

MJ85HD TRAVELIFT® CRANE SPECIFICATIONS

•INDUSTRIAL APPLICATION•



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ISO 9001:2008 CERTIFIED

CAPACITY.....170,000 LBS (77,111 KG)

STANDARD EQUIPMENT

Enclosed Inward facing cab 18' 0" (5.49m) 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) • 33.25 x 35 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 Over-center 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 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 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" DYFORM® 8
Reeving.....8 parts per top beam
Maximum load eccentricity ratio.....50%/50%

PERFORMANCE

Traverse Speed (Rated Capacity)
Speed.....up to 100 fpm (30.5 m/min)
Slope.....2.8%

Hoist Speed
Rated Capacity.....22.0 fpm (6.7 m/min)

Level Drive Speed at Rated Capacity Speed	Max. Gradeability ² at Rated Capacity Paved Gravel
.....3.0 mph (5.0 km/h).....	5.0%.....3.1%.....

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 • 2 speed hoist and
drive • 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 consol 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

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

2-System capacity varies depending on height and width of unit.

3-Consult factory when adding magnet package.

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

MJ85HD TRAVELIFT® CRANE

ESTIMATED SHIPPING WEIGHTS:

		I.C.W.					24' 0"	WB
		18' 5"	28' 5"	38' 5"	48' 5"	58' 5"		
HK HT	25' 5"	97,253 lbs 44,113 kg	104,522 lbs 47,410 kg	110,331 lbs 50,045 kg	116,433 lbs 52,813 kg	129,507 lbs 58,743 kg		
	29' 5"	100,050 lbs 45,382 kg	107,319 lbs 48,679 kg	113,128 lbs 51,314 kg	119,230 lbs 54,082 kg	132,304 lbs 60,012 kg		
	33' 7"	102,963 lbs 46,703 kg	110,232 lbs 50,000 kg	116,041 lbs 52,635 kg	122,143 lbs 55,403 kg	135,217 lbs 61,333 kg		
	39' 7"	107,800 lbs 48,897 kg	115,069 lbs 52,194 kg	120,879 lbs 54,830 kg	126,980 lbs 57,597 kg	140,054 lbs 63,527 kg		

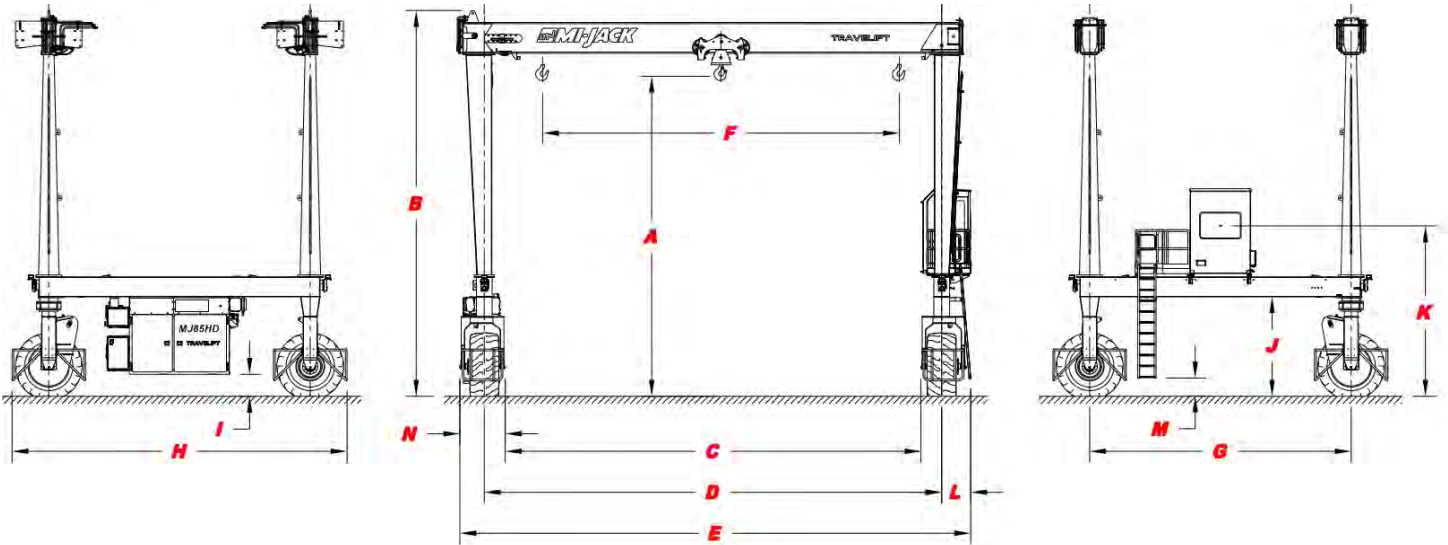
1.) Add 1,600 lbs for 30' WB

2.) Add 4,200 lbs for 40' WB

GROUND BEARING PRESSURE:

		I.C.W.					24' 0"	WB
		18' 5"	28' 5"	38' 5"	48' 5"	58' 5"		
HK HT	25' 5"	110 psi 758 kPa	111 psi 765 kPa	112 psi 772 kPa	113 psi 779 kPa	114 psi 786 kPa		
	29' 5"	110 psi 758 kPa	111 psi 765 kPa	112 psi 772 kPa	113 psi 779 kPa	115 psi 793 kPa		
	33' 7"	110 psi 758 kPa	111 psi 765 kPa	112 psi 772 kPa	113 psi 779 kPa	115 psi 793 kPa		
	39' 7"	110 psi 758 kPa	112 psi 772 kPa	113 psi 779 kPa	114 psi 786 kPa	116 psi 800 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 OVERALL HEIGHT	C I.C.W. ⁽²⁾	D TREAD WIDTH	E OVERALL WIDTH AT GROUND ⁽³⁾	F TROLLEY TRAVEL ⁽¹⁾	G WHEELBASE & HK. CENTERS
25'- 5" (7.75 m)	31'- 5" (9.58 m)	18'- 5" (5.61 m)	23'- 3" (7.14 m)	28'- 7" (8.71 m)	13'- 8" (4.17 m)	24'- 0" (7.32 m)
29'- 5" (8.97 m)	35'- 5" (10.80 m)	28'- 5" (8.66 m)	33'- 3" (10.19 m)	38'- 7" (11.76 m)	23'- 8" (7.21 m)	30'- 0" (9.14 m)
33'- 7" (10.24 m)	39'- 8" (12.09 m)	38'- 5" (11.71 m)	43'- 3" (13.23 m)	48'- 7" (14.81 m)	33'- 8" (10.26 m)	40'- 0" (12.19 m)
†39'- 7" (12.07 m)	45'- 8" (13.92 m)	48'- 5" (14.76 m)	53'- 3" (16.28 m)	58'- 7" (17.86 m)	43'- 8" (13.31 m)	
		58'- 5" (17.80 m)	63'- 3" (19.33 m)	68'- 7" (20.90 m)	53'- 8" (16.36 m)	

H OVERALL LENGTH	I GROUND CLEARANCE	J GROUND TO SIDE BEAM	K OPERATOR EYE LEVEL	L TREAD CENTER TO LADDER ⁽³⁾	M HEIGHT TO LADDER	N YOKE WIDTH ⁽²⁾
32'-11" (10.03 m) 38'-11" (11.86 m) 48'-11" (14.91 m)	2' (0.61 m)	11'- 3" (3.43 m)	Inward facing cab 18'- 0" (5.49 m) High Inward facing cab 19'- 11" (6.07 m)	2'- 8" (0.81 m)	1'- 6" (0.46 m)	5' (1.52 m)

(1) Consult factory for dual trolley option.

(3) For unit with standard cab height

(2) Measured from face of yoke.

Subtract 3" (0.08 m) for hardware

† 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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