MJ110HD TRAVELIFT® CRANE SPECIFICATIONS

•INDUSTRIAL APPLICATION•

MI-JACK PRODUCTS
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www.mi-jack.com
ISO 9001:2008 CERTIFIED

CAPACITY……220,000 LBS (100,000 KG)

STANDARD EQUIPMENT

Enclosed Inward facing cab 16' 4" (4.98m) eye level • Tinted glass • Windshield wiper • Adjustable, heated bucket seat • 7" touch screen Human Machine Interface (HMI) • Electronic, stepless, infinitely variable multi-axis joystick controls • Noise suppression • 4 Red strobe lights • 4 Motion alarms • Cummins diesel engine with grid heater • Direct Flow air intake primary and secondary filters • Localized diagnostic power unit interface • (2) dual wheel rear wheel drive • Rear wheel steer • Vivid yellow paint w/black yokes and wheels • Single trolley • Chain traverse • Programmable Electronic Control System (ECS) • 18.00 x 25 Bias Ply tires • Wheel guards • 8 LED lights (4 work, 4 drive)

ENGINE

Make and Model……..Tier 4F Cummins Diesel QSB6.7
Fuel……No. 2 Ultra Low Sulfur Diesel (ULSD)
No. of Cylinders……6
Fuel Supply……..High Pressure Common Rail
Air Cleaner……Direct Flow
Oil Filter……Renewable Cartridge
Cooling System……Pressurized Radiator
Horsepower, gross @ Flywheel……260 hp @ 2200 rpm
194 kW @ 2200 rpm
Torque, maximum @ Flywheel……730 lbs. ft. @ 1500 rpm
990 Nm @ 1500 rpm

ELECTRICAL

Voltage……..24 Volt Alternator……95 Amps
Batteries (2)……1000 CCA @ 0°F (-18°C) for 30 sec.

MAIN HYDRAULICS

Hoist & Drive Pump……Closed Loop Over-center Piston Type
Traverse Pump……..Open Loop Load Sense Piston Type
Control Valves……Fully Proportional Directional Control Valves

DRIVE SYSTEM

Hydrostatic on rear wheels. Four piston motors (one at each rear wheel) drive planetary gear transmissions with a roller chain to the drive sprocket at the wheels.
Chain……ANSI 180

BRAKING SYSTEM

Service……..Automatic hydrostatic braking
Parking……..MultiDisc "SAHR[1]"

STEERING

Dual worm gear driven, electrically controlled, hydraulically powered slew drives.

TRAVERSE SYSTEM

Direct Chain Drive, one located on each top beam. Each traverse is individually controlled and is driven by a hydraulic motor.
Motor……..Bent-Axis Piston
Brake……. MultiDisc "SAHR[1]"
Chain……ANSI 120

HOIST SYSTEM

Hoist drums are directly coupled to a planetary gearbox, one located on each top beam. Each hoist is individually controlled and driven by a fixed displacement piston motor integrated with a direct mounted counterbalance valve.
Motor……..Bent-Axis Piston
Brake……. MultiDisc "SAHR[1]"
Wire Rope……3/4" DYFORM® 8
Reeving……..8 parts per top beam
Maximum load eccentricity ratio……50%/50%

PERFORMANCE

Traverse Speed (Rated Capacity)
Speed……..60 fpm (18.3 m/min)
Slope……2.8%

2 Speed Hoist
Rated Capacity……17.0 fpm (5.2 m/min)
Empty……34.0 fpm (10.4 m/min)

	Level Drive Speed at Rated Capacity Speed	Max. Gradeability[2] at Rated Capacity Paved	Gravel
2 Speed Drive			
Rated Capacity	2.7 mph (4.2 km/h)	5.5%	3.6%
Empty	4.5 mph (7.9 km/h)	5.5%	3.6%

SERVICE CAPACITIES	**U.S.**	**METRIC**
Fuel Tank	100 gals	379L
Hydraulic System[3]	75 to 100 gals	284 to 379L
Hydraulic Reservoir	100 gals	379L
Cooling System	32 qts	30L
Engine Oil (w/Filter)	17 qts	16L
Pump Drive Transmission	2.5 qts	2.4L

OPTIONAL EQUIPMENT

Dual/split trolley (specify spacing) • Top beam widths • Column heights • Side beam lengths • Raised operator cab • Ladder safety device(s) • Cab heater and defroster • Engine block heater • Remote control • Drive camera/monitor kit • Maintenance ladders and platforms • Air conditioner • AC light package • Power on Demand® • Scale package • Lead wheel steer • All wheel drive • Up and Down hoist limits • E-stops on wheel yokes • Windshield washer fluid • Cab seat height and console width spacer adjustments • Cold weather package • Anti-sway • Trolley and Hoist Speed and Position Synchronization • AccuSteer® • Work area cameras and monitors • Lockable power unit doors • Tier 3 engine (export only) • PA system • Anemometer • Auxiliary power outlet in cab • White noise travel alarms • Single tire yokes (33.25 x 35 Bias Ply)

ACCESSORIES

Spare tire and wheel • American tool kit (recommended for export) • Filter kits (Hydraulic/engine kits available) • Export preparation • Magnet package[4] • Spreader beams • Spare parts kit

1-"SAHR" spring applied hydraulic release; Automatic Actuation; No mechanical adjustment
2-Gradeability is dependent on machine size. Consult with Engineering for increased gradeability options
3-System capacity varies depending on height and width of unit.
4-Consult factory when adding magnet package.

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Rev.2

NOTE: MI-JACK PRODUCTS reserves the right to change specifications without notice and without incurring any obligation relating to such a change. 07/09/19

MJ110HD TRAVELIFT® CRANE
STANDARD DUAL TIRE DIMENSIONS

ESTIMATED SHIPPING WEIGHTS:

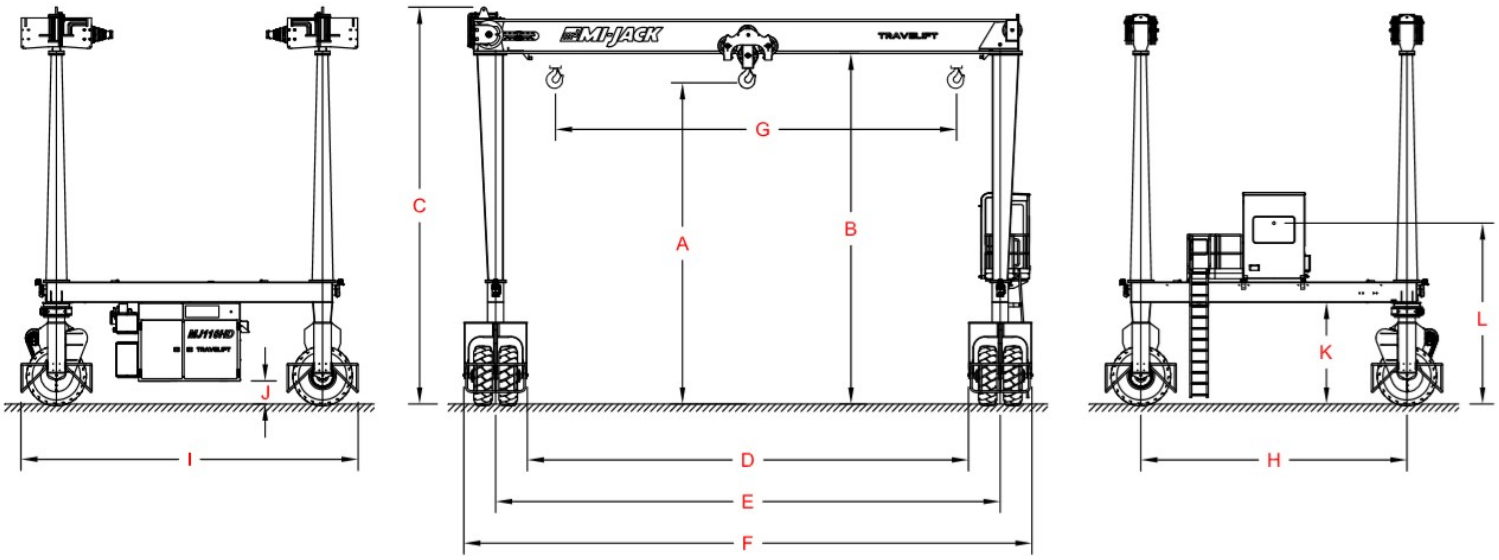
HK HT		ICW 40' 0"	ICW 50' 0"	ICW 60' 0"		
	25' 0"	123,214 lbs 55,889 kg	132,641 lbs 60,165 kg	146,629 lbs 66,510 kg	24' 0"	WB
	30' 0"	126,709 lbs 57,474 kg	136,137 lbs 61,751 kg	150,124 lbs 68,095 kg		
	40' 0"	134,344 lbs 60,937 kg	143,771 lbs 65,213 kg	157,759 lbs 71,558 kg		

1.) Add 1,570 lbs for 30' WB
2.) Add 4,185 lbs for 40' WB

GROUND BEARING PRESSURE:

HK HT		ICW 40' 0"	ICW 50' 0"	ICW 60' 0"		
	25' 0" MINSPAN	121 psi 834 kPa	122 psi 841 kPa	124 psi 855 kPa	24' 0"	WB
	30' 0" MINSPAN	121 psi 834 kPa	123 psi 848 kPa	125 psi 862 kPa		
	40' 0" MINSPAN	122 psi 841 kPa	124 psi 855 kPa	125 psi 862 kPa		

DIMENSIONAL DATA



Any combination of widths, heights, and lengths shown are available except as noted in charts. Dimensional variations may occur based upon optional equipment characteristics. All crane dimensions are capable of full capacity. Consult factory for optional dimension and ratings.

A HEIGHT TO HK. THROAT(1)	*B* HEIGHT TO BTTM OF TP BM	*C* OVERALL HEIGHT	*D* I.C.W.(2)	*E* TREAD WIDTH	*F* OVERALL WIDTH AT GROUND(3)(4)	*G* TROLLEY TRAVEL(5)
25'- 0" (7.62 m)	27'- 6" (8.46 m)	31'- 9" (9.75 m)	40'- 0" (12.19 m)	45'- 8" (13.92 m)	51'- 5" (15.67 m)	34'- 1" (10.39 m)
30'- 0" (9.14 m)	32'- 6" (9.98 m)	36'- 9" (11.28 m)	50'- 0" (15.24 m)	55'- 8" (16.97 m)	61'- 5" (18.72 m)	44'- 1" (13.44 m)
†40'- 0" (12.19 m)	42'- 6" (13.03 m)	46'- 9" (14.33 m)	60'- 0" (18.29 m)	65'- 8" (20.02 m)	71'- 5" (21.77 m)	54'- 1" (16.48 m)

H WHEELBASE & HK. CENTERS	*I* OVERALL LENGTH	*J* GROUND CLEARANCE	*K* GROUND TO SIDE BEAM	*L* OPERATOR EYE LEVEL	
24'- 0" (7.32 m)	30'-5" (9.27 m)	2'-0" (0.61 m)	9'- 2" (2.79 m)	Inward facing cab	16'- 4" (4.98 m)
30'- 0" (9.14 m)	36'-5" (11.10 m)			High Inward facing cab	18'- 2" (5.54 m)
40'- 0" (12.19 m)	46'-5" (14.15 m)				

(1) Add 6" (0.08 m) for dual trolley option.
(2) Measured from face of yoke.
Subtract 2" (0.05 m) for hardware
(3) For unit with raised cab options add 15" (0.38 m) to left side clearance.
(4) Subtract 6" (0.15 m) for overall width at top.
(5) Single trolley dimensions shown,
For dual trolley, subtract (trolley spacing + 6" (0.15 m))
† Tie bar options

NOTE: All heights above ground include 2" tire deflection for an unloaded crane. Up to 3" additional should be deducted for tire deflection at rated load. Inside, outside and height dimensions are nominal and may vary due to manufacturing standards and structural deflection.
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MJ110HD TRAVELIFT® CRANE
SINGLE TIRE OPTION DIMENSIONS

ESTIMATED SHIPPING WEIGHTS:

HK HT		ICW 40' 0"	ICW 50' 0"	ICW 60' 0"		
	25' 0"	123,214 lbs 55,889 kg	132,641 lbs 60,165 kg	146,629 lbs 66,510 kg	24' 0"	WB
	30' 0"	126,709 lbs 57,474 kg	136,137 lbs 61,751 kg	150,124 lbs 68,095 kg		
	40' 0"	134,344 lbs 60,937 kg	143,771 lbs 65,213 kg	157,759 lbs 71,558 kg		

1.) Add 1,570 lbs for 30' WB
2.) Add 4,185 lbs for 40' WB

GROUND BEARING PRESSURE:

HK HT		ICW 40' 0"	ICW 50' 0"	ICW 60' 0"		
	25' 0" MINSPAN	121 psi 834 kPa	122 psi 841 kPa	124 psi 855 kPa	24' 0"	WB
	30' 0" MINSPAN	121 psi 834 kPa	123 psi 848 kPa	125 psi 862 kPa		
	40' 0" MINSPAN	122 psi 841 kPa	124 psi 855 kPa	125 psi 862 kPa		

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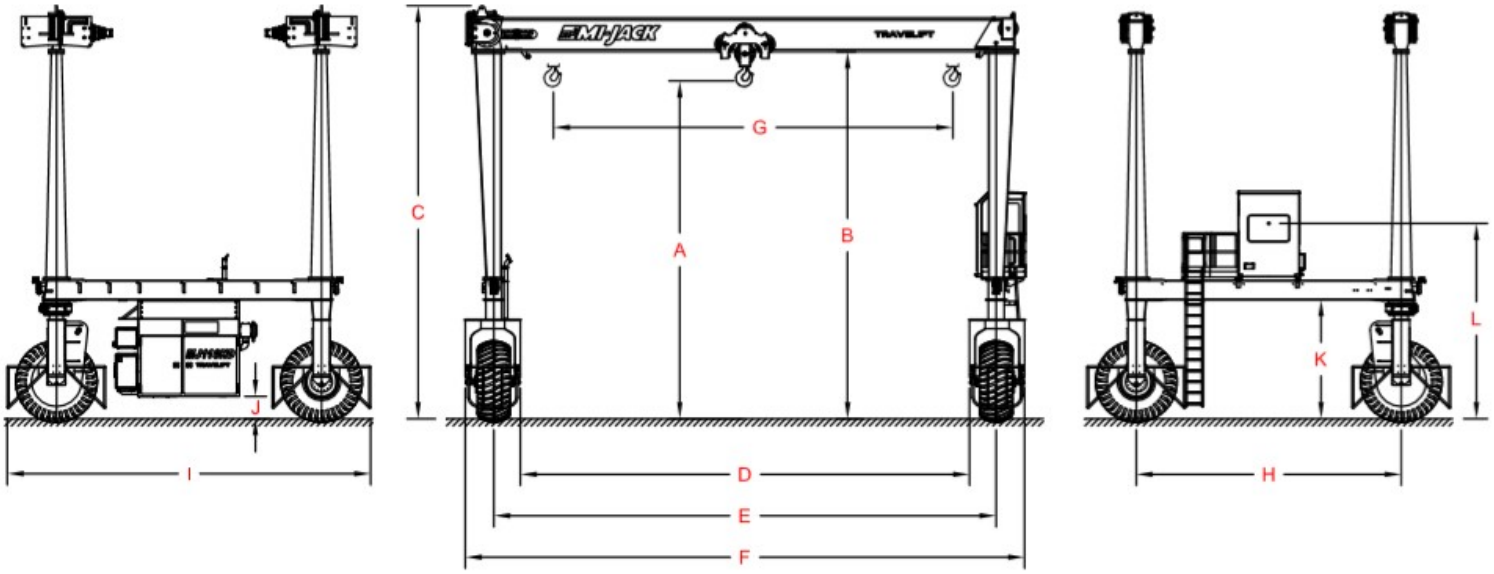

Any combination of widths, heights, and lengths shown are available except as noted in charts. Dimensional variations may occur based upon optional equipment characteristics. All crane dimensions are capable of full capacity. Consult factory for optional dimension and ratings.

A HEIGHT TO HK. THROAT(1)	*B* HEIGHT TO BTTM OF TP BM	*C* OVERALL HEIGHT	*D* I.C.W.(2)	*E* TREAD WIDTH	*F* OVERALL WIDTH AT GROUND(3)(4)	*G* TROLLEY TRAVEL(5)
25'- 0" (7.62 m)	27'- 6" (8.38 m)	31'- 9" (9.68 m)	40'- 0" (12.19 m)	45'- 0" (13.72 m)	50'- 2" (15.29 m)	34'- 1" (10.39 m)
30'- 0" (9.14 m)	32'- 6" (9.90 m)	36'- 9" (11.20 m)	50'- 0" (15.24 m)	55'- 0" (16.76 m)	60'- 2" (18.34 m)	44'- 1" (13.44 m)
†40'- 0" (12.19 m)	42'- 6" (12.95 m)	46'- 9" (14.25 m)	60'- 0" (18.29 m)	65'- 0" (19.81 m)	70'- 2" (21.39 m)	54'- 1" (16.48 m)

H WHEELBASE & HK. CENTERS	*I* OVERALL LENGTH	*J* GROUND CLEARANCE	*K* GROUND TO SIDE BEAM	*L* OPERATOR EYE LEVEL	
24'- 0" (7.32 m)	30'-5" (9.27 m)	1'-11" (0.58 m)	10'- 9" (3.28 m)	Inward facing cab	17'- 8" (5.38 m)
30'- 0" (9.14 m)	36'-5" (11.10 m)			High Inward facing cab	19'- 7" (5.97 m)
40'- 0" (12.19 m)	46'-5" (14.15 m)				

(1) Add 6" (0.15 m) for dual trolley option.
(2) Measured from face of yoke.
Subtract 2" (0.05 m) for hardware
(3) For unit with raised cab options add 15" (0.38 m) to left side clearance.
(4) Subtract 6" (0.15 m) for overall width at top.
(5) Single trolley dimensions shown,
For dual trolley, subtract (trolley spacing + 6" (0.15 m))
† Tie bar options

NOTE: All heights above ground include 4" tire deflection for an unloaded crane. Up to 3" additional should be deducted for tire deflection at rated load. Inside, outside and height dimensions are nominal and may vary due to manufacturing standards and structural deflection.
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