

Technical data



Diesel engine

Rating	
per SAE J1349	308 HP (230 kW) at 1,800 rpm
per ISO 9249	313 HP (230 kW) at 1,800 rpm
Model	Liebherr D946
Type	6 cylinder in-line
Bore / Stroke	5.1 / 5.9 in
Displacement	729 in ³
Engine operation	4-stroke diesel Common-Rail Turbo-charged and after-cooled Reduced emissions
Air cleaner	Dry-type air cleaner with pre-cleaner, primary and safety elements
Engine idling	Sensor controlled
Electrical system	
Voltage	24 V
Batteries	2 x 180 Ah / 12 V
Alternator	Three-phase current 28 V / 140 A
Stage V	
Harmful emissions values	According to regulation (EU) 2016/1628
Emission control	Liebherr-SCRFilter technology
Fuel tank	174 gal
Urea tank	17 gal
Stage IIIA (compliant)	
Harmful emissions values	In accordance with ECE-R.96 Power Band H
Fuel tank	174 gal
Tier 4 Final	
Harmful emissions values	In accordance with 40CFR1039 (EPA) / 13CCR (CARB)
Emission control	Liebherr-SCR technology
Fuel tank	174 gal
Urea tank	17 gal



Electric motor

Rating	220 kW at 1,800 rpm
Type	Three-phase squirrel cage motor
Secondary electric motor	Electric motor auxiliary equipment (air-conditioning compressor, alternator 24 V) 15 kW
Electrical system energy supply	Frequency converter fed drive system Heavy-duty version
Supply voltage	
Low voltage	380 V, 400 V
Frequency	50 / 60 Hz
Engine idling	Sensor controlled
Electrical system	Battery-assisted Control system, lighting, diagnostics system
Voltage	24 V
Batteries	2 x 135 Ah / 12 V
Alternator	Three-phase current 28 V / 140 A

Deviating parameters of the power supply system must always be clarified with Liebherr-Hydraulikbagger GmbH.



Cooling system

Diesel engine	Water-cooled Cooling system, consisting of a cooling unit for water and charge air and a 2nd cooler for hydraulic oil, each with an infinitely variable, thermostatically controlled fan drive system
Electric motor	Air-cooled Cooling system for hydraulic oil with an infinitely variable, thermostatically controlled fan drive system



Hydraulic controls

Power distribution	Via control valves with integrated safety valves, simultaneous actuation of chassis and equipment. Swing drive in separate closed circuit
Servo circuit	
Equipment and swing	With electro-hydraulic pilot control and proportional joystick levers
Chassis mobile	Electro-proportional via foot pedal
Chassis crawler	With electric proportionally functioning foot pedals or adjusted with plugable levers
Additional functions	Via switch or electro-proportional foot pedals
Proportional control	Proportionally acting transmitters on the joysticks for additional hydraulic functions



Hydraulic system

Hydraulic pump	
For equipment and travel drive	2 Liebherr axial piston variable displacement pumps (double construction)
Max. flow	2 x 96 gpm
Max. pressure	5,076 psi
For swing drive	Reversible axial piston variable displacement pump, closed-loop circuit
Max. flow	52 gpm
Max. pressure	5,366 psi
Hydraulic pump regulation and control	2 circuit Liebherr-Synchron-Comfort-system (LSC) with electronic engine speed sensing regulation, pressure and flow compensation, automatic oil flow optimizer
Hydraulic tank	90 gal
Hydraulic system	251 gal
Filtration	2 main return filters with integrated partial micro filtration (5 µm)
MODE selection	Adjustment of engine and hydraulic performance via a mode pre-selector to match application, e.g. for especially economical and environmentally friendly operation or for maximum material handling and heavy-duty jobs
S (Sensitive)	Mode for precision work and lifting through very sensitive movements
E (Eco)	Mode for especially economical and environmentally friendly operation
P (Power)	Mode for high performance with low fuel consumption
P+ (Power-Plus)	Mode for highest performance and for very heavy duty applications, suitable for continuous operation
Engine speed and performance setting	Stepless alignment of engine output and hydraulic power via engine speed
Option	Tool Control: 20 pre-adjustable pump flows and pressures for add-on attachments



Swing drive

Drive	Liebherr axial piston motor in a closed system, Liebherr planetary reduction gear
Swing ring	Liebherr, sealed race ball bearing swing ring, internal teeth
Swing speed	0-6.5 rpm stepless
Swing torque	103,996 lbf ft
Holding brake	Wet multi-disc (spring applied, pressure released)
Option	Slewing gear brake Comfort



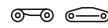
Cab

Cab	Safety cab structure with individual windscreens or featuring a slide-in subpart under the ceiling, work headlights integrated in the ceiling, a door with a sliding window (can be opened on both sides), large stowing and depositing possibilities, shock-absorbing suspension, sound damping insulating, tinted laminated safety glass, separate shades for the sunroof window and windscreen
High Rise / Gantry	Deviating from standard: safety cab structure with fixed built-in front and roof window made from impact-resistant laminated safety glass
Operator's seat Comfort	Air cushioned operator's seat with 3D-adjustable armrests, headrest, lap belt, seat heater, adjustable seat cushion inclination and length, lockable horizontal suspension, automatic weight adjustment, adjustable suspension stiffness, pneumatic lumbar vertebrae support and passive seat climatization with active coal
Operator's seat Premium (Option)	In addition to operator's seat comfort: active electronic weight adjustment (automatic readjustment), pneumatic low frequency suspension and active seat climatization with active coal and ventilator
Arm consoles	Joysticks with control consoles and swivel seat, folding left control console
Operation and displays	Large high-resolution operating unit, self-explanatory, color display with touchscreen, video-compatible, numerous setting, control and monitoring options, e.g. air conditioning control, fuel consumption respectively energy consumption, machine and attachment parameters
Air-conditioning	
Diesel engine	Automatic air-conditioning, recirculated air function, fast de-icing and demisting at the press of a button, air vents can be operated via a menu; recirculated air and fresh air filters can be easily replaced and are accessible from the outside; heating-cooling unit, designed for extreme outside temperatures, sensors for solar radiation, inside and outside temperatures
Electric motor	In addition to diesel engine: stationary air conditioning function with external climate condenser - controlled by a weekly timer



Equipment

Type	High-strength steel plates at highly-stressed points for the toughest requirements. Complex and stable mountings of equipment and cylinders
Hydraulic cylinders	Liebherr cylinders with special sealing and guide system and, depending on cylinder type, shock absorption
Energy recovering cylinder	Liebherr gas cylinder with special sealing and control system
Bearings	Sealed, low maintenance



Undercarriage

Mobile	
Versions	Standard, High Rise
Drive Standard	One axle drive per drive axle with Liebherr axial piston motor and functional brake valve on both sides
Drive High Rise	One driven axle with transmission with Liebherr axial piston motor and functional brake valve on both sides
Travel speed	0-6.2 mph stepless
Joystick steering	0-2.2 mph stepless (creeper speed) (Diesel) 0-1.9 mph stepless (creeper speed) (Electric) 0-5.0 mph stepless (High Rise) 0-3.1 mph stepless (creeper speed) (High Rise) (Diesel) 0-1.6 mph stepless (creeper speed) (High Rise) (Electric)
Driving operation	Automotive driving using accelerator pedal, cruise control function: storage of variable accelerator pedal positions
Axles	198,400 lb drive axles; manual or automatic hydraulically controlled front axle oscillation lock
Service brake	Two circuit travel brake system with accumulator; wet and backlash-free disc brake
Holding brake	Wet multi-disc (spring applied, pressure released)
Stabilization	4 point outriggers
Crawler	
Versions	EW, SW, High Rise, Gantry
Drive	Liebherr compact planetary reduction gear with Liebherr axial piston motor per side of undercarriage
Travel speed	
EW	0-2.5 mph stepless 0-1.7 mph stepless (creeper speed)
SW	0-2.5 mph stepless 0-1.6 mph stepless (creeper speed)
High Rise	0-1.8 mph stepless 0-1.2 mph stepless (creeper speed)
Gantry	0-2.2 mph stepless 0-1.6 mph stepless (creeper speed)
Brake	Functional brake valves on both sides
Holding brake	Wet multi-disc (spring applied, pressure released)
Track pads	Triple grouser, flat
Tracks	Sealed and greased



Complete machine

Lubrication	Liebherr central lubrication system for uppercarriage and equipment, automatically
Mobile (Option)	Liebherr central lubrication system for undercarriage, automatically
Steps system	Safe and durable access system with anti-slip steps; main components hot-galvanized
Noise emission	
ISO 6396	70 dB(A) = L _{PA} (inside cab)
2000/14/EC	105 dB(A) = L _{WA} (surround noise)



WARNING

Breathing diesel engine exhaust exposes you to chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

- Always start and operate the engine in a well-ventilated area.
- If in an enclosed area, vent the exhaust to the outside.
- Do not modify or tamper with exhaust system.
- Do not idle the engine except as necessary.

For more information go to www.P65warnings.ca.gov/diesel.



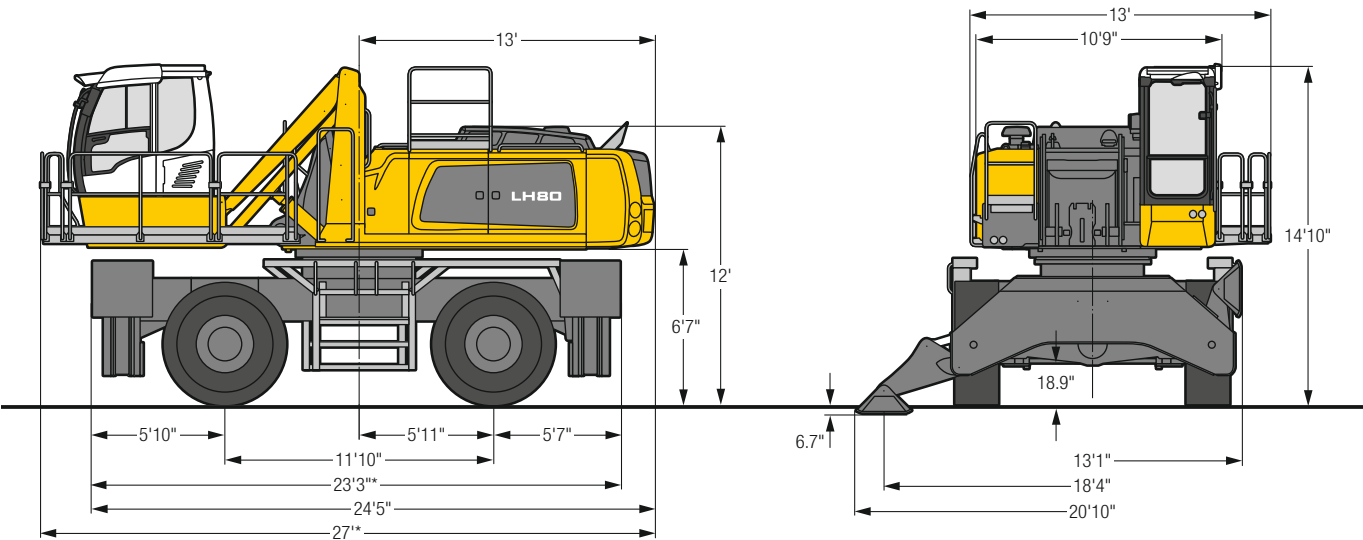
WARNING

This product can expose you to chemicals including lead and lead compounds, which are known to the State of California to cause cancer and birth defects or other reproductive harm.

For more information go to www.P65warnings.ca.gov.

LH 80 M – Dimensions

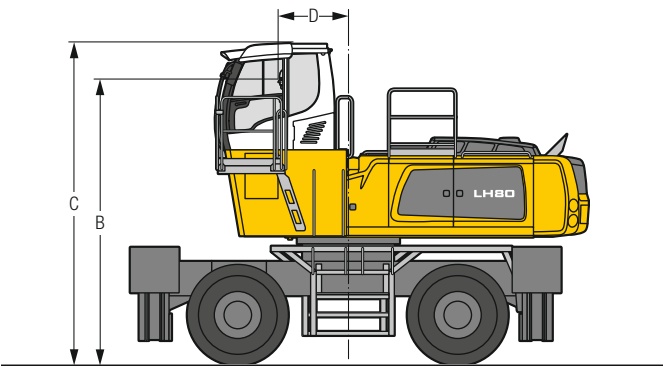
Industry



* For electric machines, the length of the machine is increased accordingly by the trailing cable / cable reel system. Detailed dimensions are available on request.

LH 80 M – Choice of cab elevation

Cab elevation LFC (rigid elevation)

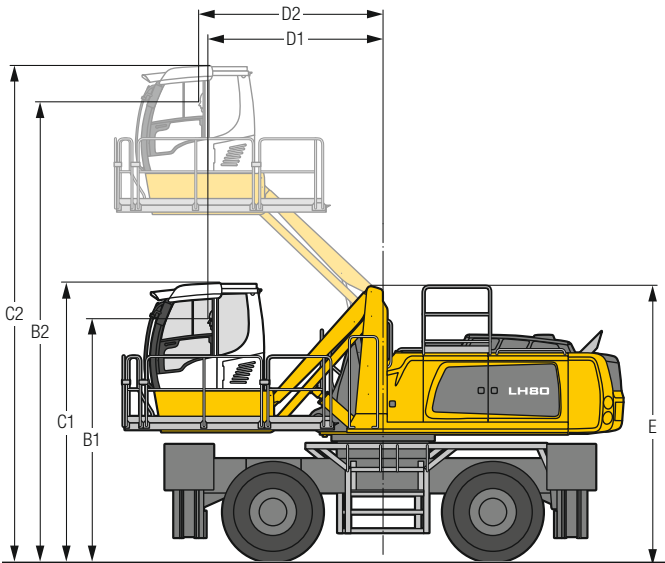


Increase type	LFC 120	LFC 200
Height	3'11"	6'7"
B	15' 5"	18'1"
C	17' 1"	19'9"
D	3' 8"	3'8"

A rigid cab elevation has a fixed eye level height. For a lower transport height, the shell of the cab can be removed and replaced by a transport device. The dimension C is in this machine design for all rigid cab elevations 13'.

Tires 23.5-25

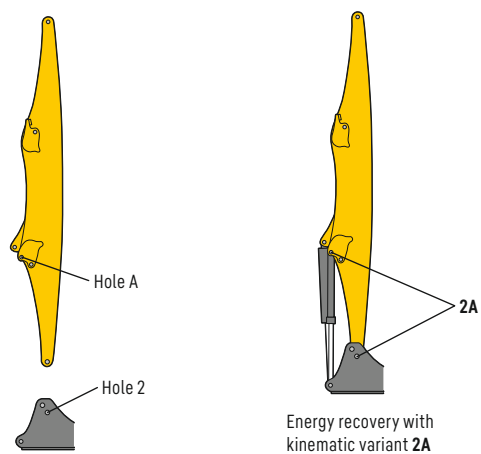
Cab elevation LHC (hydraulic elevation)



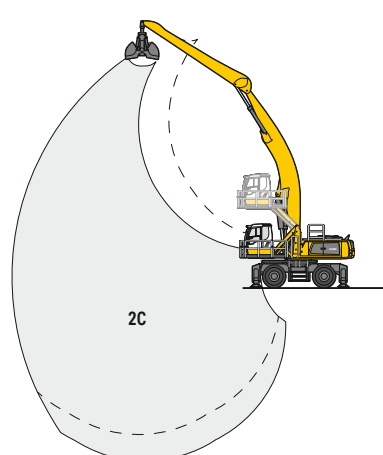
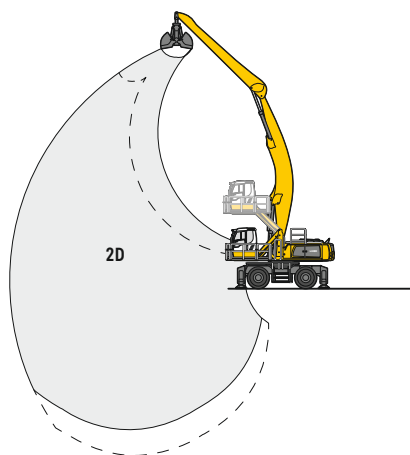
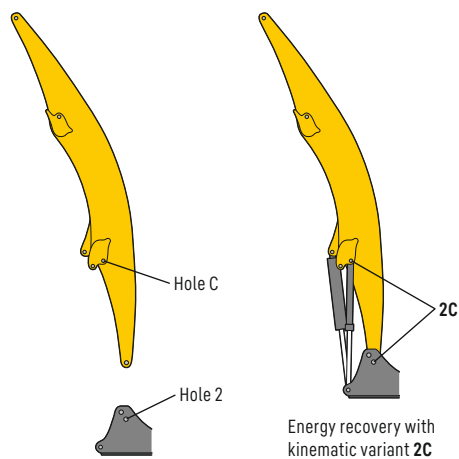
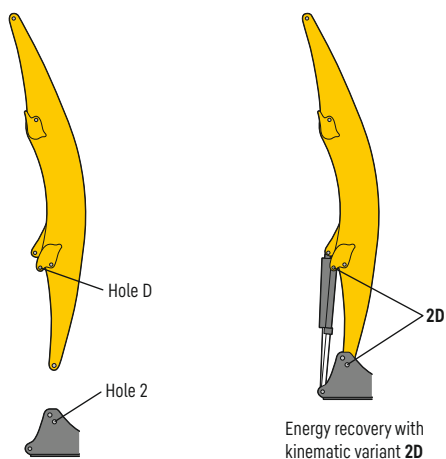
Increase type	LHC 255	LHC 340-35	LHC 360-50
B1	11' 6"	12' 8"	13' 2"
B2	19'10"	23'10"	24'10"
C1	13' 2"	14' 4"	14'10"
C2	21' 6"	25' 6"	26' 6"
D1	5' 6"	9' 2"	9' 4"
D2	5'11"	9' 2"	9'10"
E	12'10"	14' 2"	14' 7"

The hydraulically adjustable cab allows the driver, that he can choose his field of view freely and at any time within the stroke.

Kinematic variant 2A



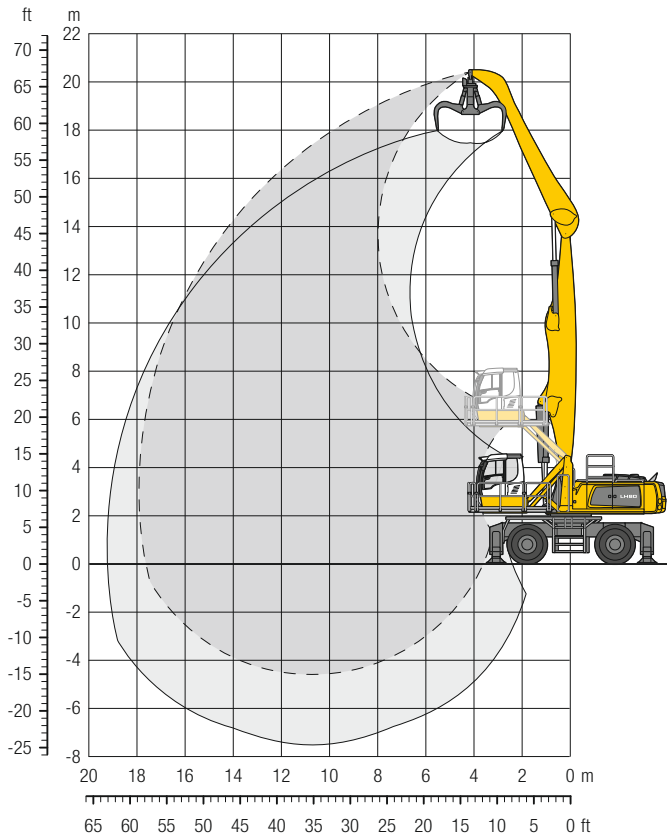
Kinematic variant 2D / 2C



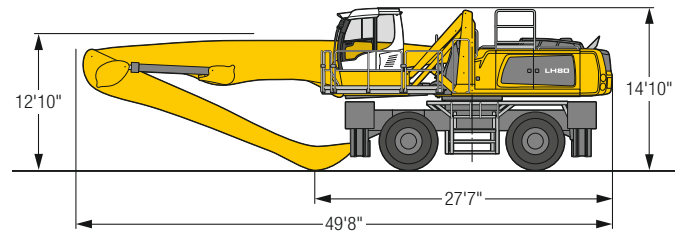
Altered range curve with additional reach depth, e.g. for unloading from ships

LH 80 M – Equipment GA18

Industry – Kinematic 2A



Dimensions



Operating weight

The operating weight includes the basic machine with 4 point outriggers, hydr. cab elevation, 4 solid tires, straight boom 34'5", angled stick 25'7" and multi-tine grab GMM 80-5/2.22 yd³ semi-closed tines.

Weight 167,100 lb

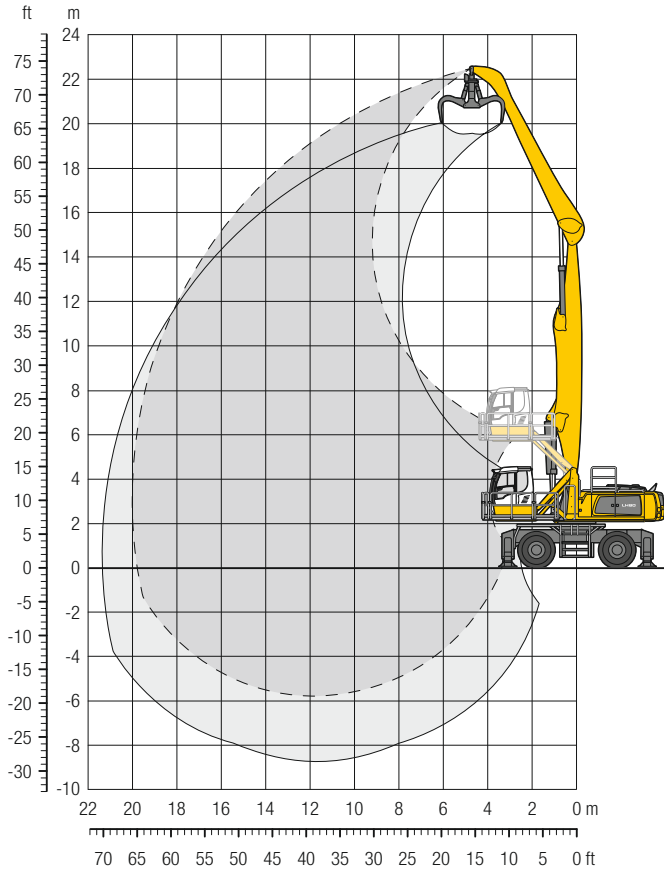
		20 ft	25 ft	30 ft	35 ft	40 ft	45 ft	50 ft	55 ft	60 ft	65 ft	70 ft		
ft	Undercarriage													ft in
70	4 pt. outriggers down													
65	4 pt. outriggers down	31,4"	31,4"											30,4" 30,4" 20' 8"
60	4 pt. outriggers down			31,6" 31,6"	25,8" 25,8"									24,0" 24,0" 31'
55	4 pt. outriggers down			34,2" 34,2"	31,0" 31,0"	26,0" 26,0"								21,2" 21,2" 38'
50	4 pt. outriggers down				33,4" 33,4"	30,2" 30,2"	25,2" 25,2"							19,6" 19,6" 43' 4"
45	4 pt. outriggers down				33,4" 33,4"	29,9" 29,9"	27,3" 27,3"	23,4" 23,4"						18,6" 18,6" 47' 5"
40	4 pt. outriggers down				33,5" 33,5"	30,0" 30,0"	27,2" 27,2"	25,1" 25,1"	19,7" 19,7"					17,9" 17,9" 50' 8"
35	4 pt. outriggers down					30,3" 30,3"	27,4" 27,4"	25,1" 25,1"	23,2" 23,2"					17,5" 17,5" 53' 5"
30	4 pt. outriggers down			38,1" 38,1"	34,0" 34,0"	30,9" 30,9"	27,8" 27,8"	25,3" 25,3"	23,2" 23,2"	18,5" 18,5"				17,3" 17,3" 55' 5"
25	4 pt. outriggers down	42,6" 42,6"	42,3" 42,3"	36,2" 36,2"	31,8" 31,8"	28,3" 28,3"	25,6" 25,6"	23,4" 23,4"	20,6" 21,2"					17,3" 17,3" 56'11"
20	4 pt. outriggers down	55,2" 55,2"	44,7" 44,7"	37,7" 37,7"	32,7" 32,7"	29,0" 29,0"	26,0" 26,0"	23,5" 23,5"	20,4" 21,2"					17,5" 17,5" 58'
15	4 pt. outriggers down	59,5" 59,5"	47,2" 47,2"	39,2" 39,2"	33,7" 33,7"	29,6" 29,6"	26,3" 26,3"	23,5" 23,6"	20,1" 21,0"					17,7" 17,7" 58' 7"
10	4 pt. outriggers down	50,9" 50,9"	49,2" 49,2"	40,5" 40,5"	34,5" 34,5"	30,0" 30,0"	26,5" 26,5"	23,0" 23,5"	19,8" 20,6"					17,8" 17,8" 58'10"
5	4 pt. outriggers down	24,8" 24,8"	50,2" 50,2"	41,2" 41,2"	34,8" 34,8"	30,1" 30,1"	26,3" 26,3"	22,5" 23,0"	19,5" 19,8"					16,7" 16,7" 58' 6"
0	4 pt. outriggers down	21,0" 21,0"	49,5" 49,5"	40,8" 40,8"	34,5" 34,5"	29,6" 29,6"	25,6" 25,6"	22,1" 22,1"	18,3" 18,3"					15,3" 15,3" 57'10"
-5	4 pt. outriggers down	21,5" 21,5"	41,6" 41,6"	39,0" 39,0"	33,0" 33,0"	28,2" 28,2"	24,2" 24,2"	20,3" 20,3"	15,7" 15,7"					15,0" 15,0" 55' 6"
-10	4 pt. outriggers down		40,3" 40,3"	35,3" 35,3"	30,1" 30,1"	25,7" 25,7"	21,5" 21,5"	17,2" 17,2"						16,8" 16,8" 50' 6"
-15	4 pt. outriggers down				25,4" 25,4"									24,4" 24,4" 36' 4"

Height Can be slewed through 360° In longitudinal position of undercarriage Max. reach * Limited by hydr. capacity

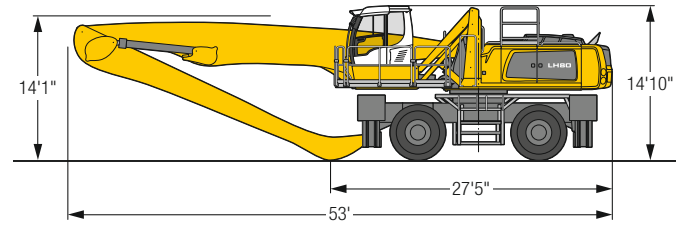
The lift capacities on the stick end without attachment are stated in lb x 1,000 and are valid on a firm, level supporting surface with blocked oscillating axle. These capacities can be slewed through 360° with the undercarriage in the transverse position. Capacities in the longitudinal position of the undercarriage (±15°) are specified over the rigid axle with the stabilizers down. Indicated loads based on the ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity. The lift capacity values indicated are attained at the corresponding operating temperature. This operating temperature is ensured by continuous movement of the boom. Weights of fitted attachments (grabs, load hooks, etc.) and load accommodation attachment are to be deducted from the lift capacity values. The lift capacity of the unit is limited by its stability, the lifting capability of the hydraulic elements, or the maximum permissible lifting capacity of the load hook.

LH 80 M – Equipment GA20

Industry – Kinematic 2A



Dimensions



Operating weight

The operating weight includes the basic machine with 4 point outriggers, hydr. cab elevation, 4 solid tires, straight boom 37'9", angled stick 29'6" and multi-tine grab GMM 80-5/2.22 yd³ semi-closed tines.

Weight 169,300 lb

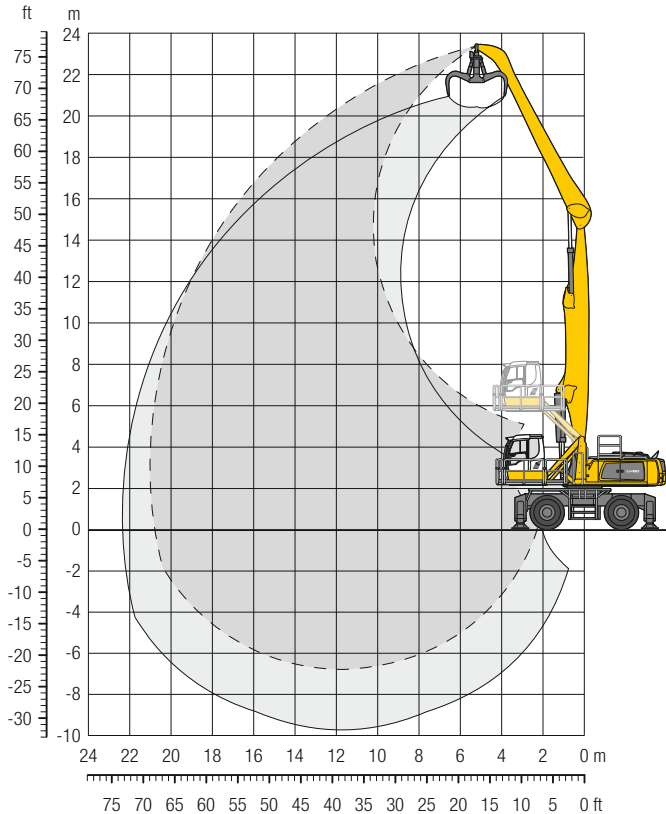
ft	Undercarriage	20 ft	25 ft	30 ft	35 ft	40 ft	45 ft	50 ft	55 ft	60 ft	65 ft	70 ft	ft in
70	4 pt. outriggers down		26,1* 26,1*										23,9* 23,9* 27'
65	4 pt. outriggers down			26,2* 26,2*	21,5* 21,5*								19,9* 19,9* 36' 2"
60	4 pt. outriggers down			28,4* 28,4*	25,7* 25,7*	21,6* 21,6*							17,8* 17,8* 42'11"
55	4 pt. outriggers down			29,6* 29,6*	27,8* 27,8*	25,1* 25,1*	20,9* 20,9*						16,5* 16,5* 48' 2"
50	4 pt. outriggers down				27,8* 27,8*	25,0* 25,0*	22,9* 22,9*	19,4* 19,4*					15,6* 15,6* 52' 5"
45	4 pt. outriggers down				27,7* 27,7*	25,0* 25,0*	22,7* 22,7*	20,9* 20,9*	16,7* 16,7*				15,1* 15,1* 55'11"
40	4 pt. outriggers down			31,6* 31,6*	27,9* 27,9*	25,1* 25,1*	22,8* 22,8*	20,9* 20,9*	19,3* 19,3*				14,7* 14,7* 58' 8"
35	4 pt. outriggers down			32,2* 32,2*	28,3* 28,3*	25,3* 25,3*	22,9* 22,9*	21,0* 21,0*	19,3* 19,3*	16,6* 16,6*			14,5* 14,5* 61'
30	4 pt. outriggers down		33,4* 33,4*	33,0* 33,0*	28,9* 28,9*	25,7* 25,7*	23,2* 23,2*	21,1* 21,1*	19,3* 19,3*	17,6* 17,7*			14,4* 14,4* 62'10"
25	4 pt. outriggers down	33,0* 33,0*	38,5* 38,5*	34,1* 34,1*	29,6* 29,6*	26,2* 26,2*	23,5* 23,5*	21,3* 21,3*	19,4* 19,4*	17,3* 17,7*			14,4* 14,4* 64' 1"
20	4 pt. outriggers down	47,9* 47,9*	42,3* 42,3*	35,4* 35,4*	30,5* 30,5*	26,8* 26,8*	23,9* 23,9*	21,5* 21,5*	19,5* 19,5*	17,1* 17,6*	14,6* 14,7*		14,5* 14,5* 65' 1"
15	4 pt. outriggers down	56,1* 56,1*	44,3* 44,3*	36,7* 36,7*	31,3* 31,3*	27,3* 27,3*	24,2* 24,2*	21,7* 21,7*	19,5* 19,5*	16,7* 17,5*	14,5* 15,2*		14,2* 14,7* 65' 7"
10	4 pt. outriggers down	39,3* 39,3*	46,0* 46,0*	37,7* 37,7*	32,0* 32,0*	27,7* 27,7*	24,4* 24,4*	21,7* 21,7*	18,9* 19,4*	16,4* 17,2*	14,3* 14,6*		14,0* 14,1* 65' 8"
5	4 pt. outriggers down	18,3* 18,3*	46,9* 46,9*	38,3* 38,3*	32,4* 32,4*	27,9* 27,9*	24,4* 24,4*	21,4* 21,6*	18,5* 19,1*	16,1* 16,7*	13,7* 13,7*		13,2* 13,2* 65' 6"
0	4 pt. outriggers down	15,1* 15,1*	34,8* 34,8*	38,2* 38,2*	32,2* 32,2*	27,7* 27,7*	24,1* 24,1*	20,9* 21,1*	18,1* 18,5*	15,8* 15,8*			12,1* 12,1* 64'11"
-5	4 pt. outriggers down	15,5* 15,5*	29,2* 29,2*	36,9* 36,9*	31,3* 31,3*	26,9* 26,9*	23,3* 23,3*	20,2* 20,2*	17,3* 17,3*	14,2* 14,2*			11,1* 11,1* 63' 7"
-10	4 pt. outriggers down	17,1* 17,1*	28,3* 28,3*	34,2* 34,2*	29,3* 29,3*	25,2* 25,2*	21,7* 21,7*	18,6* 18,6*	15,4* 15,4*				12,0* 12,0* 59' 8"
-15	4 pt. outriggers down		29,2* 29,2*	29,9* 29,9*	26,0* 26,0*	22,4* 22,4*	19,1* 19,1*	16,0* 16,0*					13,7* 13,7* 53' 4"

Height Can be slewed through 360° In longitudinal position of undercarriage Max. reach * Limited by hydr. capacity

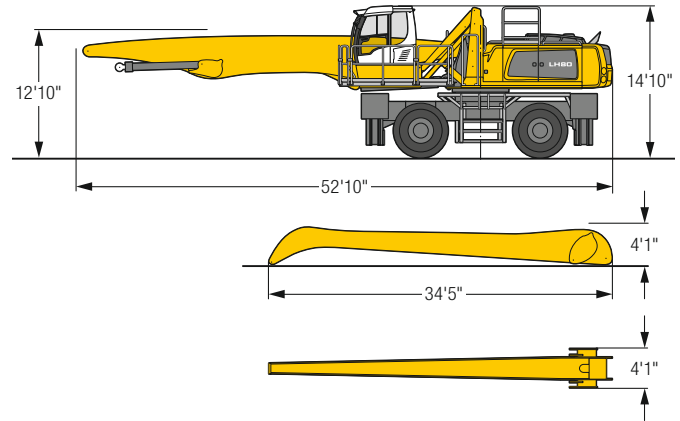
The lift capacities on the stick end without attachment are stated in lb x 1,000 and are valid on a firm, level supporting surface with blocked oscillating axle. These capacities can be slewed through 360° with the undercarriage in the transverse position. Capacities in the longitudinal position of the undercarriage (±15°) are specified over the rigid axle with the stabilizers down. Indicated loads based on the ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity. The lift capacity values indicated are attained at the corresponding operating temperature. This operating temperature is ensured by continuous movement of the boom. Weights of fitted attachments (grabs, load hooks, etc.) and load accommodation attachment are to be deducted from the lift capacity values. The lift capacity of the unit is limited by its stability, the lifting capability of the hydraulic elements, or the maximum permissible lifting capacity of the load hook.

LH 80 M – Equipment GA21

Industry – Kinematic 2A



Dimensions



Operating weight

The operating weight includes the basic machine with 4 point outriggers, hydr. cab elevation, 4 solid tires, straight boom 37'9", angled stick 32'10" and multi-tine grab GMM 80-5/1.83 yd³ semi-closed tines.

Weight 170,200 lb

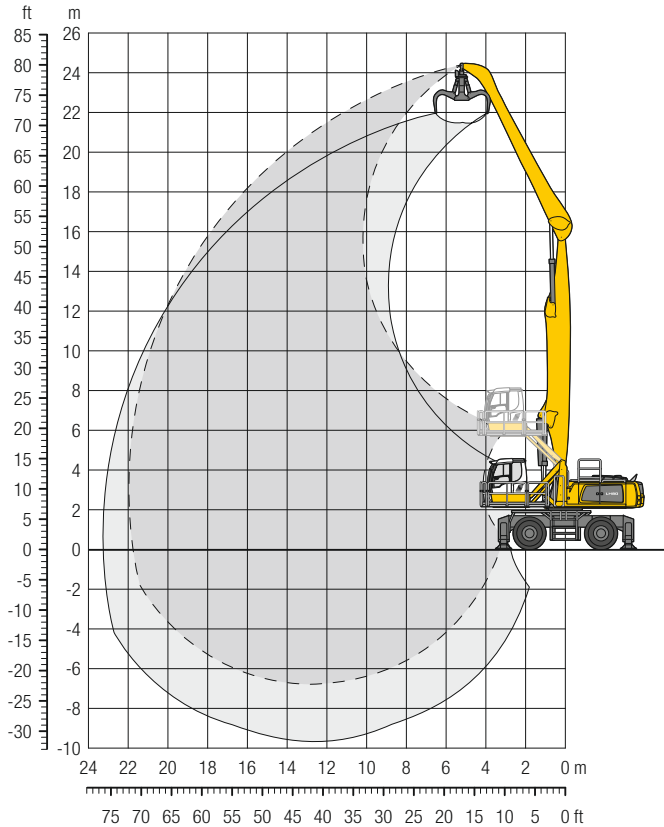
		20 ft	25 ft	30 ft	35 ft	40 ft	45 ft	50 ft	55 ft	60 ft	65 ft	70 ft	
ft	Undercarriage												
75	4 pt. outriggers down	27,2"	27,2"										24,4" 24,4" 22'11"
70	4 pt. outriggers down			23,0" 23,0"									19,0" 19,0" 34' 1"
65	4 pt. outriggers down			25,5" 25,5"	22,7" 22,7"	18,7" 18,7"							16,6" 16,6" 41' 8"
60	4 pt. outriggers down				24,7" 24,7"	22,2" 22,2"	18,3" 18,3"						15,1" 15,1" 47' 8"
55	4 pt. outriggers down				25,8" 25,8"	24,1" 24,1"	21,5" 21,5"	17,3" 17,3"					14,2" 14,2" 52' 5"
50	4 pt. outriggers down				26,6" 26,6"	24,0" 24,0"	21,9" 21,9"	20,2" 20,2"	15,5" 15,5"				13,5" 13,5" 56' 4"
45	4 pt. outriggers down				26,6" 26,6"	24,0" 24,0"	21,8" 21,8"	20,1" 20,1"	18,6" 18,6"				13,0" 13,0" 59' 7"
40	4 pt. outriggers down				26,8" 26,8"	24,1" 24,1"	21,9" 21,9"	20,1" 20,1"	18,5" 18,5"	16,3" 16,3"			12,7" 12,7" 62' 2"
35	4 pt. outriggers down				27,2" 27,2"	24,3" 24,3"	22,1" 22,1"	20,2" 20,2"	18,6" 18,6"	17,1" 17,1"			12,5" 12,5" 64' 5"
30	4 pt. outriggers down			29,8" 29,8"	27,7" 27,7"	24,7" 24,7"	22,3" 22,3"	20,3" 20,3"	18,6" 18,6"	17,2" 17,2"	14,6" 14,6"		12,5" 12,5" 66' 1"
25	4 pt. outriggers down		29,5" 29,5"	32,7" 32,7"	28,5" 28,5"	25,2" 25,2"	22,7" 22,7"	20,6" 20,6"	18,8" 18,8"	17,2" 17,2"	15,0" 15,0"		12,5" 12,5" 67' 5"
20	4 pt. outriggers down	30,2" 30,2"	36,4" 36,4"	33,9" 33,9"	29,3" 29,3"	25,8" 25,8"	23,0" 23,0"	20,8" 20,8"	18,9" 18,9"	17,2" 17,2"	14,8" 14,8"		12,6" 12,6" 68' 4"
15	4 pt. outriggers down	53,2" 53,2"	42,4" 42,4"	35,2" 35,2"	30,2" 30,2"	26,4" 26,4"	23,4" 23,4"	21,0" 21,0"	19,0" 19,0"	16,8" 16,8"	14,5" 14,5"		12,7" 12,7" 68'10"
10	4 pt. outriggers down	56,4" 56,4"	44,3" 44,3"	36,4" 36,4"	31,0" 31,0"	26,9" 26,9"	23,7" 23,7"	21,2" 21,2"	19,0" 19,0"	16,4" 16,4"	14,2" 14,2"		12,8" 13,0" 68'11"
5	4 pt. outriggers down	28,9" 28,9"	45,6" 45,6"	37,3" 37,3"	31,5" 31,5"	27,2" 27,2"	23,9" 23,9"	21,2" 21,2"	18,5" 18,5"	16,0" 16,0"	14,0" 14,0"		12,2" 12,2" 68' 8"
0	4 pt. outriggers down	18,4" 18,4"	46,0" 46,0"	37,6" 37,6"	31,7" 31,7"	27,3" 27,3"	23,8" 23,8"	20,8" 20,8"	18,0" 18,0"	15,6" 15,6"	13,6" 13,6"		11,3" 11,3" 68' 1"
-5	4 pt. outriggers down	16,6" 16,6"	33,3" 33,3"	37,0" 37,0"	31,3" 31,3"	26,8" 26,8"	23,3" 23,3"	20,2" 20,2"	17,5" 17,5"	15,1" 15,1"	12,1" 12,1"		10,1" 10,1" 67' 1"
-10	4 pt. outriggers down	17,1" 17,1"	29,6" 29,6"	35,3" 35,3"	29,9" 29,9"	25,7" 25,7"	22,2" 22,2"	19,2" 19,2"	16,4" 16,4"	13,5" 13,5"			10,5" 10,5" 64' 1"
-15	4 pt. outriggers down	18,5" 18,5"	29,1" 29,1"	32,1" 32,1"	27,5" 27,5"	23,7" 23,7"	20,3" 20,3"	17,3" 17,3"	14,3" 14,3"				11,6" 11,6" 59' 1"
-20	4 pt. outriggers down			27,3" 27,3"	23,7" 23,7"	20,4" 20,4"	17,4" 17,4"	14,3" 14,3"					14,0" 14,0" 50' 6"

Height Can be slewed through 360° In longitudinal position of undercarriage Max. reach * Limited by hydr. capacity

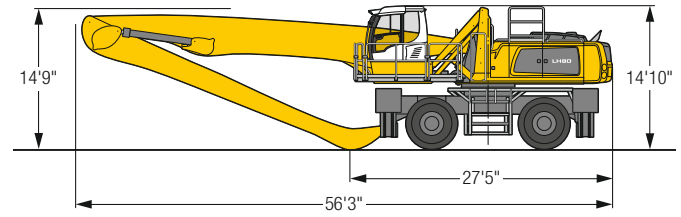
The lift capacities on the stick end without attachment are stated in lb x 1,000 and are valid on a firm, level supporting surface with blocked oscillating axle. These capacities can be slewed through 360° with the undercarriage in the transverse position. Capacities in the longitudinal position of the undercarriage (±15°) are specified over the rigid axle with the stabilizers down. Indicated loads based on the ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity. The lift capacity values indicated are attained at the corresponding operating temperature. This operating temperature is ensured by continuous movement of the boom. Weights of fitted attachments (grabs, load hooks, etc.) and load accommodation attachment are to be deducted from the lift capacity values. The lift capacity of the unit is limited by its stability, the lifting capability of the hydraulic elements, or the maximum permissible lifting capacity of the load hook.

LH 80 M – Equipment GA22

Industry – Kinematic 2A



Dimensions



Operating weight

The operating weight includes the basic machine with 4 point outriggers, hydr. cab elevation, 4 solid tires, straight boom 41', angled stick 32'10" and multi-tine grab GMM 80-5/1.83 yd³ semi-closed tines.

Weight	172,000 lb
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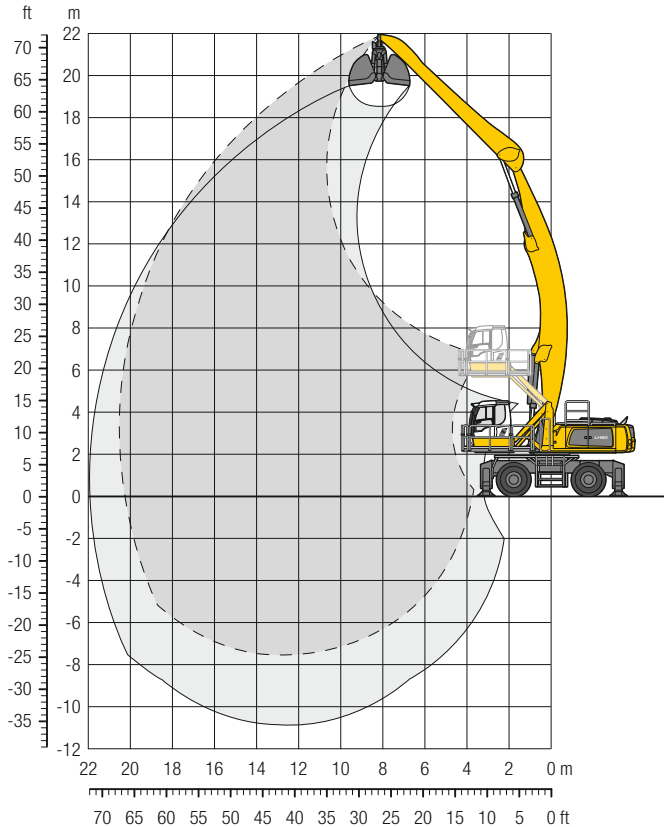
		20 ft	25 ft	30 ft	35 ft	40 ft	45 ft	50 ft	55 ft	60 ft	65 ft	70 ft	
ft	Undercarriage												ft in
75	4 pt. outriggers down		25,6* 25,6*	21,7* 21,7*									20,4* 20,4* 31' 4"
70	4 pt. outriggers down			25,0* 25,0*	22,0* 22,0*	17,6* 17,6*							17,4* 17,4* 40' 2"
65	4 pt. outriggers down				24,3* 24,3*	21,7* 21,7*	17,8* 17,8*						15,7* 15,7* 46' 11"
60	4 pt. outriggers down				25,6* 25,6*	23,8* 23,8*	21,2* 21,2*	17,2* 17,2*					14,5* 14,5* 52' 2"
55	4 pt. outriggers down				26,4* 26,4*	23,6* 23,6*	21,2* 21,2*	19,3* 19,3*	16,0* 16,0*				13,8* 13,8* 56' 7"
50	4 pt. outriggers down				26,5* 26,5*	23,5* 23,5*	21,1* 21,1*	19,2* 19,2*	17,6* 17,6*	13,6* 13,6*			13,3* 13,3* 60' 2"
45	4 pt. outriggers down				26,5* 26,5*	23,5* 23,5*	21,1* 21,1*	19,2* 19,2*	17,6* 17,6*	16,1* 16,1*			12,9* 12,9* 63' 2"
40	4 pt. outriggers down				26,7* 26,7*	23,7* 23,7*	21,2* 21,2*	19,2* 19,2*	17,6* 17,6*	16,1* 16,1*	14,0* 14,0*		12,6* 12,6* 65' 8"
35	4 pt. outriggers down				27,1* 27,1*	23,9* 23,9*	21,4* 21,4*	19,3* 19,3*	17,6* 17,6*	16,1* 16,1*	14,7* 14,7*		12,5* 12,5* 67' 10"
30	4 pt. outriggers down			29,1* 29,1*	27,5* 27,5*	24,2* 24,2*	21,6* 21,6*	19,5* 19,5*	17,7* 17,7*	16,1* 16,1*	14,7* 14,7*		12,5* 12,5* 69' 5"
25	4 pt. outriggers down	27,3* 27,3*	32,9* 32,9*	32,7* 32,7*	28,1* 28,1*	24,6* 24,6*	21,8* 21,8*	19,6* 19,6*	17,7* 17,7*	16,1* 16,1*	14,5* 14,6*	12,3 13,1*	12,1 12,5* 70' 7"
20	4 pt. outriggers down	40,7* 40,7*	40,5* 40,5*	33,6* 33,6*	28,7* 28,7*	25,0* 25,0*	22,1* 22,1*	19,8* 19,8*	17,8* 17,8*	16,1* 16,1*	14,2 14,6*	12,2 12,9*	11,6 12,3* 71' 6"
15	4 pt. outriggers down	53,3* 53,3*	41,9* 41,9*	34,5* 34,5*	29,2* 29,2*	25,3* 25,3*	22,3* 22,3*	19,9* 19,9*	17,8* 17,8*	16,1* 16,1*	13,8 14,4*	12,0 12,6*	11,3 11,7* 72'
10	4 pt. outriggers down	26,4* 26,4*	43,0* 43,0*	35,2* 35,2*	29,7* 29,7*	25,6* 25,6*	22,5* 22,5*	19,9* 19,9*	17,8* 17,8*	15,6 15,9*	13,5 14,1*	11,7 12,2*	11,1* 11,1* 72' 1"
5	4 pt. outriggers down	12,8* 12,8*	38,5* 38,5*	35,5* 35,5*	29,9* 29,9*	25,7* 25,7*	22,4* 22,4*	19,8* 19,8*	17,5 17,6*	15,1 15,6*	13,2 13,7*	11,5* 11,5*	10,3* 10,3* 71' 11"
0	4 pt. outriggers down	10,8* 10,8*	24,5* 24,5*	35,2* 35,2*	29,6* 29,6*	25,5* 25,5*	22,2* 22,2*	19,5* 19,5*	16,9 17,2*	14,7 15,1*	12,9 13,0*	10,4* 10,4*	9,4* 9,4* 71' 4"
-5	4 pt. outriggers down	11,2* 11,2*	21,1* 21,1*	34,0* 34,0*	28,8* 28,8*	24,8* 24,8*	21,5* 21,5*	18,8* 18,8*	16,4 16,5*	14,2* 14,2*	11,9* 11,9*	8,7* 8,7*	8,4* 8,4* 70' 5"
-10	4 pt. outriggers down	12,6* 12,6*	20,6* 20,6*	31,7* 31,7*	27,2* 27,2*	23,5* 23,5*	20,4* 20,4*	17,7* 17,7*	15,3* 15,3*	12,9* 12,9*	10,2*		8,6* 8,6* 67' 5"
-15	4 pt. outriggers down		21,5* 21,5*	28,2* 28,2*	24,6* 24,6*	21,4* 21,4*	18,5* 18,5*	16,0* 16,0*	13,5* 13,5*	10,9* 10,9*			9,5* 9,5* 62' 5"
-20	4 pt. outriggers down			23,2* 23,2*	20,8* 20,8*	18,2* 18,2*	15,8* 15,8*	13,3* 13,3*					11,5* 11,5* 53' 8"

Height Can be slewed through 360° In longitudinal position of undercarriage Max. reach * Limited by hydr. capacity

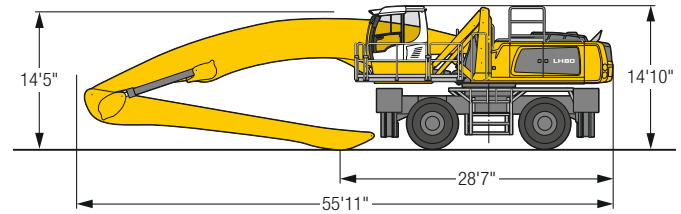
The lift capacities on the stick end without attachment are stated in lb x 1,000 and are valid on a firm, level supporting surface with blocked oscillating axle. These capacities can be slewed through 360° with the undercarriage in the transverse position. Capacities in the longitudinal position of the undercarriage (±15°) are specified over the rigid axle with the stabilizers down. Indicated loads based on the ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity. The lift capacity values indicated are attained at the corresponding operating temperature. This operating temperature is ensured by continuous movement of the boom. Weights of fitted attachments (grabs, load hooks, etc.) and load accommodation attachment are to be deducted from the lift capacity values. The lift capacity of the unit is limited by its stability, the lifting capability of the hydraulic elements, or the maximum permissible lifting capacity of the load hook.

LH 80 M – Equipment AG21

Industry – Kinematic 2D



Dimensions



Operating weight

The operating weight includes the basic machine with 4 point outriggers, hydr. cab elevation, 4 solid tires, angled boom 41°, straight stick 29° and grab for loose material GMZ 80 / 3.92 yd³.

Weight 172,200 lb

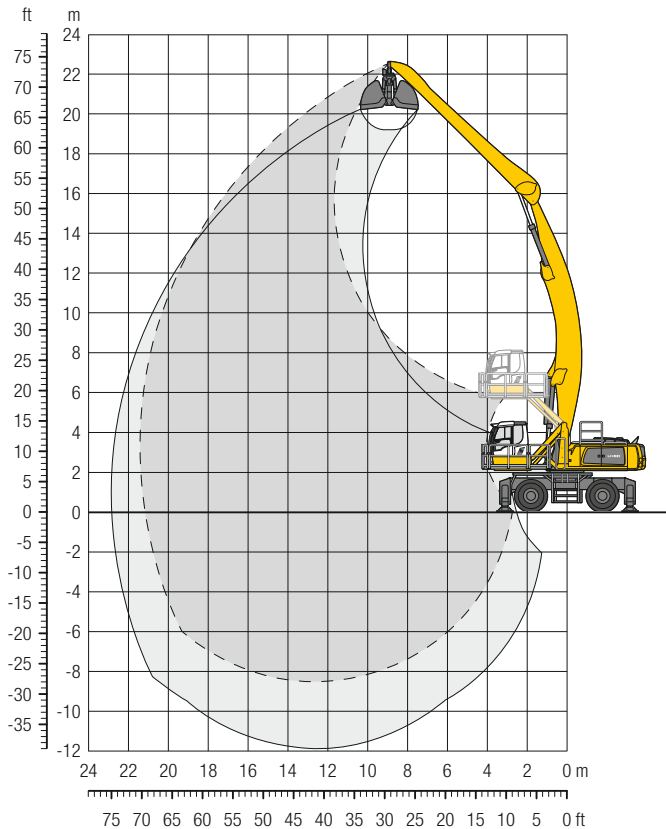
		20 ft	25 ft	30 ft	35 ft	40 ft	45 ft	50 ft	55 ft	60 ft	65 ft	70 ft			
ft	Undercarriage														ft in
70	4 pt. outriggers down			22.0° 22.0°											20.1° 20.1° 32'
65	4 pt. outriggers down				22.6° 22.6° 17.8° 17.8°										17.7° 17.7° 40' 1"
60	4 pt. outriggers down				23.1° 23.1° 20.8° 20.8°	17.9° 17.9°									16.4° 16.4° 46' 2"
55	4 pt. outriggers down				22.8° 22.8° 20.5° 20.5°	18.8° 18.8° 17.1° 17.1°									15.6° 15.6° 51' 1"
50	4 pt. outriggers down				20.5° 20.5° 18.6° 18.6°	17.2° 17.2° 15.2° 15.2°									15.0° 15.0° 55' 1"
45	4 pt. outriggers down				22.9° 22.9° 20.5° 20.5°	18.7° 18.7° 17.2° 17.2°	16.0° 16.0°								14.7° 14.7° 58' 5"
40	4 pt. outriggers down				23.2° 23.2° 20.8° 20.8°	18.8° 18.8° 17.3° 17.3°	16.0° 16.0° 15.0° 15.0°								14.5° 14.5° 61' 1"
35	4 pt. outriggers down				23.7° 23.7° 21.1° 21.1°	19.1° 19.1° 17.4° 17.4°	16.1° 16.1° 15.0° 15.0°								14.4° 14.4° 63' 4"
30	4 pt. outriggers down				24.3° 24.3° 21.6° 21.6°	19.4° 19.4° 17.7° 17.7°	16.3° 16.3° 15.1° 15.1°								14.1° 14.1° 65'
25	4 pt. outriggers down	42.9° 42.9°	34.6° 34.6°	29.1° 29.1°	25.1° 25.1°	22.1° 22.1°	19.8° 19.8°	18.0° 18.0°	16.5° 16.5°	15.2° 15.2°	14.2° 14.2°				13.9° 13.9° 66' 5"
20	4 pt. outriggers down	46.1° 46.1°	36.5° 36.5°	30.3° 30.3°	26.0° 26.0°	22.8° 22.8°	20.3° 20.3°	18.3° 18.3°	16.7° 16.7°	15.4° 15.4°	14.2° 14.2°				13.3° 13.3° 67' 4"
15	4 pt. outriggers down	49.4° 49.4°	38.5° 38.5°	31.6° 31.6°	26.9° 26.9°	23.4° 23.4°	20.8° 20.8°	18.7° 18.7°	17.0° 17.0°	15.5° 15.5°	14.0° 14.0°				12.9° 13.6° 67' 10"
10	4 pt. outriggers down	16.8° 16.8°	40.4° 40.4°	32.9° 32.9°	27.8° 27.8°	24.1° 24.1°	21.2° 21.2°	19.0° 19.0°	17.2° 17.2°	15.7° 15.7°	13.7° 13.7°				12.6° 13.4° 67' 11"
5	4 pt. outriggers down	11.7° 11.7°	29.1° 29.1°	33.9° 33.9°	28.5° 28.5°	24.6° 24.6°	21.6° 21.6°	19.3° 19.3°	17.4° 17.4°	15.4° 15.4°	13.4° 13.4°				12.5° 13.3° 67' 8"
0	4 pt. outriggers down	11.3° 11.3°	22.7° 22.7°	34.5° 34.5°	29.0° 29.0°	25.0° 25.0°	21.9° 21.9°	19.4° 19.4°	17.3° 17.3°	15.0° 15.0°	13.2° 13.2°				12.5° 13.1° 67' 1"
-5	4 pt. outriggers down	12.5° 12.5°	21.2° 21.2°	34.5° 34.5°	29.1° 29.1°	25.1° 25.1°	21.9° 21.9°	19.4° 19.4°	16.8° 16.8°	14.7° 14.7°	13.0° 13.0°				12.7° 12.8° 66' 1"
-10	4 pt. outriggers down	14.2° 14.2°	21.6° 21.6°	33.7° 33.7°	28.7° 28.7°	24.7° 24.7°	21.6° 21.6°	18.9° 18.9°	16.5° 16.5°	14.5° 14.5°					12.4° 12.4° 64' 8"
-15	4 pt. outriggers down	16.2° 16.2°	22.8° 22.8°	32.0° 32.0°	27.5° 27.5°	23.8° 23.8°	20.8° 20.8°	18.2° 18.2°	15.9° 15.9°	13.4° 13.4°					11.7° 11.7° 62' 11"
-20	4 pt. outriggers down			29.3° 29.3°	25.5° 25.5°	22.2° 22.2°	19.4° 19.4°	16.8° 16.8°	14.2° 14.2°						12.8° 12.8° 57' 6"
-25	4 pt. outriggers down														

Height Can be slewed through 360° In longitudinal position of undercarriage Max. reach * Limited by hydr. capacity

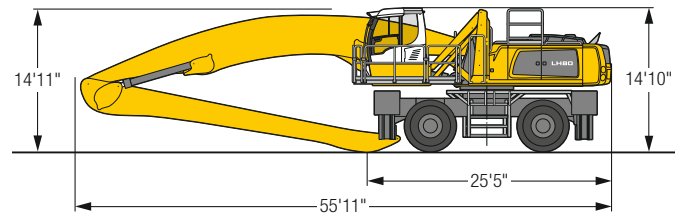
The lift capacities on the stick end without attachment are stated in lb x 1,000 and are valid on a firm, level supporting surface with blocked oscillating axle. These capacities can be slewed through 360° with the undercarriage in the transverse position. Capacities in the longitudinal position of the undercarriage (±15°) are specified over the rigid axle with the stabilizers down. Indicated loads based on the ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity. The lift capacity values indicated are attained at the corresponding operating temperature. This operating temperature is ensured by continuous movement of the boom. Weights of fitted attachments (grabs, load hooks, etc.) and load accommodation attachment are to be deducted from the lift capacity values. The lift capacity of the unit is limited by its stability, the lifting capability of the hydraulic elements, or the maximum permissible lifting capacity of the load hook.

LH 80 M – Equipment AG22

Industry – Kinematic 2D



Dimensions



Operating weight

The operating weight includes the basic machine with 4 point outriggers, hydr. cab elevation, 4 solid tires, angled boom 41°, straight stick 32°10' and grab for loose material GMZ 80 / 3.92 yd³.

Weight 173,100 lb

		20 ft	25 ft	30 ft	35 ft	40 ft	45 ft	50 ft	55 ft	60 ft	65 ft	70 ft	
ft	Undercarriage												ft in
70	4 pt. outriggers down				17.9* 17.9*								16.4* 16.4* 36'10"
65	4 pt. outriggers down					18.3* 18.3*							14.8* 14.8* 44'
60	4 pt. outriggers down					19.8* 19.8*	18.0* 18.0*						13.9* 13.9* 49' 8"
55	4 pt. outriggers down					19.6* 19.6*	17.8* 17.8*	16.4* 16.4*					13.3* 13.3* 54' 2"
50	4 pt. outriggers down					19.5* 19.5*	17.7* 17.7*	16.3* 16.3*	15.2* 15.2*				12.8* 12.8* 58'
45	4 pt. outriggers down					19.6* 19.6*	17.8* 17.8*	16.3* 16.3*	15.1* 15.1*	14.1* 14.1*			12.6* 12.6* 61' 2"
40	4 pt. outriggers down					19.8* 19.8*	17.9* 17.9*	16.4* 16.4*	15.1* 15.1*	14.1* 14.1*			12.5* 12.5* 63'10"
35	4 pt. outriggers down				22.5* 22.5*	20.1* 20.1*	18.1* 18.1*	16.5* 16.5*	15.2* 15.2*	14.2* 14.2*	13.3* 13.3*		12.4* 12.4* 65'11"
30	4 pt. outriggers down				23.1* 23.1*	20.5* 20.5*	18.4* 18.4*	16.8* 16.8*	15.4* 15.4*	14.3* 14.3*	13.3* 13.3*		12.5* 12.5* 67' 6"
25	4 pt. outriggers down			27.5* 27.5*	23.8* 23.8*	21.0* 21.0*	18.8* 18.8*	17.0* 17.0*	15.6* 15.6*	14.4* 14.4*	13.4* 13.4*		12.6* 12.6* 68'10"
20	4 pt. outriggers down	43.1* 43.1*	34.4* 34.4*	28.7* 28.7*	24.6* 24.6*	21.6* 21.6*	19.2* 19.2*	17.4* 17.4*	15.8* 15.8*	14.6* 14.6*	13.5* 13.5*		12.4 12.6* 69' 8"
15	4 pt. outriggers down	46.2* 46.2*	36.4* 36.4*	30.0* 30.0*	25.5* 25.5*	22.2* 22.2*	19.7* 19.7*	17.7* 17.7*	16.1* 16.1*	14.7* 14.7*	13.6* 13.6*	12.1 12.5*	12.0 12.5* 70' 2"
10	4 pt. outriggers down	37.7* 37.7*	38.2* 38.2*	31.2* 31.2*	26.4* 26.4*	22.9* 22.9*	20.2* 20.2*	18.1* 18.1*	16.3* 16.3*	14.9* 14.9*	13.7* 13.7*	11.8 12.5*	11.7 12.4* 70' 4"
5	4 pt. outriggers down	18.4* 18.4*	39.8* 39.8*	32.3* 32.3*	27.2* 27.2*	23.5* 23.5*	20.6* 20.6*	18.4* 18.4*	16.6* 16.6*	15.0* 15.0*	13.3 13.7*	11.6 12.3*	11.5 12.3* 70' 1"
0	4 pt. outriggers down	14.7* 14.7*	29.5* 29.5*	33.1* 33.1*	27.8* 27.8*	23.9* 23.9*	21.0* 21.0*	18.6* 18.6*	16.7* 16.7*	14.8 15.1*	12.9 13.6*		11.5 12.2* 69' 6"
- 5	4 pt. outriggers down	14.3* 14.3*	24.6* 24.6*	33.5* 33.5*	28.2* 28.2*	24.2* 24.2*	21.1* 21.1*	18.7* 18.7*	16.5 16.7*	14.4 14.9*	12.6 13.3*		11.6 12.0* 68' 6"
-10	4 pt. outriggers down	15.0* 15.0*	23.2* 23.2*	33.2* 33.2*	28.1* 28.1*	24.1* 24.1*	21.0* 21.0*	18.5 18.5*	16.1 16.4*	14.1 14.6*	12.5 12.7*		11.7* 11.7* 67' 2"
-15	4 pt. outriggers down	16.2* 16.2*	23.2* 23.2*	32.2* 32.2*	27.4* 27.4*	23.6* 23.6*	20.6* 20.6*	18.1* 18.1*	15.8 15.9*	13.8* 13.8*	11.5* 11.5*		11.3* 11.3* 65' 5"
-20	4 pt. outriggers down	17.7* 17.7*	24.1* 24.1*	30.2* 30.2*	26.0* 26.0*	22.5* 22.5*	19.6* 19.6*	17.1* 17.1*	14.8* 14.8*	12.4* 12.4*			10.8* 10.8* 62'11"
-25	4 pt. outriggers down			27.1* 27.1*	23.6* 23.6*	20.5* 20.5*	17.8* 17.8*	15.3* 15.3*	12.9* 12.9*				12.8* 12.8* 55' 2"

Height Can be slewed through 360° In longitudinal position of undercarriage Max. reach * Limited by hydr. capacity

The lift capacities on the stick end without attachment are stated in lb x 1,000 and are valid on a firm, level supporting surface with blocked oscillating axle. These capacities can be slewed through 360° with the undercarriage in the transverse position. Capacities in the longitudinal position of the undercarriage (±15°) are specified over the rigid axle with the stabilizers down. Indicated loads based on the ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity. The lift capacity values indicated are attained at the corresponding operating temperature. This operating temperature is ensured by continuous movement of the boom. Weights of fitted attachments (grabs, load hooks, etc.) and load accommodation attachment are to be deducted from the lift capacity values. The lift capacity of the unit is limited by its stability, the lifting capability of the hydraulic elements, or the maximum permissible lifting capacity of the load hook.