

MJ50HD TRAVELIFT® CRANE SPECIFICATIONS •INDUSTRIAL APPLICATION•



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ISO 9001:2008 CERTIFIED

CAPACITY.....100,000 LBS (45,358 KG)

STANDARD EQUIPMENT

Enclosed Inward facing cab 16' 1" (4.90m) 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 • Rear wheel drive • Rear wheel steer • Vivid yellow paint w/black yokes and wheels • Single trolley • Chain traverse • Programmable Electronic Control System (ECS) • 21.00 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.....225 hp @ 2200 rpm
168 kW @ 2200 rpm
Torque, maximum @ Flywheel.....700 lb. ft. @ 1500 rpm
949 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. Two piston motors (one at each rear wheel) drive planetary gear transmissions with a roller chain to the drive sprocket at the wheels.
Chain.....ANSI 160

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 100

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.....5/8" EIPS, IWRC 6x37 Class
Reeving.....8 parts per top beam
Maximum load eccentricity ratio.....60%/40%

PERFORMANCE

Traverse Speed (Rated Capacity)
Speed.....up to 100 fpm (30.5 m/min)
Slope.....5.7%

Hoist Speed
Rated Capacity and Empty.....33.0 fpm (10.1 m/min)

Level Drive Speed at Rated Capacity Speed	Max. Gradeability ² at Rated Capacity Paved Gravel
.....4.0 mph (6.2 km/h)5.9%.....4.0%.....

SERVICE CAPACITIES

	U.S.	METRIC
Fuel Tank.....	100 gals	378L
Hydraulic System ³	75 to 100 gals	284 to 378L
Hydraulic Reservoir.....	100 gals	378L
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 lengths • 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 • Auxiliary hoist • 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 • Below grade capability • White noise travel alarms

ACCESSORIES

Container handling spreader • Spare tire and wheel • American tool kit (recommended for export) • Filter kits (Hydraulic/engine kits available) • Export preparation • Magnet package⁴ • 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.

MJ50HD TRAVELIFT® CRANE

ESTIMATED SHIPPING WEIGHTS:

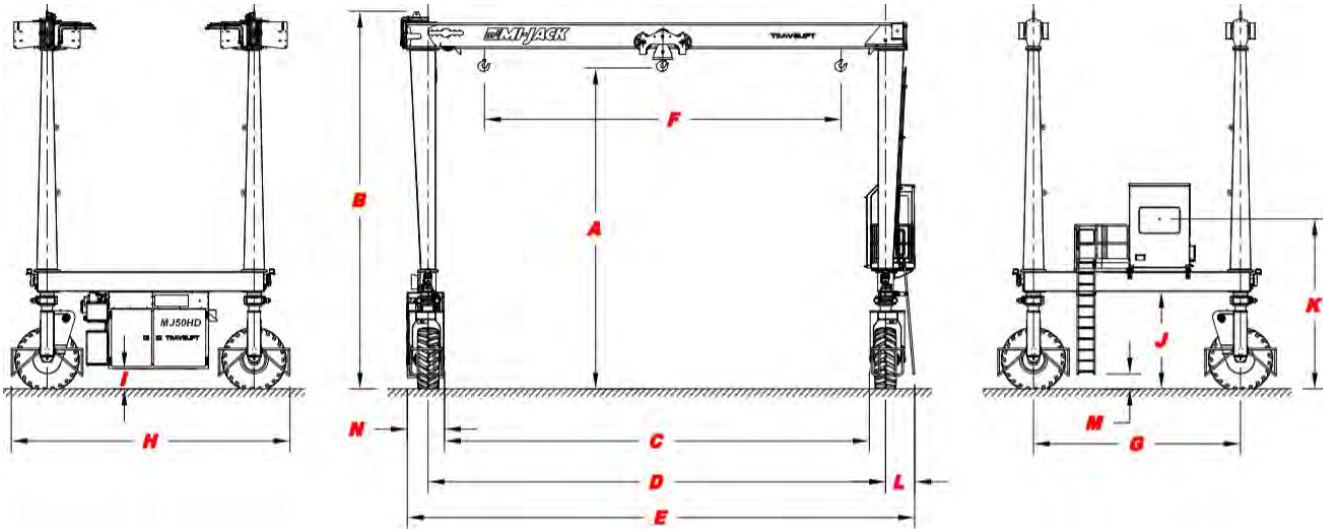
		ICW			19' 0"	WB
		29' 2"	34' 2"	39' 2"		
HK HT	24' 10"	79,187 lbs 35,919 kg	81,431 lbs 36,936 kg	83,675 lbs 37,954 kg		
	28' 10"	81,467 lbs 36,953 kg	83,710 lbs 37,970 kg	85,955 lbs 38,989 kg		
	33' 1"	83,889 lbs 38,051 kg	86,133 lbs 39,069 kg	88,378 lbs 40,088 kg		

- 1.) Add 1,200 lbs for 24' WB
- 2.) Add 2,800 lbs for 30' WB

GROUND BEARING PRESSURE:

		ICW			19' 0"	WB
		29' 2"	34' 2"	39' 2"		
HK HT	24' 10"	100 psi 689 kPa	100 psi 689 kPa	101 psi 696 kPa		
	MINS PAN	100 psi 689 kPa	100 psi 689 kPa	101 psi 696 kPa		
	33' 1"	100 psi 689 kPa	101 psi 696 kPa	101 psi 696 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	B	C	D	E	F	G
HEIGHT TO HK. THROAT ⁽¹⁾	OVERALL HEIGHT	I.C.W. ⁽²⁾	TREAD WIDTH	OVERALL WIDTH AT GROUND ⁽³⁾	TROLLEY TRAVEL ⁽⁴⁾	WHEELBASE & HK. CENTERS
24'-10" (7.57 m)	30'- 1" (9.17 m)	29'- 2" (8.89 m)	32'- 0" (9.75 m)	36'- 7" (11.15 m)	22'- 9" (6.93 m)	19'- 0" (5.79 m)
28'-10" (8.79 m)	34'- 1" (10.39 m)	34'- 2" (10.41 m)	37'- 0" (11.28 m)	41'- 7" (12.67 m)	27'- 9" (8.46 m)	24'- 0" (7.32 m)
33'- 1" (10.08 m)	38'- 4" (11.68 m)	39'- 2" (11.94 m)	42'- 0" (12.80 m)	46'- 7" (14.20 m)	32'- 9" (9.98 m)	30'- 0" (9.14 m)
† 43'- 3" (13.18 m)	48'- 6" (14.78 m)	49'-2" (14.97 m)	52'-0" (15.85 m)	56'-7" (17.25 m)	42'- 9" (13.03 m)	
		59'-2" (18.03 m)	62'-0" (18.90 m)	66'-7" (20.29 m)	52'- 9" (16.08 m)	

H	I	J	K	L	M	N
OVERALL LENGTH	GROUND CLEARANCE	GROUND TO SIDE BEAM	OPERATOR EYE LEVEL	TREAD CENTER TO LADDER	HEIGHT TO LADDER	YOKE WIDTH ⁽²⁾
25'- 7" (7.80 m)	1'- 10" (0.56 m)	8'- 11" (2.72 m)	Inward facing cab 16'- 1" (4.90 m)	2'- 8" (0.81 m)	1'- 4" (0.41 m)	3'- 2" (0.97 m)
30'- 7" (9.32 m)			High Inward facing cab 18'- 3" (5.56 m)			
36'- 7" (11.15 m)			High Inward facing cab 20'- 3" (6.17 m)			

(1) Add 3" (0.08 m) for dual trolley option

(2) Measured from face of yoke
Subtract 2" (0.05 m) for hardware

(3) For unit with standard cab height

(4) Single trolley dimensions shown,

For dual trolley, subtract (trolley spacing -2" (0.05 m))

† Tie bar options

NOTE: All heights above ground include 3" 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.

NOTE: MI-JACK PRODUCTS reserves the right to change specifications without notice and without incurring any obligation relating to such a change. 7/09/19