operating on soft ground, towing a trailer, or other working applications that require high

4 WHEEL DRIVE AND 4 WHEEL STEER

traction to get the job done.



EIGHT

0" [3.0_m]

0" [3.05_m]

FRAME LEVELING SYSTEM

Tackle rough or sloping terrain with ease. Simply push a lever to keep your load horizontal.

***/- 10**° 10130/10180/10230

⁺/- 8° 1490

SHORT TURNING RADIUS 13'2" [4.0_m]

1490 13'2" (4.0 m)

10130 17'6" (5.34 m)

10180 18'0" (5.5 m)

10230 17'9" (5.4 m)

MACHINE WIDTH

1490/10130/ **8'3"** [**2.51**_m] 10180

10230 **9'4"** [2.85_m]

MACHINE LENGTH (LESS FORKS)

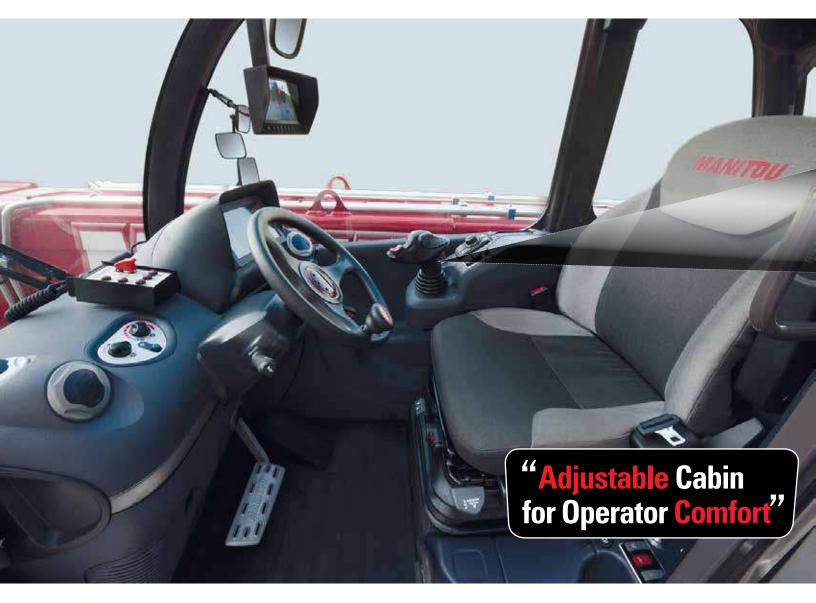
1490/10130 **20'2"** [6.15_m]

10180 **21'10"**[6.65_m]

10230 **22'11"** [6.99_m]

OPERATOR'S CAB

CONTROLS ERGONOMICS



SPACIOUS DELUXE CAB WITH HEAT & A/C

Fully enclosed cab with wide door for easier access. Includes standard features such as air conditioning, heat, adjustable cloth seat and arm rest with JSM joystick controls, ventilation outlets, sun visor, roof screen and electric window.

■ INTERACTIVE DASHBOARD

The Dashboard holds a digital display providing notifications for; fuel level, speed, hour meter, travel direction, engine temperature, wheel alignment, load placement, load level, warning lights and maintenance reminders.

ADJUSTABLE; SEAT, ARMREST WITH JSM JOYSTICK CONTROLS AND STEERING COLUMN

LOW NOISE LEVELS

Cab is soundproof down to 80 dB for operator comfort. (82 dB for the MHT 1490)

■ INTUITIVE CONTROLS

Controls and switches are positioned in groups according to machine function for easy operation.

CAB AIR FILTER

Clean air recycles in the cab providing an ideal operator environment.

JSM CONTROLS

The MANITOU exclusive Joystick Switch and Move (JSM) all-in-one joystick system allows safe, fatigue-free operation. The left hand remains on the steering wheel and the right hand controls **directional drive**, **boom** and **hydraulic** functions with one ergonomic joystick.



Label	Function
A	Lower the Boom
B	Tip the Attachment Plate
C	Raise the Boom
D	Tilt the Attachment Plate
E	Forward, Neutral, and Reverse Shift
F	Roller for Attachment Function (100% proportional movement)
G	Roller for Extending and Retracting the Boom (100% proportional movement)



MHT SERIES FEATURES	MHT 1490	MHT 10130	MHT 10180	MHT 10230
Enclosed Cab with Heat/Defrost/AC	•	•	•	•
Hydraulic Power Steering	•	•	•	•
Three Steering Modes	•	•	•	•
Full-Time 4-Wheel Drive	•	•	•	•
2-Speed Hydrostatic Transmission	•	•	•	•
Frame Leveling	•	•	•	•
JSM Joystick Switch & Move Controls	•	•	•	•
Adjustable Cloth Seat	•	•	•	•
Quick Attach System	•	•	•	•
Complete Road Lights	•	•	•	•
Return to Tank	•	0	0	0
Hydraulic Operated Locking System	0	•	•	•
Cyclonic Pre-Cleaner	•	•	•	•
Left & Right Rearview Mirrors	•	•	•	•
Front, Rear & Roof Wipers	•	•	•	•
Front & Rear Work Lights	•	•	•	•
Two Boom Mounted Work Lights	0	0	0	0
Predisposition for Work Platform	•	•	•	•
Remote Radio Control Predisposition	•	•	•	•
Horn & Backup Alarm	•	•	•	•
Tow Pin	•	•	•	•
Rotating Beacon	•	•	•	•
Lockable Engine Compartment	•	•	•	•
Battery Cut-off	•	•	•	•
360° Visibility	•	•	•	•
3B6 Load Moment System	0	•	•	•
E-Reco Attachment Recognition System	0	•	•	•
Engine Block Heater 110V	*	•	•	•
Video System, Rear and Side Cameras	N/A	•	•	•
Video System, Boom Tip Camera	N/A	0	0	0
Radio AM/FM/& CD Player	N/A	0	0	0
Windshield Protector	0	0	0	0
One Auxiliary Circuit to Boom Tip	•	•	•	•
Dual Hydraulic Functions Boom to Tip	•	0	0	0
Sunshade- Roof and Windshield	•	0	0	0
Antifreeze (-34° F /-36° C)	•	•	•	•
Cold Weather Package	0	0	0	0
Aeolus Tires	•	•	•	

Standard O Optional *Extended Lead Time

PROTECTION

LOAD MANAGEMENT



MANITOU LOAD MOMENT SYSTEM/3B6

Continuously analyzes the position of your load in accordance with the machine's work configuration. The system restricts the working area based on the accessory used and load being handled.

MEX 12.3 KLb. | Coad | 12.3 % | | OM: OMco | OMco | | 12.3 mt | Mail 12.3 mt | | 12.3 mt | Mail 12.3

LEVEL CONTROL SCREEN

The level control display screen indicates the level of inclination of the machine in the lateral or longitudinal direction. When the machine is level the dot will turn from red to green.

E-RECO® ATTACHMENT LOADING SYSTEM

Decrease operator guesswork with the Manitou E-RECO, attachment recognition system. This system will automatically detect which attachment has been properly installed to the machine, and will assign the appropriate load chart requirements to maximize machine productivity.

SAFE, RELIABLE BRAKING

Oil-bath multiple-disc brakes are integrated into the axles for precise machine stopping.

- MAXIMUM PERMITTED LOAD
- WEIGHT OF THE LOAD
- WORKING CONFIGURATION
- LOAD CONDITION
- MAIN OPERATING DATA
- MESSAGE AREA
- **DYNAMIC LOAD CHART**

CAMERA VIEW, AVAILABLE ON THE MHT 10130, MHT 10180, AND MHT 10230

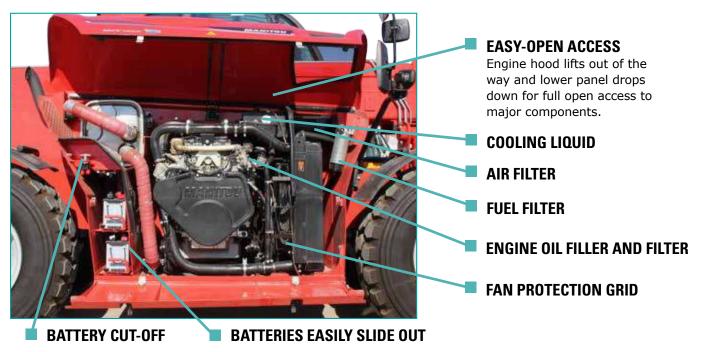
Perform close maneuvers with standard rear and side cameras on the MHT 10130 through the MHT 10230 models, with an optional boom tip camera for increased visibility.



SERVICEABILITY

SIMPLIFIED ACCESS

The engine is positioned to the right side of the chassis allowing for easy access from three sides. The large engine hood is spring loaded and automatically stays up during servicing.



ELECTRICAL CIRCUIT PROTECTION

The entire electrical installation and all components (printed circuit boards, fuse boxes and connections) are rated IP67, ensuring that they are dust free and watertight.

AUTO DIAGNOSIS

Displays the state of the machine on the screen. The faulty component is displayed on the screen in order to minimize machine downtime.

■ FUEL, OIL & DEF TANKS

Fluid tanks are placed under the cab door, in an easy accessible location.



VERSATILITY

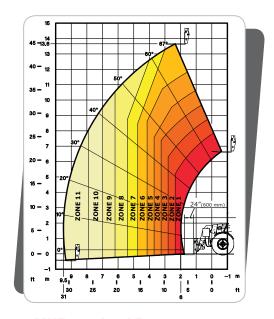
DOMINATE YOUR APPLICATION

A wide range of attachments are available, ideally suited to increase your MHT's utilization, versatility and productivity. Whatever the job, we've got a solution to maximize your handling requirements.

MHT ATTACHMENT SELECTION	MHT 1490	MHT 10130	MHT 10180	MHT 10230
FORKS AND CARRIAGES				
Shaft Type Carriages with Forks	•	•	•	•
Shaft Type with Hydraulic Fork Positioner	•	•	•	•
Shaft Type, w/ Side Shifting Fork Positioner - Requires Dual Hydraulics	•	•	•	•
BUCKETS				
Construction Buckets		•	•	•
Recycling/Rehandling Buckets		•	•	•
JIBS, HOOKS, AND WINCHES				
Hooks, Capacity from 20,000 lbs. to 48,500 lbs. (9T to 22T)	•	•	•	•
Jib with 3 Hooks, Capacity from 20,000 lbs. to 48,500 lbs. (9T to 22T)	•	•	•	•
Winches, Requires Return to Tank , 20,000 lbs. to 48,500 lbs. (9T to 22T)	•	•	•	•
TIRE HANDLERS				
Tire Handler, TH33, 23.6" to 82.7" (600 - 2100 mm), 4,409 lbs. (2000 kg) Capacity - Requires Return to Tank and Predisposition	•			
Tire Handler, TH5, 47" to 133" (1194 - 3378 mm), 7,700 lbs. (13500 kg) Capacity - Requires Return to Tank and Predisposition	•	•		
Tire Handler, TH 57, 51" to 149.5" (1296 - 3797 mm), 13,200 lbs. (6000 kg) Capacity - Requires Return to Tank and Predisposition	•	•	•	•
Tire Handler, TH 63 plus Parallelogram 23" to 161" (585 - 4089 mm), 26,455 lbs. (12000 kg) Capacity - Requires Return to Tank and Predisposition			•	•
OTHER ATTACHMENTS				
Cylinder Handler, Diameter 9" to 25.2" (228 to 596 mm), 23,100 lbs. (10,500 kg) - Requires Return to Tank, Predisposition, and High Pressure Hydraulics			•	•
Pipe Grapple (14T) Double Arm, 98" (2490 mm) width, Includes 94" (2400 mm) length (pair) 5.5" x 10.23" (140 x 260 mm) Fixed Tines			•	
Twin Arm Log Grapple, 48" (120 mm) Fork Length, 59" wide, Max. Opening 70" (1780 mm), 22,000 lbs. (10,000 kg) Capacity - Requires Auxiliary Hydraulics		•		
Work Platforms - Requires Work Platform Predisposition	•	•	•	•
Work Platform with 180° Swing - Requires Work Platform Predisposition	•	•	•	•
Work Platforms (Underground) - Requires Work Platform Predisposition	•			

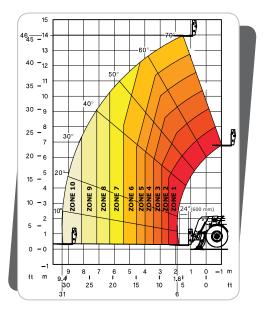
MHT SERIES HEAVY CAPACITY TELESCOPIC HANDLER LOAD CHARTS

Load charts based on 24" (600 mm) load center and 36" (900 mm) load center for the MHT 10230 per ANSI/ITSDF B56.6.



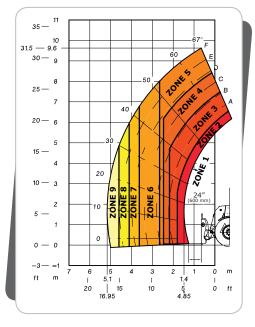
MHT 1490 Load Zones:

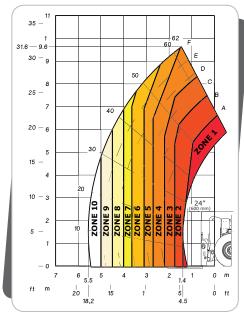
- 1. 20,000 lbs. (9072 kg)
- 2. 17,500 lbs. (8000 kg)
- 3. 15,000 lbs. (7000 kg)
- **4.** 13,000 lbs. (6000 kg)
- **5.** 11,000 lbs. (5000 kg)
- 6. 10,000 lbs. (4500 kg)
- 7. 8,500 lbs. (4000 kg)
- 8. 6,500 lbs. (3000 kg)
- 9. 5,500 lbs. (2500 kg)
- 10. 4,400 lbs. (2000 kg)
- 11. 3,300 lbs. (1500 kg)

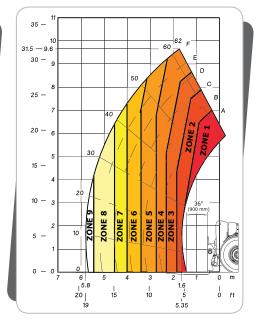


MHT 1490 on Stabilizers Load Zones:

- 1. 20,000 lbs. (9072 kg)
- 6. 13,000 lbs. (6000 kg)
- **2.** 18,500 lbs. (8500 kg)
- 7. 11,000 lbs. (5000 kg)
- **3.** 17,500 lbs. (8000 kg)
- 8. 10,000 lbs. (4500 kg)
- **4.** 16,500 lbs. (7500 kg)
- 9. 8,500 lbs. (4000 kg)
- **5.** 15,000 lbs. (7000 kg)
- 10. 7,500 lbs. (3500 kg)







MHT 10130 Load Zones:

- 1. 28,000 lbs. (13000 kg)
- 6. 12,100 lbs. (5500 kg)
- 2. 26,450 lbs. (12000 kg)
- **7.** 9,900 lbs. (4500 kg)
- 3. 22,000 lbs. (10000 kg)
- 8. 7,700 lbs. (3500 kg)
- 4. 18,800 lbs. (8500 kg)
- 9. 5,500 lbs. (2500 kg)
- **5.** 16,500 lbs. (7500 kg)

MHT 10180 Load Zones:

- 1. 40,000 lbs. (18000 kg)
- **6.** 17,700 lbs. (8000 kg)
- 2. 33,000 lbs. (15000 kg)
- **7.** 15,400 lbs. (7000 kg)
- **3.** 28,700 lbs. (13000 kg)
- **8.** 13,200 lbs. (6000 kg)
- 4. 24,250 lbs. (11000 kg)
- 9. 11,000 lbs. (5000 kg)
- **5.** 21,000 lbs. (9500 kg)
- 10. 9,900 lbs. (4500 kg)

MHT 10230 Load Zones:

- **1.** 50,000 lbs. (23000 kg)
- 6. 22,000 lbs. (10000 kg)
- 2. 44,000 lbs. (20000 kg)
- 7. 18,800 lbs. (8500 kg)
- **3.** 37,500 lbs. (17000 kg)
- 8. 15,400 lbs. (7000 kg) 9. 14,000 lbs. (6400 kg)
- 4. 33,000 lbs. (15000 kg)
- **5.** 26,450 lbs. (12000 kg)

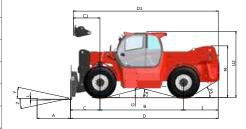
MHT SERIES HEAVY CAPACITY TELESCOPIC HANDLER SPECIFICATIONS

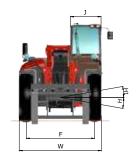
			MHT 1490	MHT 10130	MHT 10180	MHT 10230		
\bowtie	ITIES	Lift Capacity with Forks (kg)	20,000 lbs. (9072)	28,000 lbs. (13000)	40,000 lbs. (18000)	50,000 lbs. (23000)		
CAPACITIES		Max. Lift Height (m)	46'0" (14)	31'6" (9.62)	31'7" (9.63)	31'8" (9.65)		
		Capacity at Max. Lift Height (kg)	13,000 lbs. (6000)	16,500 lbs. (7500)	24,250 lbs. (11000)	33,000 lbs. (15000)		
		Max. Forward Reach (m)	31'0" (9.45)	16'11.5" (5.17)	18'3" (5.56)	19'0" (5.80)		
		Cap. at Max. Forward Reach (kg)	7,5000 lbs. (3500)	5,500 lbs. (2500)	9,900 lbs. (4500)	14,000 lbs. (6400)		
<u>=</u>	ENGINE	Manufacturer	Mercedes-Benz					
	Ž	Power (kW)	176 hp (129) Tier IV					
		Aspiration	Diesel Turbocharged					
		Model	OM 934 LA.E4-3					
		Torque (Nm) @ rpm	553 ftlbs. (750) @ 1200-1600					
STN		Transmission	Hydrostatic Transmission					
	COMPONENTS	Max Travel Speed (km/hr)	19.3 m	nph (25)				
	CO	Drive		4-W	heel			
		Selective Steering	2-Wheel, 4-Wheel, Crab					
		Service Brake	Multi-Disc Brakes and Front and Rear Axles					
		Parking Brake	Hydraulic Front Axle					
		Axle Manufacturer	DA	NA	OMCI			
	YSTEM	Pump Type	Piston Pump					
	HYDRAULIC SYSTEM	Total Capacity (L/min)	47.5 gp	m (180)	54.1 gpm (205)			
HYDR4		System Pressure (bar)	4350 psi (300)		5145 psi (350)			
(· · · · ·	SNOL	Approximate Weight (kg)	45,856 lbs. (20800)	40,763 lbs. (18490)	52,910 lbs. (24000)	64,595 lbs. (29300)		
	GENERAL SPECIFICATIONS	Length - Less Forks (m)	22'0" (6.71)	20'2" (6.14)	21'10" (6.65)	22'11" (6.99)		
	L SPE(Width (m)	8'3" (2.50)	8'3" (2.51)	8'3" (2.52)	9'4" (2.85)		
	ENERA	Ground Clearance (m)		17" (0.44)		19" (0.49)		
3		Wheelbase (m)	11'1" (3.37)		12'4" (3.75)	12'9.5" (3.90)		
		Turning Radius -Outside Tire (m)	13'2" (4.0)	17'6" (5.34)	18'0" (5.50)	17'9" (5.40)		
		Overall Height (m)	9'10" (3.0)			10'0" (3.05)		
		Frame Leveling	+/- 8°	+/- 10°	+/- 10°	+/- 10°		
		Standard Tires	Aeolus 17.5 x 25		Aeolus 16 R25	Aeolus 18 R25		
		Drawbar Pull (daN)	24,504 lbf. (10900)	24,279 lbf. (10800)	35,901 lbf. (15970)	41,589 lbf. (18500)		
圓	ACITIES	Hydraulic Oil (L)	72.6 gal. (275)	76.6 gal. (290)	76.6 gal. (290)	76.6 gal. (290)		
	FLUID CAPACITIES	Fuel Tank (L)	83 gal. (315)	83 gal. (315)	83 gal. (315)	83 gal. (315)		
	FLUI	DEF Tank (L)	14.3 gal. (54)	16.6 gal. (63)	16.6 gal. (63)	16.6 gal. (63)		

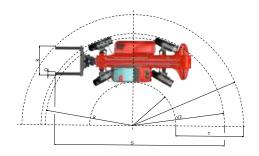
DIMENSIONS REFERENCE DIAGRAMS

(MHT 10180 Model shown below)

(m)	MHT 1490	MHT 10130	MHT 10180	MHT 10230
В	11'1" (3.37)	11'1" (3.37)	12'4" (3.75)	12'9.5" (3.90)
С	6'1" (1.865)	4'5" (1.357)	4'4" (1.33)	4'5" (1.35)
D	22'0" (6.71)	20'2" (6.14)	21'10" (6.65)	22'11" (6.99)
G	17" (.44)	17.5" (.44)	17.5" (.44)	19" (.49)
I	4'8" (1.415)	4'8" (1.42)	5'2" (1.57)	5'9" (1.75)
U2	9'10" (3.0)	9'10" (2.99)	19'10" (3.0)	10'0" (3.05)
V2	13'2" (4.01)	17'6" (5.34)	18'0" (5.50)	17'9" (5.40)
W	8'3" (2.50)	8'3" (2.51)	8'3" (2.52)	9'4" (2.85)







This publication in no way constitutes an offer and the company reserves the right to alter specification without notice.

