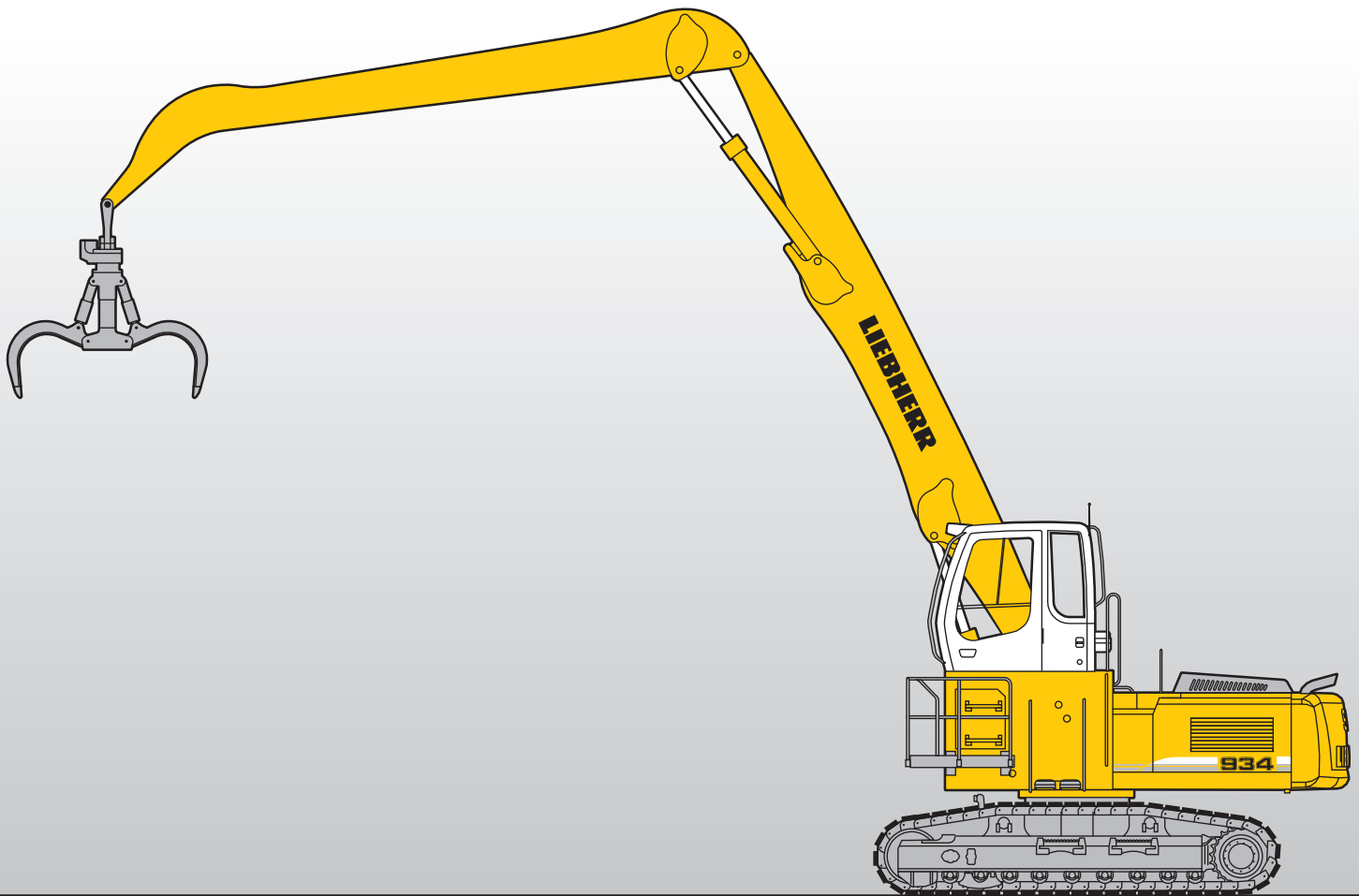


# Machine for Industrial Applications R 934 C

Litronic®

Operating Weight: 79,480 – 83,890 lb

Engine Output: 204 hp / 150 kW



# LIEBHERR

# Technical Data



## Engine

Rating per ISO 9249	203 hp (150 kW) at 1800 rpm
Model	Liebherr D 934 L
Type	4 cylinder in-line
Bore/Stroke	4.8/5.9 in
Displacement	428 in <sup>3</sup>
Engine operation	4-stroke diesel direct injection turbo-charged after-cooled reduced emissions
Cooling	water-cooled and integrated motor oil cooler
Air cleaner	dry-type air cleaner with pre-cleaner, primary and safety elements
Fuel tank	153 gal
Standard	sensor controlled engine idling
Electrical system	
Voltage	24 V
Batteries	2 x 170 Ah/12 V
Starter	24 V/6.6 kW
Alternator	three phase current 28 V/80 A



## Hydraulic System

Hydraulic pump for attachment and travel drive	Liebherr variable flow, swash plate double pump
Max. flow	2 x 65 gpm
Max. pressure	5,076 psi
Pump regulation	electro-hydraulic with electronic engine speed sensing regulation, pressure compensation, flow compensation, automatic oil flow optimizer
Hydraulic pump for swing drive	reversible, variable flow, swash plate pump, closed-loop circuit
Max. flow	39.4 gpm
Max. pressure	5,076 psi
Hydraulic tank	90 gal
Hydraulic system	145 gal
Hydraulic oil filter	full flow filter in return line with integrated fine filter area (5 µm)
Hydraulic oil cooler	compact cooler, consisting of a water cooler, sandwiched with hydraulic oil cooler and fuel and after-cooler cores and hydrostatically driven fan
MODE selection	adjustment of machine performance and the hydraulics via a mode selector to match application
ECO	for economical and environmentally friendly operation
POWER	for maximum digging power and heavy duty jobs
LIFT	for lifting
FINE	for precision work and lifting
RPM adjustment	stepless adjustment of engine output via rpm at each selected mode



## Hydraulic Controls

Power distribution	via monoblock control valve with integrated safety valves
Flow summation	to boom and stick
Closed-loop circuit	for uppercarriage swing drive
Servo circuit	
Attachment and swing	proportional via joystick levers
Travel	– proportional via foot pedals or removable hand levers – speed pre-selection
Additional functions	via foot pedals or joystick toggle switch



## Swing Drive

Drive by	Liebherr swash plate motor with integrated brake valves
Transmission	Liebherr compact planetary reduction gear
Swing ring	Liebherr, sealed single race ball bearing swing ring, internal teeth. Lubrication via a grease distributor and a grease nipple
Swing speed	0 – 8.2 rpm stepless
Swing torque	61,955 lbf ft
Holding brake	wet multi-disc (spring applied, pressure released)
Option	pedal controlled positioning brake



## Operator's Cab

Cab	built from deep drawn components, resiliently mounted, sound insulated, tinted windows, front window stores overhead, door with sliding window
Operator's seat	shock absorbing suspension, adjustable to operator's weight, 6-way adjustable seat integrated into adjustable seat consoles
Joysticks	integrated into adjustable seat consoles
Monitoring	menu driven query of current operating conditions via the LCD display. Automatic monitoring, display, warning (acoustical and optical signal) and saving machine malfunction data, for example, engine overheating, low engine oil pressure or low hydraulic oil level
Heating system	standard air conditioning, combined cooler/heater, additional dust filter in fresh air/recirculated
Noise emission	
ISO 6396	$L_{pA}$ (inside cab) = 72 dB(A)
2000/14/EC	$L_{WA}$ (surround noise) = 103 dB(A)



## Undercarriage

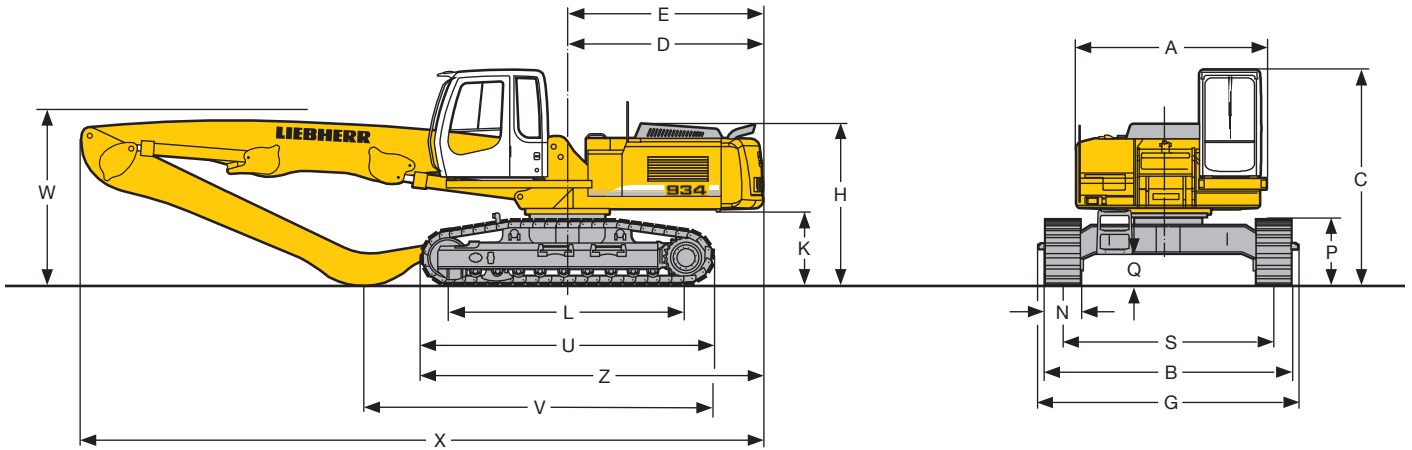
Versions	
HD-SL	heavy duty, wide gauge
EW	special duty, extra wide gauge
Drive	Liebherr swash plate motors with integrated brake valves on both sides
Transmission	Liebherr planetary reduction gears
Travel speed	low range – 1.7 mph high range – 3.2 mph
Drawbar pull max.	72,615 lbf
Track components	B 60, maintenance-free
Track rollers/Carrier rollers	9/2
Tracks	sealed and greased
Track pads	triple grouser
Digging locks	wet multi-discs (spring applied, pressure released)
Brake valves	integrated into travel motor



## Attachment

Type	high-strength steel plates at highlystressed points for the toughest requirements. Complex and stable mountings of attachment and cylinders. Unrivalled strength, even at high loads
Hydraulic cylinders	Liebherr cylinders with special seal system. Shock absorption
Pivots	sealed, low maintenance
Lubrication	Liebherr semi-automatic central lubrication system

# Dimensions



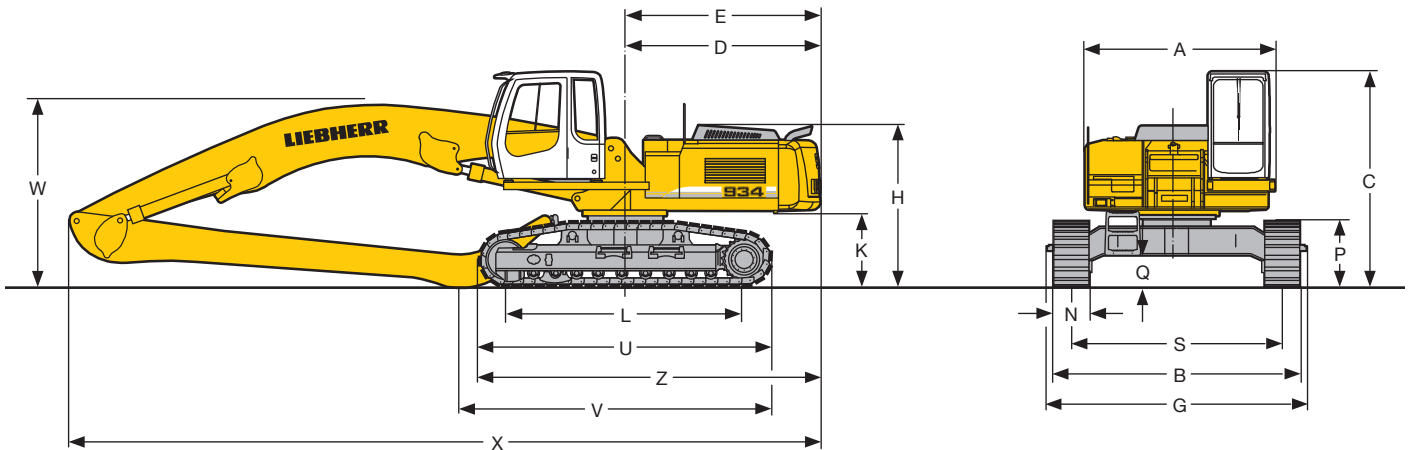
	HD-SL	ft in	EW	ft in
A	Upper - overall width			
C	Basic machine - height overall			
D	Tail reach			
E	Tail swing			
H	Height - engine cover			
K	Clearance under counterweight			
L	Center idler to center sprocket			
P	Track height			
Q	Ground clearance			
S	Track gauge			
U	Track length			
N	20"	24"	30"	
B	10' 6"	10' 6"	11'	13' 1"
G	11' 2"	11' 2"	11' 2"	13' 9"
Z	Basic machine - length overall			

E = Tail radius

<b>Industrial-Type Straight Boom 24'11"</b> with HD-SL- and EW-Undercarriage and Industrial Stick			
	ft in	16'5"	19'8"
V	ft in	22'2"	18'8"
W	ft in	9'2"	9'2"
X	ft in	36'7"	36'7"

<b>Industrial-Type Straight Boom 28'3"</b> with EW-Undercarriage and Industrial Stick			
	ft in	19'8"	24'7"
V	ft in	22'	18'4"
W	ft in	9'2"	13'9"
X	ft in	40'	39'6"

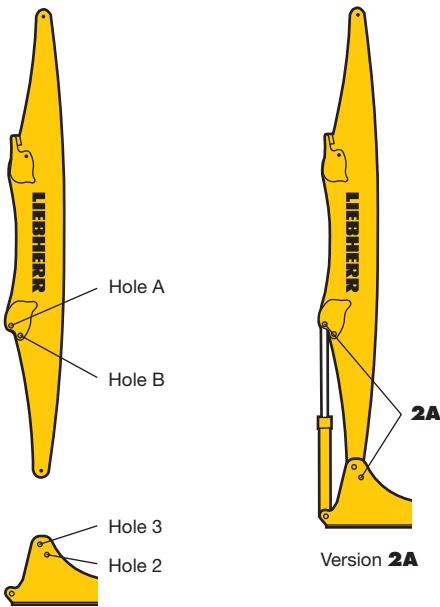
<b>Industrial-Type Gooseneck Boom 28'3"</b> with EW-Undercarriage and Industrial Stick			
	ft in	19'8"	24'7"
V	ft in	21'4"	16'5"
W	ft in	10'4"	10'4"
X	ft in	39'8"	39'8"



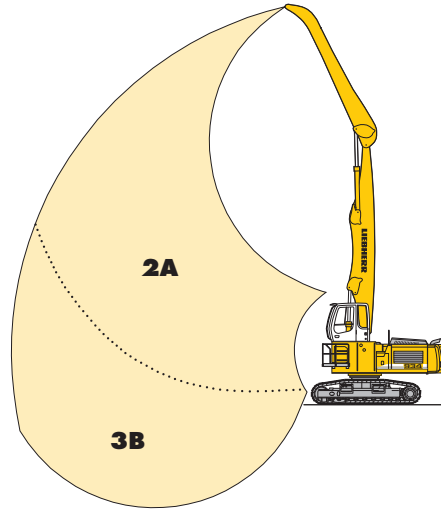
These dimensions are stated with cab carrier. This assembly is only valid for transportation.

# VarioLiftPlus

## Variable Boom Mounting Positions for Optimized Lift Capacities

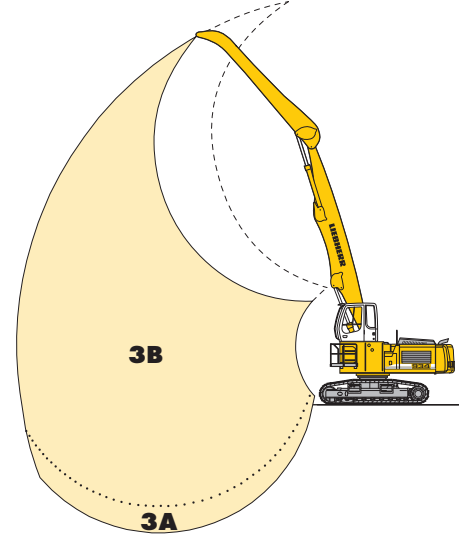


with **the same** working range

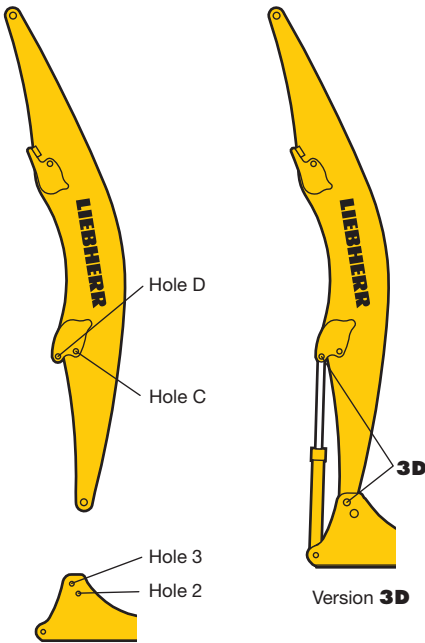


**Kinematic variant 2A:**  
Increased lift capacities above ground level  
**Kinematic variant 3B:**  
Increased lift capacities below ground level  
and when working at extended reach

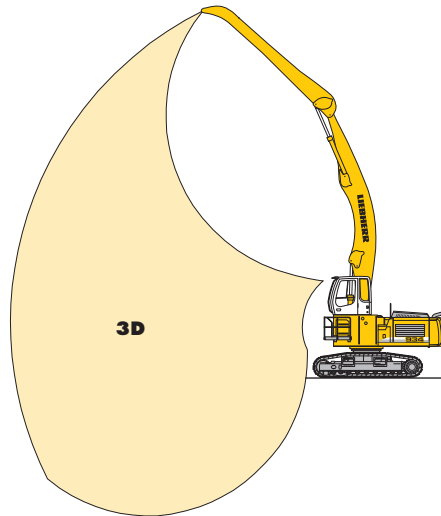
with a **different** working range



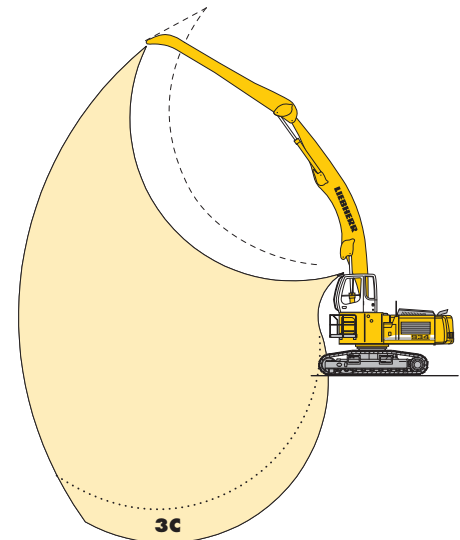
**Kinematic variant 3A:**  
Altered range curve with additional reach  
depth, e.g. for unloading from ships



with a **different** working range



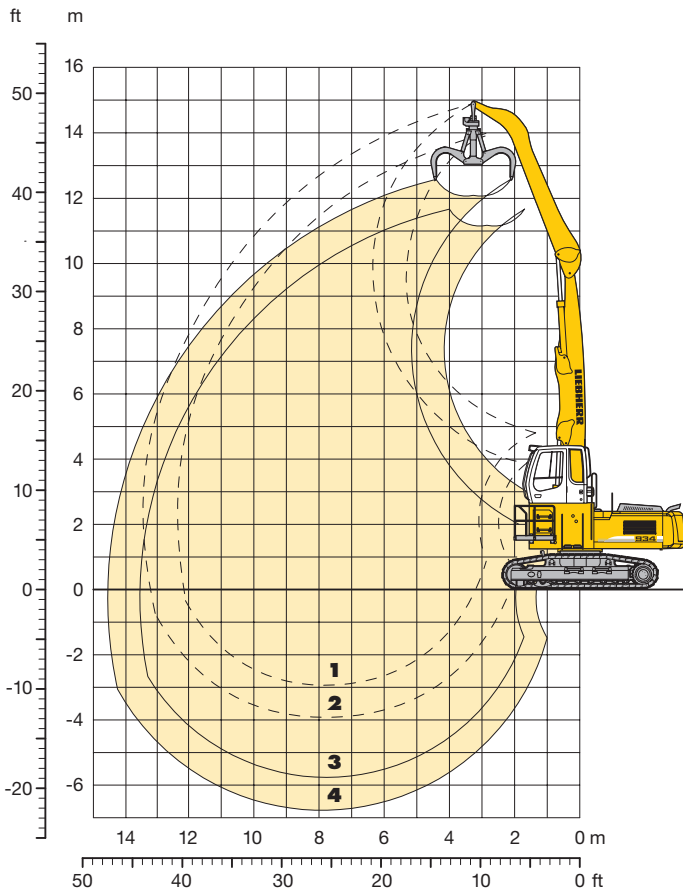
**Kinematic variant 3D:**  
Increased lift capacities below ground level  
and when working at extended reach



**Kinematic variant 3C:**  
Altered range curve with additional reach  
depth, e.g. for unloading from ships

# Industrial Attachment

with Industrial-Type Straight Boom 24'11"



## Attachment Envelope

Kinematic variant 2A

- 1** with industrial stick 16'5"
- 2** with industrial stick 19'8"
- 3** with industrial stick 16'5" and grapple model 70 C
- 4** with industrial stick 19'8" and grapple model 70 C

## Operating Weight and Ground Pressure

Operating weight includes basic machine with rigid cab elevation 3'4", counterweight 16,530 lb, industrial-type straight boom 24'11", industrial stick 16'5" and grapple model 70 C with 5 semi-closed tines 1.05 yd<sup>3</sup>.

Undercarriage		HD-SL		EW	
Pad width	in	24"	30"	24"	30"
Weight	lb	79,480	80,580	81,570	82,670
Ground pressure	psi	11.1	9.0	11.4	9.2

Operating weight includes basic machine with rigid cab elevation 3'4", counterweight 16,530 lb, industrial-type straight boom 24'11", industrial stick 19'8" and grapple model 70 C with 5 semi-closed tines 1.05 yd<sup>3</sup>.

Undercarriage		HD-SL		EW	
Pad width	in	24"	30"	24"	30"
Weight	lb	79,810	80,910	81,900	83,000
Ground pressure	psi	11.1	9.0	11.4	9.2

# Lift Capacities

with Industrial-Type Straight Boom 24'11"

## Industrial Stick 16'5" (Variant 2A)

ft	Under-carriage	10 ft		15 ft		20 ft		25 ft		30 ft		35 ft		40 ft		45 ft		50 ft		ft in			
50	HD-SL EW																						
45	HD-SL EW																				22,040*	22,040*	14' 4"
40	HD-SL EW					22,701*	22,701*														16,530*	16,530*	23' 7"
35	HD-SL EW					24,464	25,787*	17,191	22,260*												12,563	14,767*	29' 4"
30	HD-SL EW					24,464	25,566*	17,191	22,040*	12,783	17,852										10,138	13,665*	33' 4"
25	HD-SL EW					24,024	26,228*	16,971*	22,481*	12,563	17,632										13,444	13,665*	36' 3"
20	HD-SL EW			34,382*	34,382*	23,142	27,550*	16,310	23,142*	12,342	17,412	9,477	13,665								8,816	12,563*	38' 3"
15	HD-SL EW	56,202*	56,202*	33,942	38,129*	21,820	29,313*	15,648	22,481*	11,902	16,971	9,257	13,444	7,494	10,800						7,494	10,579	39' 8"
10	HD-SL EW	5,069*	5,069*	30,636	41,215*	20,277	30,195	14,767	21,379	11,461	16,310	9,036	13,004	7,494	10,579						10,138	11,020	40' 4"
5	HD-SL EW	4,628*	4,628*	41,215*	41,215*	27,991	30,636	20,056	22,040	15,428	16,750	12,342	13,444	10,138	11,020						9,698	10,579	40' 5"
0	HD-SL EW			17,412*	17,412*	18,073	27,550	13,444	20,056	10,579	15,428	8,596	12,783	7,273	10,579						7,053	10,138	39'11"
- 5	HD-SL EW			19,175*	19,175*	17,632	25,126*	13,224	19,616	10,359	15,208	8,596	12,342								9,698	10,359	36'11"
- 10	HD-SL EW			19,175*	19,175*	25,126	25,126*	18,293	20,056	14,326	15,648	11,681	12,783*								10,800	10,800*	
- 15	HD-SL EW																						

## Industrial Stick 19'8" (Variant 2A)

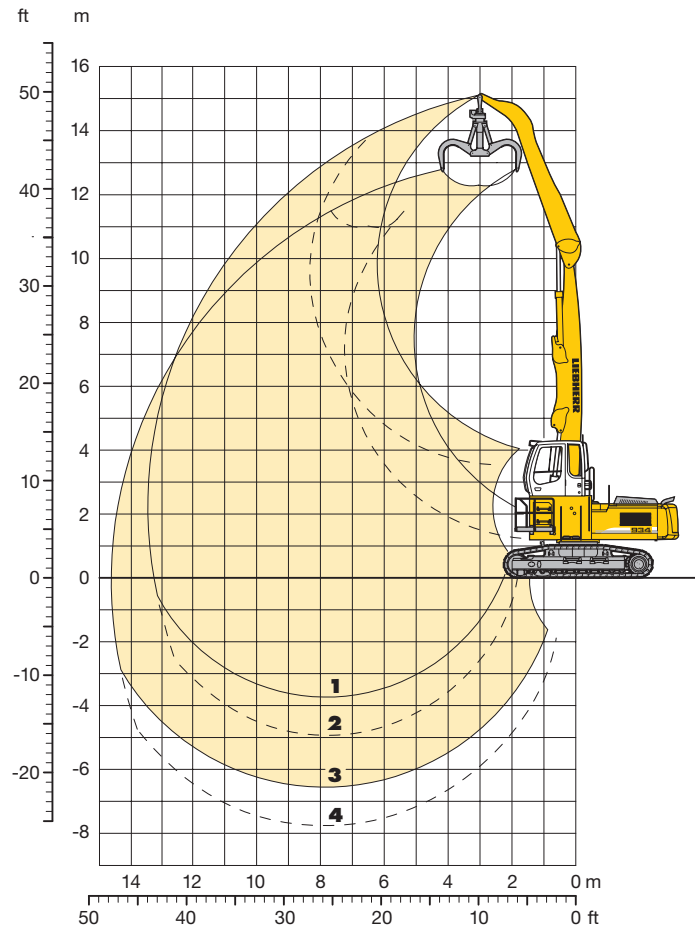
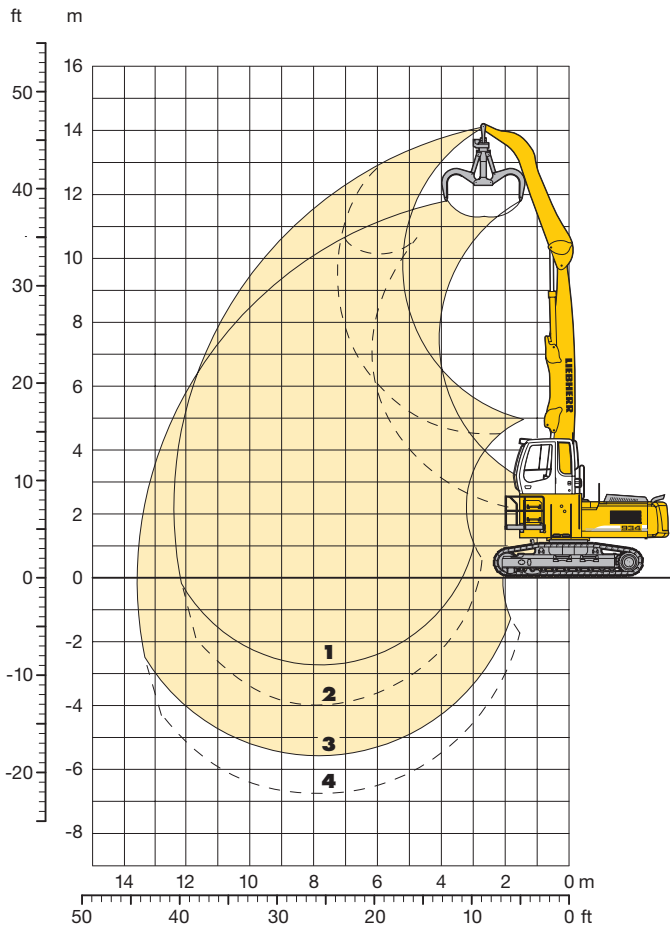
ft	Under-carriage	10 ft		15 ft		20 ft		25 ft		30 ft		35 ft		40 ft		45 ft		50 ft		ft in			
50	HD-SL EW																						
45	HD-SL EW					18,514*	18,514*														15,428*	15,428*	21'11"
40	HD-SL EW					18,514*	18,514*	17,412	18,514*												15,208*	15,208*	28'10"
35	HD-SL EW					21,599*	21,599*	17,412	18,514*	13,004	17,632*										13,004*	13,004*	33' 8"
30	HD-SL EW					21,820*	21,820*	17,852	20,938*	17,191	17,852*	10,138	14,106								10,359	11,681*	37' 2"
25	HD-SL EW					24,244*	24,244*	17,852	20,718*	13,224	18,293	10,138	14,106	7,714	11,240						11,681*	11,681*	39'10"
20	HD-SL EW					24,244	25,566*	16,971	21,820*	12,783	17,852	9,918	13,885	7,714	11,020						7,714	10,800*	41' 8"
15	HD-SL EW			30,636*	30,636*	22,922	27,550*	16,310	22,922*	12,122	17,191	9,477	13,665	7,714	11,020						9,477	10,359	42'11"
10	HD-SL EW	59,288*	59,288*	30,856*	30,856*	27,550*	27,550*	21,599	22,922*	16,310	17,632	12,783	13,885	10,359	11,240						6,612	9,477	43' 1"
5	HD-SL EW	6,832*	6,832*	29,313	41,435*	19,616	29,313	14,326	20,938	11,020	16,089	8,816	12,783	7,273	10,579						6,392	9,257	43' 8"
0	HD-SL EW	7,053*	7,053*	41,435*	41,435*	27,109	29,974	19,616	21,599	14,987	16,530	12,122	13,224	9,918	10,800						8,596	9,257	43' 2"
- 5	HD-SL EW	9,698*	9,698*	21,599*	21,599*	25,787	28,652	18,734	20,718	14,546	15,869	11,681	12,783	9,698	10,579						6,171	9,257	41' 2"
- 10	HD-SL EW	9,698*	9,698*	19,616*	19,616*	17,632	27,109	13,004	19,616	10,359	15,208	8,375	12,342	7,053	10,359						9,257	9,257*	35'11"
- 15	HD-SL EW			21,379*	21,379*	17,191	23,362*	12,783	18,954*	10,138	14,987	8,375	11,902*								7,934	10,800*	

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

The lift capacities are stated in lb on the lifting gear's stick tip, and can be lifted 360° on firm, level supporting surface. Capacities are valid for 24" wide triple grouser pads. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (indicated via \*). Lifting capacity of the excavator is limited by machine stability, hydraulic capacity and maximum permissible load of the load hook.

# Industrial Attachment

## with Industrial-Type Straight Boom 24'11"



### Attachment Envelope

Kinematic variants 3A/3B

- 1** with industrial stick 16'5" (3B)
- 2** with industrial stick 16'5" (3A)
- 3** with industrial stick 16'5" and grapple model 70 C (3B)
- 4** with industrial stick 16'5" and grapple model 70 C (3A)

### Attachment Envelope

Kinematic variants 3A/3B

- 1** with industrial stick 19'8" (3B)
- 2** with industrial stick 19'8" (3A)
- 3** with industrial stick 19'8" and grapple model 70 C (3B)
- 4** with industrial stick 19'8" and grapple model 70 C (3A)

### Operating Weight and Ground Pressure

Operating weight includes basic machine with rigid cab elevation 3'4", counterweight 16,530 lb, industrial-type straight boom 24'11", industrial stick 16'5" and grapple model 70 C with 5 semi-closed tines 1.05 yd<sup>3</sup>.

Undercarriage		HD-SL		EW	
Pad width	in	24"	30"	24"	30"
Weight	lb	79,480	80,580	81,570	82,670
Ground pressure	psi	11.1	9.0	11.4	9.2

### Operating Weight and Ground Pressure

Operating weight includes basic machine with rigid cab elevation 3'4", counterweight 16,530 lb, industrial-type straight boom 24'11", industrial stick 19'8" and grapple model 70 C with 5 semi-closed tines 1.05 yd<sup>3</sup>.

Undercarriage		HD-SL		EW	
Pad width	in	24"	30"	24"	30"
Weight	lb	79,810	80,910	81,900	83,000
Ground pressure	psi	11.1	9.0	11.4	9.2

# Lift Capacities

with Industrial-Type Straight Boom 24'11"

## Industrial Stick 16'5" (Variant 3A)

ft	Under-carriage	10 ft		15 ft		20 ft		25 ft		30 ft		35 ft		40 ft		45 ft		50 ft		ft in			
50	HD-SL EW																						
45	HD-SL EW																						
40	HD-SL EW							16,530	16,530*												16,310*	16,310*	24' 8"
35	HD-SL EW							16,750*	16,750*												11,902	14,546*	30' 2"
30	HD-SL EW							17,191	20,277*	12,563	17,632										9,698	13,665*	34' 1"
25	HD-SL EW							16,750	20,718*	12,563	17,632	9,698	13,665								8,596	12,122	36'10"
20	HD-SL EW					22,922	25,566*	16,310	21,820*	12,122	17,191	9,477	13,444								7,714	11,020	38'10"
15	HD-SL EW	54,218*	54,218*	33,280	36,366*	21,599	28,211*	15,428	22,260	11,681	16,750	9,257	13,224	7,494	10,800						7,273	10,359	40' 1"
10	HD-SL EW	54,439*	54,439*	36,586*	36,586*	28,211*	28,211*	20,718	22,701	15,869	17,191	12,563	13,665	10,138	11,020						9,918	10,800	40' 9"
5	HD-SL EW			18,514*	18,514*	18,734	28,211	13,885	20,277	10,800	15,648	8,816	12,563	7,273	10,359						6,832	9,918	40' 9"
0	HD-SL EW	5,290*	5,290*	16,310*	16,310*	17,852	27,330	13,224	19,836	10,359	15,428	8,596	12,342	7,053	10,359						9,477	10,359	40' 2"
- 5	HD-SL EW			18,514*	18,514*	17,412	26,889	13,004	19,395	10,138	15,208	8,375	12,342								7,273	10,579	38'11"
- 10	HD-SL EW			18,734*	18,734*	24,905	27,550	18,073	20,056	14,106	15,648	11,681	12,563								9,918	10,800	35' 1"
- 15	HD-SL EW					24,905	27,330*	18,073	19,836	14,106	15,428	11,681	12,783								11,461	12,563	

## Industrial Stick 19'8" (Variant 3A)

ft	Under-carriage	10 ft		15 ft		20 ft		25 ft		30 ft		35 ft		40 ft		45 ft		50 ft		ft in				
50	HD-SL EW																							
45	HD-SL EW																					14,987*	14,987*	23' 2"
40	HD-SL EW									12,563	13,224*										12,342	12,783*	29' 9"	
35	HD-SL EW									13,004	17,412*										9,918	11,681*	34' 5"	
30	HD-SL EW									13,224	17,191*	11,902*	11,902*	10,138	14,106						11,681*	11,681*	37'10"	
25	HD-SL EW									13,004	17,412*	9,918	14,106	7,714	11,020						7,494	10,579	40' 5"	
20	HD-SL EW							16,971	20,056*	12,563	17,632	9,698	13,885	7,714	11,020						6,832	9,698	42' 3"	
15	HD-SL EW					22,481	25,566*	16,089	21,820*	12,122	17,191	9,477	13,444	7,494	10,800						9,257	10,138	42' 3"	
10	HD-SL EW	33,721*	33,721*	31,958	38,129*	20,938	28,652*	14,987	21,820	11,461	16,530	9,036	13,004	7,273	10,579						8,816	9,477	43' 5"	
5	HD-SL EW	5,510*	5,510*	28,652	35,264*	19,175	28,872	14,106	20,718	11,020	15,869	8,816	12,783	7,273	10,359						6,171	9,036	44'	
0	HD-SL EW	6,612*	6,612*	19,395*	19,395*	18,073	27,550	13,444	19,836	10,579	15,428	8,375	12,342	7,053	10,359						8,375	9,257	44'	
- 5	HD-SL EW	9,477*	9,477*	18,734*	18,734*	17,412	26,668	12,783	19,395	10,138	14,987	8,155	12,122	6,832	10,138						6,171	9,036	43' 5"	
- 10	HD-SL EW	9,698*	9,698*	18,734*	18,734*	24,685	27,550	18,073	19,836	14,106	15,428	11,461	12,563	9,477	10,579						8,375	9,257	42' 4"	
- 15	HD-SL EW			20,718*	20,718*	16,971	26,448	12,563	19,175	9,918	14,767	8,155	12,122	7,053	10,138						6,832	10,138	40'	
				20,718*	20,718*	24,464	27,109	17,852	19,616	13,885	15,208	11,461	12,563	9,698	10,579						9,477	10,359	40'	
						17,191	25,566*	12,563	19,175	9,918	14,987											8,816	12,783	33'
						24,464	25,566*	17,852	19,616	13,885	15,428											12,342	13,444	

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

The lift capacities are stated in lb on the lifting gear's stick tip, and can be lifted 360° on firm, level supporting surface. Capacities are valid for 24" wide triple grouser pads. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (indicated via \*). Lifting capacity of the excavator is limited by machine stability, hydraulic capacity and maximum permissible load of the load hook.



# Lift Capacities

with Industrial-Type Straight Boom 24'11"

## Industrial Stick 16'5" (Variant 3B)

ft	Under-carriage	10 ft		15 ft		20 ft		25 ft		30 ft		35 ft		40 ft		45 ft		50 ft		ft in		
50	HD-SL EW																					
45	HD-SL EW			22,922*	22,922*																20,938*	20,938
40	HD-SL EW			23,142*	23,142*	21,820*	21,820*	16,530	16,530*												20,718*	20,718*
35	HD-SL EW					20,497*	20,497*	17,191	18,954*	12,563	16,089*										16,310*	16,310
30	HD-SL EW					20,497*	20,497*	17,191	18,734*	12,563	17,412*										14,546*	14,546*
25	HD-SL EW					21,379*	21,379*	16,750	19,175*	12,563	17,632	9,698	13,665								11,902	14,546*
20	HD-SL EW			28,211*	28,211*	22,922	23,583*	16,310	20,497*	12,122	17,191	9,477	13,444								11,461	12,342
15	HD-SL EW	50,031*	50,031*	33,501	33,721*	21,599	26,228*	15,428	22,040	11,681	16,750	9,257	13,224	7,494	10,800					7,273	10,359	
10	HD-SL EW	50,472*	50,472*	33,942*	33,942*	26,448*	26,448*	20,718	22,040	15,869	17,191	12,563	13,665	10,138	11,020					9,918	10,800	
5	HD-SL EW			29,974	39,892*	20,056	29,313*	14,546	21,158	11,240	16,310	9,036	13,004	7,273	10,579					7,053	10,138	
0	HD-SL EW			40,113*	40,113*	27,550	29,534*	19,836	21,820	15,208	16,750	12,122	13,224	9,918	10,800					9,477	10,359	
-5	HD-SL EW			18,514*	18,514*	18,734	28,211	13,885	20,497	10,800	15,648	8,816	12,563	7,273	10,579					6,832	9,918	
-10	HD-SL EW			18,293*	18,293*	26,228	28,872	18,954	20,938	14,767	16,089	11,902	13,004	9,918	10,800					9,477	10,359	
-15	HD-SL EW			16,310*	16,310*	17,852	27,330	13,224	19,836	10,359	15,428	8,596	12,342	7,053	10,359					7,053	10,138	
	HD-SL EW			16,310*	16,310*	25,346	27,991	18,514	20,277	14,326	15,869	11,681	12,783	9,698	10,800					9,477	10,359	
	HD-SL EW			18,514*	18,514*	17,412	26,889	13,004	19,395	10,138	15,208	8,375	12,342							7,714	11,461	
	HD-SL EW					24,905	27,550	18,073	20,056	14,106	15,648	11,681	12,563							10,800	11,681	

## Industrial Stick 19'8" (Variant 3B)

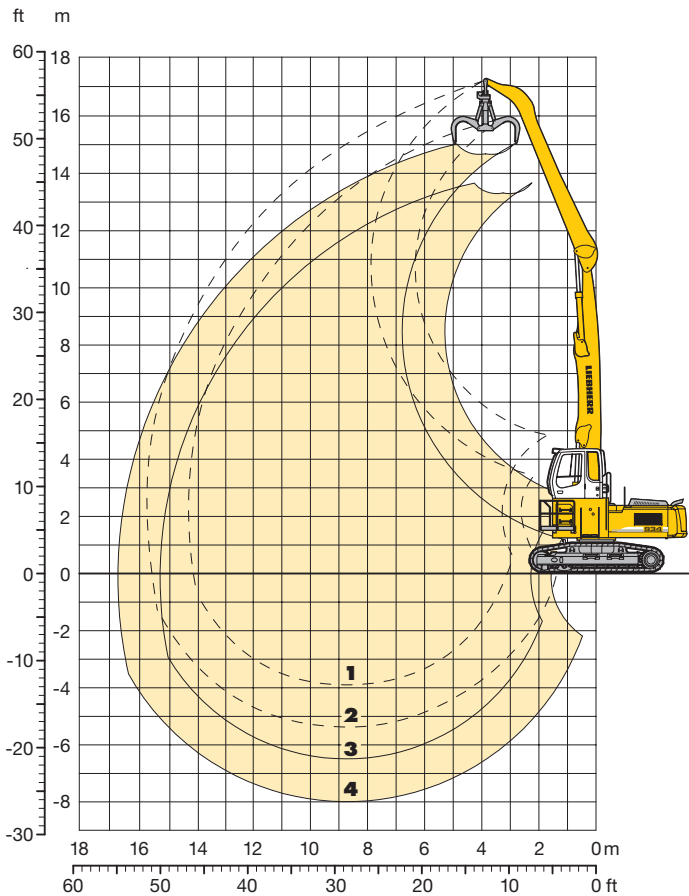
ft	Under-carriage	10 ft		15 ft		20 ft		25 ft		30 ft		35 ft		40 ft		45 ft		50 ft		ft in		
50	HD-SL EW																				22,481*	22,481*
45	HD-SL EW					19,395*	19,395*														22,040*	22,040*
40	HD-SL EW					19,616*	19,616*	18,954*	18,954*	17,412	17,632*	12,563	13,224*								14,987*	14,987*
35	HD-SL EW					18,954*	18,954*	17,412	17,632*	13,444*	13,444*										14,987*	14,987*
30	HD-SL EW					18,734*	18,734*	17,632*	17,632*	13,004	16,089*										12,783*	12,783*
25	HD-SL EW					16,750*	16,750*	16,089*	16,089*	11,902*	11,902*										9,918	11,681*
20	HD-SL EW					16,750*	16,750*	13,224	15,869*	10,138	14,106										11,681*	11,681*
15	HD-SL EW					16,750*	16,750*	15,869*	15,869*	13,224	14,326										8,375	11,020*
10	HD-SL EW					18,734*	18,734*	17,412*	17,412*	13,004	16,310*	9,918	14,106	7,714	11,020						7,494	10,579
5	HD-SL EW					18,954*	18,954*	17,412*	17,412*	16,310*	16,310*	13,224	14,326	10,579	11,461						9,918	10,579*
0	HD-SL EW					20,718*	20,718*	16,971	18,514*	12,563	16,971*	9,698	13,885	7,714	11,020						6,832	9,698
-5	HD-SL EW					20,938*	20,938*	18,734*	18,734*	16,750	16,971*	13,004	14,106	10,359	11,461						9,257	10,138
-10	HD-SL EW					29,093*	29,093*	22,701	23,583*	16,089	20,277*	12,122	17,191	9,477	13,444	7,494	10,800				6,392	9,257
-15	HD-SL EW					22,701*	22,701*	29,093*	29,093*	23,803*	23,803*	20,277*	20,277*	16,089	17,632	12,783	13,885	10,359	11,240		8,816	9,477
	HD-SL EW					33,721*	33,721*	31,958	35,705*	20,938	26,889*	14,987	21,820	11,461	16,530	9,036	13,004	7,494	10,579		6,171	9,036
	HD-SL EW					29,093*	29,093*	35,705*	35,705*	27,109*	27,109*	20,497	22,260*	15,648	16,971	12,342	13,444	10,138	11,020		8,375	9,257
	HD-SL EW					5,510*	5,510*	28,872	35,264*	19,175	28,872	14,106	20,718	11,020	15,869	8,816	12,783	7,273	10,579		6,171	8,816
	HD-SL EW					5,510*	5,510*	34,162*	34,162*	26,889	29,754	19,395	21,379	14,987	16,310	11,902	13,004	9,918	10,800		8,375	9,257
	HD-SL EW					6,612*	6,612*	19,395*	19,395*	18,073	27,550	13,444	19,836	10,579	15,428	8,375	12,342	7,053	10,359		6,171	9,036
	HD-SL EW					6,612*	6,612*	19,395*	19,395*	25,566	28,211	18,514	20,497	14,546	15,869	11,681	12,783	9,698	10,579		8,375	9,257
	HD-SL EW					18,734*	18,734*	17,412	26,889	13,004	19,395	10,138	14,987	8,375	12,122	6,832	10,138				6,612	9,698
	HD-SL EW					18,734*	18,734*	24,685	27,550	18,073	19,836	14,106	15,428	11,461	12,563	9,698	10,579				9,036	9,918
	HD-SL EW					16,971	26,448	12,563	19,175	9,918	14,987	8,155	12,122								7,934	11,681
	HD-SL EW					24,464	27,330	17,852	19,616	13,885	15,208	11,461	12,563								11,020	12,122

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

The lift capacities are stated in lb on the lifting gear's stick tip, and can be lifted 360° on firm, level supporting surface. Capacities are valid for 24" wide triple grouser pads. Indicated loads are based on ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity (indicated via \*). Lifting capacity of the excavator is limited by machine stability, hydraulic capacity and maximum permissible load of the load hook.

# Industrial Attachment

with Industrial-Type Straight Boom 28'3"



## Attachment Envelope

Kinematic variant 2A

- 1** with industrial stick 19'8"
- 2** with industrial stick 24'7"
- 3** with industrial stick 19'8" and grapple model 65
- 4** with industrial stick 24'7" and grapple model 65

## Operating Weight and Ground Pressure

Operating weight includes basic machine with rigid cab elevation 3'4", counterweight 16,530 lb, industrial-type straight boom 28'3", industrial stick 19'8" and grapple model 65 with 5 semi-closed tines 0.78 yd<sup>3</sup>.

Undercarriage	EW	
Pad width	in 24"	30"
Weight	lb 81,900	83,000
Ground pressure	psi 11.4	9.2

Operating weight includes basic machine with rigid cab elevation 3'4", counterweight 16,530 lb, industrial-type straight boom 28'3", industrial stick 24'7" and grapple model 65 with 5 semi-closed tines 0.78 yd<sup>3</sup>.

Undercarriage	EW	
Pad width	in 24"	30"
Weight	lb 82,450	83,550
Ground pressure	psi 11.5	9.4

# Lift Capacities

with Industrial-Type Straight Boom 28'3"

## Industrial Stick 19'8" (Variant 2A)

ft	Under-carriage	10 ft		15 ft		20 ft		25 ft		30 ft		35 ft		40 ft		45 ft		50 ft		ft in			
55	EW																						
50	EW			21,820*	21,820*																16,750*	16,750*	19' 7"
45	EW					21,158*	21,158*	17,852*	17,852*												13,665*	13,665*	28'
40	EW							20,497*	20,497*	17,191	17,632*										12,122*	12,122*	33' 8"
35	EW							20,277*	20,277*	17,412	17,852*	13,224	14,326								11,020	11,240*	37'10"
30	EW							20,497*	20,497*	17,191	17,852*	13,224	14,326	10,359	11,240						9,477	10,359	41'
25	EW					24,685*	24,685*	20,938*	20,938*	16,971	18,073*	13,004	14,106	10,359	11,240						8,596	9,477	43' 4"
20	EW			27,109*	27,109*	26,228*	26,228*	21,599*	21,599*	16,310	17,852*	12,783	13,885	10,138	11,020	8,155	9,036				7,934	8,816	45' 1"
15	EW	54,659*	54,659*	36,586*	36,586*	27,770*	27,770*	20,718	22,481*	15,648	16,971	12,342	13,444	9,918	10,800	8,155	8,816				7,494	8,375	46' 3"
10	EW			39,231*	39,231*	27,109	29,093*	19,395	21,379	14,987	16,310	11,902	13,004	9,698	10,579	7,934	8,816				7,273	7,934	46'10"
5	EW			12,783*	12,783*	25,126	27,991	18,293	20,277	14,106	15,648	11,461	12,563	9,257	10,359	7,934	8,596				7,273	7,934	46'10"
0	EW			10,800*	10,800*	23,803	26,668	17,412	19,395	13,665	14,987	11,020	12,122	9,036	10,138	7,714	8,596				7,273	7,934	46' 5"
- 5	EW			12,342*	12,342*	23,142	24,244*	16,971	18,734	13,224	14,546	10,800	11,902	9,036	9,918	7,714	7,714*				7,714	7,714*	44' 5"
- 10	EW					19,836*	19,836*	16,750	16,971*	13,004	14,106*	10,579	11,461*								9,036*	9,036*	39'
- 15	EW																						
- 20	EW																						
- 25	EW																						

## Industrial Stick 24'7" (Variant 2A)

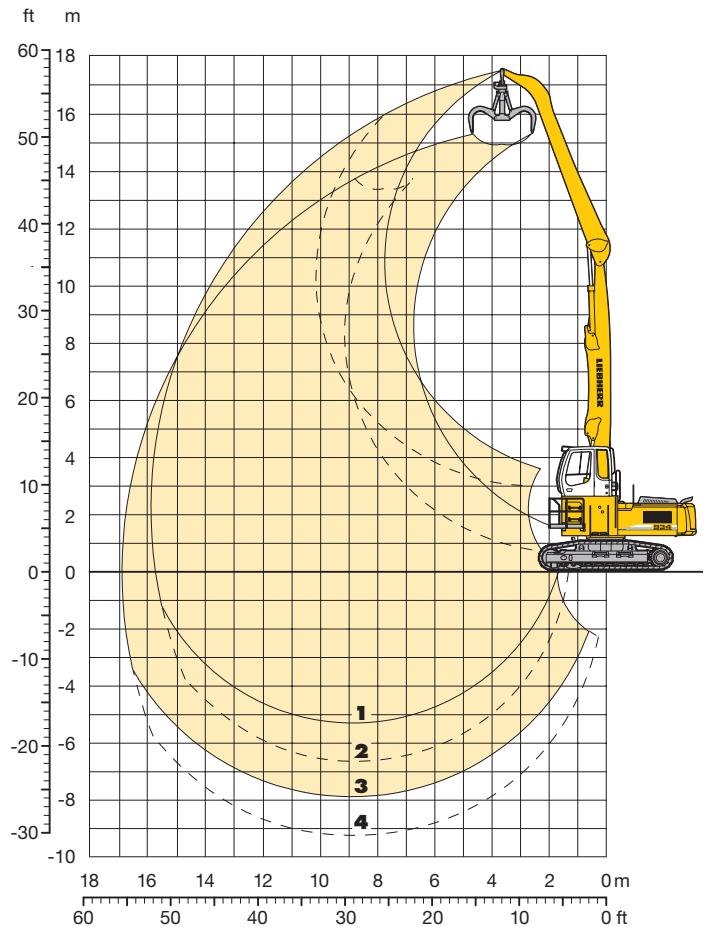
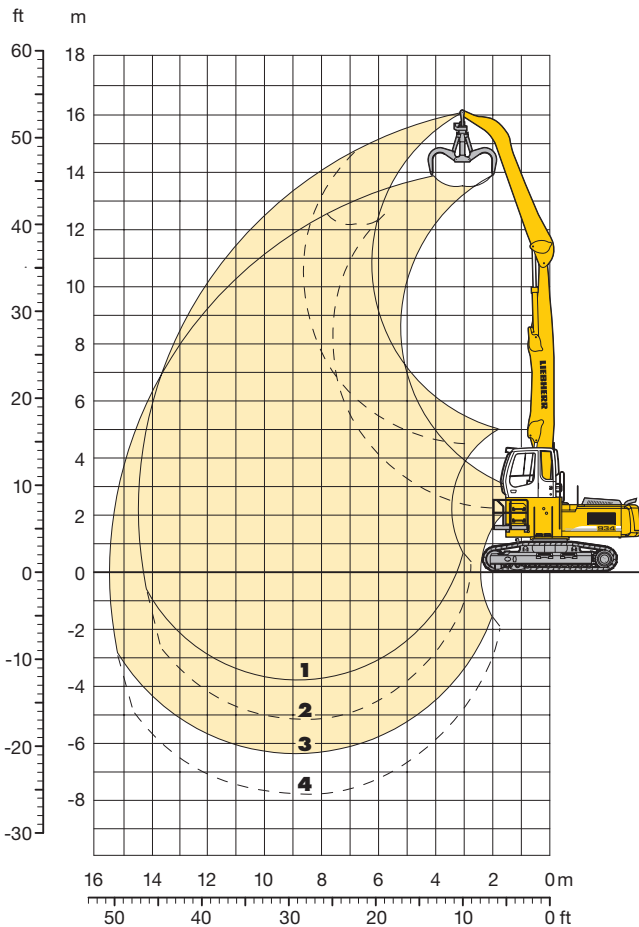
ft	Under-carriage	10 ft		15 ft		20 ft		25 ft		30 ft		35 ft		40 ft		45 ft		50 ft		ft in			
55	EW					14,767*	14,767*														14,106*	14,106*	20'2"
50	EW							15,208*	15,208*												11,240*	11,240*	29'3"
45	EW							16,971*	16,971*	14,767*	14,767*	11,020*	11,020*								9,918*	9,918*	35'4"
40	EW									16,530*	16,530*	13,885	14,326*	9,918*	9,918*						9,036*	9,036*	40'
35	EW									16,310*	16,310*	14,106	14,767*	11,020	11,902						8,596*	8,596*	43'7"
30	EW									16,530*	16,530*	13,885	14,767*	11,020	11,902	8,596	9,477				7,934	8,155*	46'4"
25	EW							19,175*	19,175*	16,750*	16,750*	13,665	14,767*	10,800	11,681	8,596	9,477				7,273	7,934	48'5"
20	EW							19,836*	19,836*	17,191	17,412*	13,224	14,326	10,579	11,461	8,596	9,257	6,832	7,714		6,612	7,273	50'
15	EW					24,024*	24,024*	20,938*	20,938*	16,530	17,852*	12,783	13,885	10,138	11,240	8,375	9,036	6,832	7,494		6,392	7,053	51'
10	EW	46,284*	46,284*	36,146*	36,146*	27,330*	27,330*	20,718	22,040*	15,428	16,971	12,122	13,224	9,918	10,800	8,155	8,816	6,612	7,494		6,171	6,832	51'6"
5	EW	6,612*	6,612*	38,570*	38,570*	26,668	28,432*	19,175	21,158	14,546	16,089	11,681	12,783	9,477	10,359	7,714	8,596	6,612	7,273		6,171	6,612	51'7"
0	EW	5,069*	5,069*	16,530*	16,530*	24,685	27,330	17,852	19,836	13,885	15,208	11,020	12,122	9,036	9,918	7,494	8,375	6,392	7,053		6,171	6,832	51'2"
- 5	EW	6,612*	6,612*	13,885*	13,885*	23,142	26,007	16,971	18,734	13,224	14,546	10,579	11,681	8,816	9,698	7,494	8,155	6,392	7,053		6,171	6,392*	50'2"
- 10	EW			14,326*	14,326*	22,481	24,024*	16,310	18,293	12,783	14,106	10,359	11,461	8,596	9,477	7,273	8,155				6,832	6,832*	46'8"
- 15	EW					19,616*	19,616*	16,089	16,310*	12,563	13,665*	10,138	11,020*	8,596	8,596*						8,155*	8,155*	40'4"
- 20	EW																						
- 25	EW																						

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

The lift capacities are stated in lb on the lifting gear's stick tip, and can be lifted 360° on firm, level supporting surface. Capacities are valid for 24" wide triple grouser pads. Indicated loads are based on ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity (indicated via \*). Lifting capacity of the excavator is limited by machine stability, hydraulic capacity and maximum permissible load of the load hook.

# Industrial Attachment

## with Industrial-Type Straight Boom 28'3"



### Attachment Envelope

Kinematic variants 3A/3B

- 1 with industrial stick 19'8" (3B)
- 2 with industrial stick 19'8" (3A)
- 3 with industrial stick 19'8" and grapple model 65 (3B)
- 4 with industrial stick 19'8" and grapple model 65 (3A)

### Attachment Envelope

Kinematic variants 3A/3B

- 1 with industrial stick 24'7" (3B)
- 2 with industrial stick 24'7" (3A)
- 3 with industrial stick 24'7" and grapple model 65 (3B)
- 4 with industrial stick 24'7" and grapple model 65 (3A)

### Operating Weight and Ground Pressure

Operating weight includes basic machine with rigid cab elevation 3'4", counterweight 16,530 lb, industrial-type straight boom 28'3", industrial stick 19'8" and grapple model 65 with 5 semi-closed tines 0.78 yd<sup>3</sup>.

Undercarriage	EW	
Pad width	in 24"	30"
Weight	lb 81,900	83,000
Ground pressure	psi 11.4	9.2

### Operating Weight and Ground Pressure

Operating weight includes basic machine with rigid cab elevation 3'4", counterweight 16,530 lb, industrial-type straight boom 28'3", industrial stick 24'7" and grapple model 65 with 5 semi-closed tines 0.78 yd<sup>3</sup>.

Undercarriage	EW	
Pad width	in 24"	30"
Weight	lb 82,450	83,550
Ground pressure	psi 11.5	9.4

# Lift Capacities

with Industrial-Type Straight Boom 28'3"

## Industrial Stick 19'8" (Variant 3A)

ft	Under-carriage	10 ft		15 ft		20 ft		25 ft		30 ft		35 ft		40 ft		45 ft		50 ft		ft in		
55	EW																					
50	EW																					
45	EW																					
40	EW									16,530*	16,530*	12,122*	12,122*							12,122*	12,122*	34'6"
35	EW									16,310*	16,310*	13,224	14,326							10,579	11,240*	38'7"
30	EW									16,530*	16,530*	13,224	14,326	10,359	11,240					9,257	10,138	41'8"
25	EW									16,750	16,971*	13,004	14,106	10,359	11,240					8,375	9,036	44'
20	EW							20,277*	20,277*	16,089	17,632*	12,563	13,665	10,138	11,020	8,155	9,036			7,714	8,596	45'7"
15	EW	52,455*	52,455*	34,603*	34,603*	26,448*	26,448*	20,497	21,599*	15,428	16,971	12,122	13,224	9,918	10,800	8,155	8,816			7,273	8,155	46'8"
10	EW			30,195*	30,195*	26,668	28,872*	19,175	21,158	14,767	16,089	11,681	12,783	9,477	10,359	7,934	8,596			7,053	7,934	47'2"
5	EW			10,800*	10,800*	24,685	27,550	18,073	19,836	13,885	15,428	11,240	12,342	9,257	10,138	7,714	8,596			7,053	7,714	47'3"
0	EW	2,865*	2,865*	10,138*	10,138*	23,362	26,228	17,191	18,954	13,444	14,767	10,800	11,902	9,036	9,918	7,714	8,375			7,053	7,934	46'8"
- 5	EW			11,902*	11,902*	22,922	24,464*	16,750	18,514	13,004	14,326	10,579	11,681	8,816	9,698	7,494	8,375			7,273	8,155	45'7"
- 10	EW			14,767*	14,767*	22,701	25,346*	16,530	18,293	12,783	14,326	10,579	11,681	8,816	9,698					7,714	8,596	43'6"
- 15	EW							16,530	18,293	12,783	14,326	10,579	11,681							9,698	10,579	37'1"
- 20	EW																					
- 25	EW																					

## Industrial Stick 24'7" (Variant 3A)

ft	Under-carriage	10 ft		15 ft		20 ft		25 ft		30 ft		35 ft		40 ft		45 ft		50 ft		ft in		
55	EW																					
50	EW									11,902*	11,902*									11,020*	11,020*	30' 4"
45	EW											11,902*	11,902*							9,698*	9,698*	36' 3"
40	EW											13,665*	13,665*	10,800	10,800*					9,036*	9,036*	40' 9"
35	EW											13,444*	13,444*	10,800	11,902					8,596*	8,596*	44' 3"
30	EW											13,665*	13,665*	10,800	11,902	8,596	9,477			7,714	8,155*	46'11"
25	EW											13,665	13,885*	10,800	11,681	8,596	9,477			7,053	7,714	49'
20	EW									15,869*	15,869*	13,224	14,326	10,359	11,461	8,375	9,257	6,832	7,494	6,612	7,273	50' 6"
15	EW							19,395*	19,395*	16,310	16,750*	12,563	13,665	10,138	11,020	8,155	9,036	6,832	7,494	6,171	6,832	51' 6"
10	EW	51,794*	51,794*	33,942*	33,942*	25,787*	25,787*	20,277	20,938*	15,428	16,750	12,122	13,224	9,698	10,579	7,934	8,816	6,612	7,273	5,951	6,612	51'11"
5	EW	5,069*	5,069*	34,382*	34,382*	26,228	28,432*	18,954	20,718	14,326	15,869	11,461	12,563	9,257	10,138	7,714	8,596	6,392	7,273	5,951	6,612	51'11"
0	EW	4,849*	4,849*	14,546*	14,546*	24,244	26,889	17,632	19,395	13,665	14,987	11,020	12,122	9,036	9,918	7,494	8,375	6,392	7,053	5,951	6,612	51' 6"
- 5	EW	6,612*	6,612*	13,004*	13,004*	22,922	25,566	16,750	18,514	13,004	14,326	10,579	11,681	8,596	9,698	7,273	8,155	6,392	7,053	6,171	6,832	50' 6"
- 10	EW	8,816*	8,816*	14,106*	14,106*	22,260	24,905	16,089	18,073	12,563	13,885	10,138	11,240	8,596	9,477	7,273	7,934			6,392	7,053	49'
- 15	EW			15,648*	15,648*	22,040	24,685	15,869	17,632	12,342	13,665	10,138	11,240	8,375	9,257	7,273	7,934			7,053	7,714	45' 8"
- 20	EW					22,040	22,481*	15,869	17,852	12,342	13,665	10,138	11,240							8,816	9,918	38' 1"
- 25	EW																					

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

The lift capacities are stated in lb on the lifting gear's stick tip, and can be lifted 360° on firm, level supporting surface. Capacities are valid for 24" wide triple grouser pads. Indicated loads are based on ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity (indicated via \*). Lifting capacity of the excavator is limited by machine stability, hydraulic capacity and maximum permissible load of the load hook.

# Lift Capacities

with Industrial-Type Straight Boom 28'3"

## Industrial Stick 19'8" (Variant 3B)

ft	Under-carriage	10 ft		15 ft		20 ft		25 ft		30 ft		35 ft		40 ft		45 ft		50 ft		ft in			
55	EW																						
50	EW					18,073*	18,073*														16,310*	16,310*	21' 1"
45	EW					19,175*	19,175*	17,412*	17,412*												13,444*	13,444*	29'
40	EW							16,530*	16,530*	15,428*	15,428*	12,122*	12,122*								12,122*	12,122*	34' 6"
35	EW							16,310*	16,310*	14,987*	14,987*	13,224	14,106*								10,579	11,240*	38' 7"
30	EW					18,293*	18,293*	16,530*	16,530*	15,208*	15,208*	13,224	14,106*	10,359	11,240						9,257	10,138	41' 8"
25	EW					19,616*	19,616*	17,412*	17,412*	15,648*	15,648*	13,004	14,106	10,359	11,240						8,375	9,257	44'
20	EW			26,668*	26,668*	21,820*	21,820*	18,734*	18,734*	16,310	16,530*	12,563	13,665	10,138	11,020	8,155	9,036				7,714	8,596	45' 7"
15	EW	48,268*	48,268*	31,958*	31,958*	24,464*	24,464*	20,277*	20,277*	15,428	16,971	12,122	13,224	9,918	10,800	8,155	8,816				7,273	8,155	46' 8"
10	EW			30,195*	30,195*	26,668	27,330*	19,175	21,158	14,767	16,089	11,681	12,783	9,477	10,359	7,934	8,596				7,053	7,934	47' 2"
5	EW			10,800*	10,800*	24,685	27,550	18,073	20,056	14,106	15,428	11,240	12,342	9,257	10,138	7,714	8,596				7,053	7,714	47' 3"
0	EW			10,138*	10,138*	23,583	26,228	17,191	19,175	13,444	14,767	10,800	11,902	9,036	9,918	7,714	8,375				7,053	7,934	46' 8"
- 5	EW			11,902*	11,902*	22,922	24,464*	16,750	18,514	13,004	14,326	10,579	11,681	8,816	9,698	7,494	8,375				7,494	8,375	44' 4"
- 10	EW					22,701	25,346*	16,530	18,293	12,783	14,326	10,579	11,681								9,036	9,918	38' 6"
- 15	EW																						
- 20	EW																						
- 25	EW																						

## Industrial Stick 24'7" (Variant 3B)

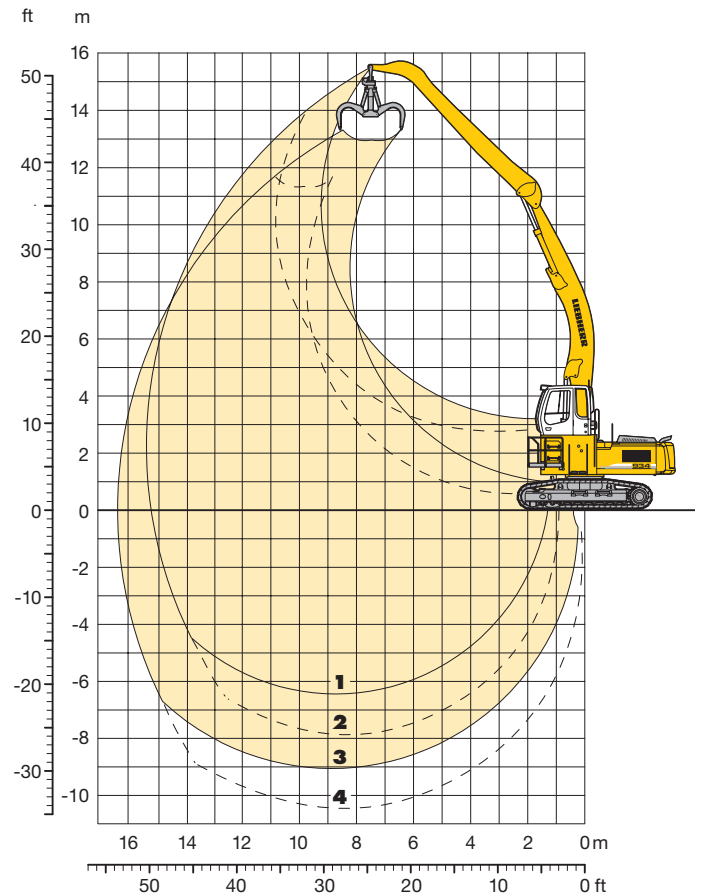
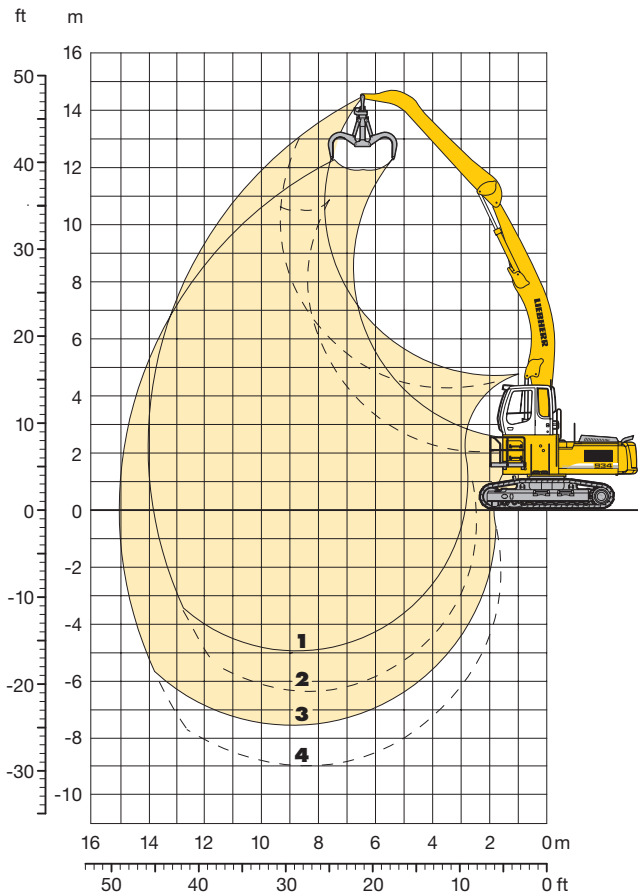
ft	Under-carriage	10 ft		15 ft		20 ft		25 ft		30 ft		35 ft		40 ft		45 ft		50 ft		ft in			
55	EW					15,648*	15,648*														13,665*	13,665*	21' 9"
50	EW							15,648*	15,648*	11,902*	11,902*										11,020*	11,020*	30' 4"
45	EW							14,546*	14,546*	13,665*	13,665*	11,902*	11,902*								9,698*	9,698*	36' 3"
40	EW									13,224*	13,224*	12,563*	12,563*	10,800	10,800*						9,036*	9,036*	40' 9"
35	EW									13,004*	13,004*	12,342*	12,342*	11,020	11,902						8,596*	8,596*	44' 3"
30	EW									13,224*	13,224*	12,563*	12,563*	10,800	11,902	8,596	9,477				7,714	8,155*	46' 11"
25	EW							14,767*	14,767*	13,665*	13,665*	12,783*	12,783*	10,800	11,681	8,596	9,477				7,053	7,714	49'
20	EW					18,073*	18,073*	16,089*	16,089*	14,546*	14,546*	13,224	13,444*	10,579	11,461	8,375	9,257	6,832	7,494		6,612	7,273	50' 6"
15	EW			19,616*	19,616*	20,718*	20,718*	17,852*	17,852*	15,648*	15,648*	12,563	13,885	10,138	11,020	8,155	9,036	6,832	7,494		6,171	6,832	51' 6"
10	EW	47,606*	47,606*	31,517*	31,517*	24,024*	24,024*	19,616*	19,616*	15,428	16,750*	12,122	13,224	9,698	10,579	7,934	8,816	6,612	7,273		5,951	6,612	51' 11"
5	EW	5,069*	5,069*	34,382*	34,382*	26,228	26,889*	18,954	20,718	14,546	15,869	11,461	12,563	9,257	10,359	7,714	8,596	6,612	7,273		5,951	6,612	51' 11"
0	EW	4,849*	4,849*	14,546*	14,546*	24,244	27,109	17,632	19,395	13,665	14,987	11,020	12,122	9,036	9,918	7,494	8,375	6,392	7,053		5,951	6,612	51' 6"
- 5	EW	6,612*	6,612*	13,004*	13,004*	22,922	25,566	16,750	18,514	13,004	14,326	10,579	11,681	8,596	9,698	7,273	8,155	6,392	7,053		6,171	6,832	50' 3"
- 10	EW			14,106*	14,106*	22,260	24,905	16,089	18,073	12,563	13,885	10,138	11,240	8,596	9,477	7,273	7,934				6,832	7,494	46' 6"
- 15	EW					22,040	24,685	15,869	17,852	12,342	13,665	10,138	11,240	8,375	9,257						8,375	9,257	39' 8"
- 20	EW																						
- 25	EW																						

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

The lift capacities are stated in lb on the lifting gear's stick tip, and can be lifted 360° on firm, level supporting surface. Capacities are valid for 24" wide triple grouser pads. Indicated loads are based on ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity (indicated via \*). Lifting capacity of the excavator is limited by machine stability, hydraulic capacity and maximum permissible load of the load hook.

# Industrial Attachment

## with Industrial-Type Gooseneck Boom 28'3"



### Attachment Envelope

Kinematic variants 3C/3D

- 1** with industrial stick 19'8" (3D)
- 2** with industrial stick 19'8" (3C)
- 3** with industrial stick 19'8" and grapple model 65 (3D)
- 4** with industrial stick 19'8" and grapple model 65 (3C)

### Attachment Envelope

Kinematic variants 3C/3D

- 1** with industrial stick 24'7" (3D)
- 2** with industrial stick 24'7" (3C)
- 3** with industrial stick 24'7" and grapple model 65 (3D)
- 4** with industrial stick 24'7" and grapple model 65 (3C)

### Operating Weight and Ground Pressure

Operating weight includes basic machine with rigid cab elevation 3'4", counterweight 16,530 lb, industrial-type gooseneck boom 28'3", industrial stick 19'8" and grapple model 65 with 5 semi-closed tines 0.78 yd<sup>3</sup>.

Undercarriage		EW	
Pad width	in	24"	30"
Weight	lb	82,230	83,330
Ground pressure	PSI	11.5	9.4

### Operating Weight and Ground Pressure

Operating weight includes basic machine with rigid cab elevation 3'4", counterweight 16,530 lb, industrial-type gooseneck boom 28'3", industrial stick 24'7" and grapple model 65 with 5 semi-closed tines 0.78 yd<sup>3</sup>.

Undercarriage		EW	
Pad width	in	24"	30"
Weight	lb	82,780	83,890
Ground pressure	PSI	11.5	9.4

# Lift Capacities

with Industrial-Type Gooseneck Boom 28'3"

## Industrial Stick 19'8" (Variant 3C)

ft	Under-carriage	10 ft		15 ft		20 ft		25 ft		30 ft		35 ft		40 ft		45 ft		50 ft		ft in		
55	EW																					
50	EW																					
45	EW																					
40	EW																					
35	EW																					
30	EW												11,681*	11,681*						10,800*	10,800*	36'9"
25	EW												11,681*	11,681*	10,579	11,461*				10,359	10,579*	40'
20	EW												12,563*	12,563*	10,579	11,461				9,257	10,138	42'4"
15	EW												13,444*	13,444*	12,563*	12,563*	10,359	11,240		8,375	9,257	44'1"
10	EW					19,836*	19,836*	16,750*	16,750*	14,767*	14,767*	12,563	13,224*	10,138	11,020	8,155	9,036		7,934	8,596	45'2"	
5	EW	5,510*	5,510*	32,399*	32,399*	23,362*	23,362*	18,734*	18,734*	14,987	16,089*	11,902	13,004	9,698	10,579	7,934	8,816		7,714	8,375	45'8"	
0	EW	3,747*	3,747*	16,750*	16,750*	25,346	26,668*	18,514	20,277	14,326	15,648	11,461	12,563	9,477	10,359	7,934	8,596		7,494	8,155	45'8"	
-5	EW	6,392*	6,392*	14,106*	14,106*	23,803	26,668	17,412	19,395	13,665	14,987	11,020	12,122	9,036	10,138	7,714	8,375		7,494	8,155	45'2"	
-10	EW	9,257*	9,257*	14,987*	14,987*	22,922	25,787	16,750	18,734	13,224	14,546	10,800	11,902	8,816	9,918				7,714	8,375	44'1"	
-15	EW			16,750*	16,750*	22,701	25,346	16,530	18,293	13,004	14,326	10,579	11,681	8,816	9,698				7,934	8,816	42'4"	
-20	EW			18,734*	18,734*	22,701	25,346	16,530	18,293	12,783	14,106	10,579	11,461	8,816	9,698				8,596	9,698	40'	
-25	EW							16,530	18,514	13,004	14,326								10,800	11,902	34'2"	

## Industrial Stick 24'7" (Variant 3C)

ft	Under-carriage	10 ft		15 ft		20 ft		25 ft		30 ft		35 ft		40 ft		45 ft		50 ft		ft in		
55	EW																					
50	EW																					
45	EW																					
40	EW																					
35	EW																					
30	EW																					
25	EW																					
20	EW																					
15	EW																					
10	EW					19,175*	19,175*	16,089*	16,089*	14,106*	14,106*	12,563*	12,563*	11,681*	11,681*	10,359	11,020*	8,375	9,257	6,832	7,494	49'9"
5	EW	11,240*	11,240*	31,738*	31,738*	22,922*	22,922*	18,293*	18,293*	14,767	15,428*	11,681	12,783	9,477	10,359	7,934	8,596	6,612	7,273	6,392	7,053	50'3"
0	EW	8,375*	8,375*	19,836*	19,836*	24,685	26,007*	18,073	19,836	13,885	15,428	11,240	12,342	9,036	10,138	7,714	8,375	6,392	7,053	6,392	7,053	49'9"
-5	EW	9,257*	9,257*	16,310*	16,310*	23,142	26,007	16,971	18,954	13,224	14,546	10,579	11,681	8,816	9,698	7,494	8,155		6,392	7,053	48'9"	
-10	EW	10,800*	10,800*	16,310*	16,310*	22,260	25,126	16,310	18,073	12,783	14,106	10,359	11,461	8,596	9,477	7,273	7,934		6,612	7,273	47'3"	
-15	EW	12,342*	12,342*	16,971*	16,971*	22,040	24,685	15,869	17,852	12,342	13,885	10,138	11,240	8,375	9,257	7,273	7,934		7,053	7,934	45'1"	
-20	EW			18,293*	18,293*	22,040	24,685	15,869	17,632	12,342	13,665	10,138	11,240	8,375	9,477				7,714	8,596	42'3"	
-25	EW							16,089	17,852	12,563	13,885	10,138	11,240						9,918	11,020	35'	

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

The lift capacities are stated in lb on the lifting gear's stick tip, and can be lifted 360° on firm, level supporting surface. Capacities are valid for 24" wide triple grouser pads. Indicated loads are based on ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity (indicated via \*). Lifting capacity of the excavator is limited by machine stability, hydraulic capacity and maximum permissible load of the load hook.



# Lift Capacities

with Industrial-Type Gooseneck Boom 28'3"

## Industrial Stick 19'8" (Variant 3D)

ft	Under-carriage	10 ft		15 ft		20 ft		25 ft		30 ft		35 ft		40 ft		45 ft		50 ft		ft in				
55	EW																							
50	EW																							
45	EW								14,767*	14,767*											12,563*	12,563*	26'6"	
40	EW									14,326*	14,326*										11,461*	11,461*	32'5"	
35	EW									13,885*	13,885*	13,444*	13,444*								10,800*	10,800*	36'9"	
30	EW									14,106*	14,106*	13,224*	13,224*	10,579	11,461						10,359	10,579*	40'	
25	EW							16,089*	16,089*	14,546*	14,546*	13,444	13,665*	10,579	11,461						9,257	10,138	42'4"	
20	EW					20,056*	20,056*	17,412*	17,412*	15,428*	15,428*	13,004	14,106*	10,359	11,240						8,375	9,257	44'1"	
15	EW	44,741*	44,741*	29,754*	29,754*	22,922*	22,922*	19,175*	19,175*	15,869	16,530*	12,563	13,665	10,138	11,020	8,155	9,036				7,934	8,596	45'2"	
10	EW	5,510*	5,510*	35,925*	35,925*	26,228*	26,228*	19,616	20,938*	14,987	16,530	11,902	13,004	9,698	10,579	7,934	8,816				7,714	8,375	45'8"	
5	EW	3,747*	3,747*	16,750*	16,750*	25,346	27,991	18,514	20,277	14,326	15,648	11,461	12,563	9,477	10,359	7,934	8,596				7,494	8,155	45'8"	
0	EW	6,392*	6,392*	14,106*	14,106*	23,803	26,448	17,412	19,395	13,665	14,987	11,020	12,122	9,036	10,138	7,714	8,375				7,494	8,155	45'2"	
- 5	EW			14,987*	14,987*	22,922	25,787	16,750	18,734	13,224	14,546	10,800	11,681	8,816	9,918							7,714	8,375	44'1"
- 10	EW			16,750*	16,750*	22,701	25,346	16,530	18,293	13,004	14,326	10,579	11,681	8,816	9,698							7,934	8,816	42'4"
- 15	EW							16,530	18,293	12,783	14,106	10,579	11,461									9,918	10,800	36'2"
- 20	EW																							
- 25	EW																							

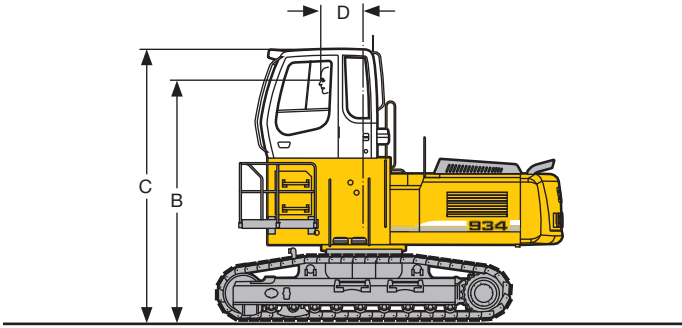
## Industrial Stick 24'7" (Variant 3D)

ft	Under-carriage	10 ft		15 ft		20 ft		25 ft		30 ft		35 ft		40 ft		45 ft		50 ft		ft in				
55	EW																							
50	EW																							
45	EW									12,563*	12,563*											9,257*	9,257*	33'10"
40	EW											11,681*	11,681*									8,596*	8,596*	38' 7"
35	EW											11,461*	11,461*	11,240*	11,240*							8,375*	8,375*	42' 3"
30	EW											11,681*	11,681*	11,240*	11,240*	8,816	9,036*					8,155*	8,155*	45' 1"
25	EW									12,563*	12,563*	11,902*	11,902*	11,020	11,461*	8,816	9,698					7,714	7,934*	47' 3"
20	EW									13,444*	13,444*	12,563*	12,563*	10,800	11,681	8,596	9,477					7,273	7,934	48' 9"
15	EW					18,954*	18,954*	16,530*	16,530*	14,546*	14,546*	13,004	13,224*	10,359	11,240	8,375	9,257	6,832	7,494			6,832	7,494	49' 9"
10	EW	44,080*	44,080*	29,093*	29,093*	22,260*	22,260*	18,514*	18,514*	15,869	15,869*	12,342	13,444	9,918	10,800	8,155	9,036	6,832	7,494			6,392	7,053	50' 3"
5	EW	11,240*	11,240*	35,264*	35,264*	25,566*	25,566*	19,395	20,277*	14,767	16,310	11,681	12,783	9,477	10,359	7,934	8,596	6,612	7,273			6,392	7,053	50' 3"
0	EW	8,375*	8,375*	19,836*	19,836*	24,685	27,550	18,073	19,836	13,885	15,208	11,240	12,342	9,036	10,138	7,714	8,375	6,392	7,053			6,392	7,053	49' 9"
- 5	EW	9,257*	9,257*	16,310*	16,310*	23,142	26,007	16,971	18,734	13,224	14,546	10,579	11,681	8,816	9,698	7,494	8,155					6,392	7,053	48' 9"
- 10	EW	10,800*	10,800*	16,310*	16,310*	22,260	25,126	16,310	18,073	12,783	14,106	10,359	11,461	8,596	9,477	7,273	7,934					6,612	7,273	47' 3"
- 15	EW			16,971*	16,971*	22,040	24,685	15,869	17,852	12,342	13,885	10,138	11,240	8,375	9,257	7,273	7,934					7,053	7,934	45' 1"
- 20	EW							15,869	17,632	12,342	13,665	10,138	11,240									9,036	10,138	37' 1"
- 25	EW																							

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

The lift capacities are stated in lb on the lifting gear's stick tip, and can be lifted 360° on firm, level supporting surface. Capacities are valid for 24" wide triple grouser pads. Indicated loads are based on ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity (indicated via \*). Lifting capacity of the excavator is limited by machine stability, hydraulic capacity and maximum permissible load of the load hook.

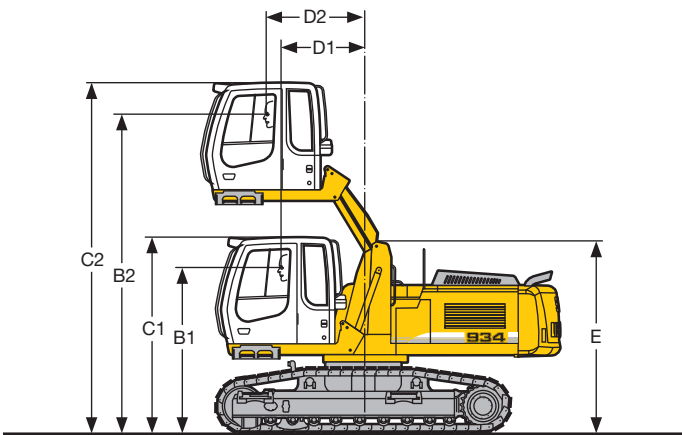
# Choice of Cab Elevation and Cab Protection



## Rigid Cab Elevation

	HD-SL		EW	
Height	3'11"	6'7"	3'11"	6' 7"
B	12' 6"	15'2"	12' 8"	15' 4"
C	14' 2"	16'9"	14' 3"	16'11"
D	2' 6"	2'6"	2' 6"	2' 6"

Additional weight with fixed cab elevation 6'7" in relation to cab elevation 3'11": 440 lb

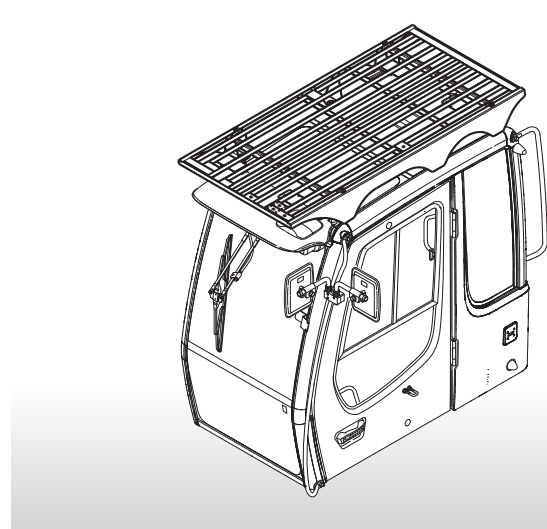


## Hydraulic Cab Elevation

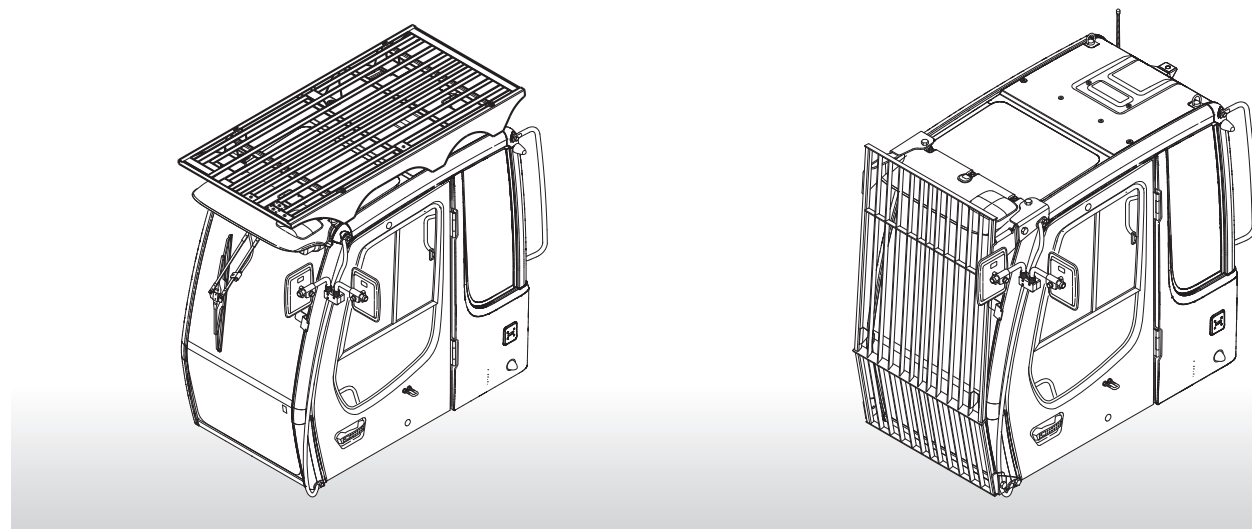
	HD-SL	EW
B1	8' 7"	8'8"
B2	16' 8"	17'
C1	10' 2"	10'3"
C2	18' 4"	18'6"
D1	4' 9"	4'9"
D2	5' 7"	5'7"
E	9'12"	10'1"

Additional weight in relation to cab elevation 3'11": 1,100 lb

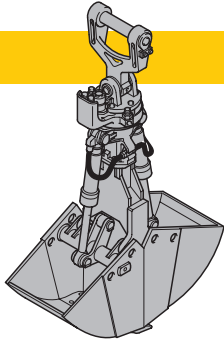
## FOPS Guard



## Front Guard



# Variety of Tools

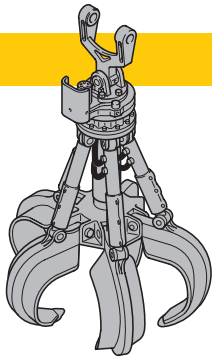


## Shells for Loose Material

### Clamshell Model 20 B

Shells for loose material with cutting edge (without teeth)

Cutting width of shells	in	39"	47"	63"
Capacity	yd <sup>3</sup>	1.70	1.96	2.62
For loose material, specific weight up to	lb/yd <sup>3</sup>	3,300	3,300	3,300
Total weight	lb	2,987	3,119	3,417



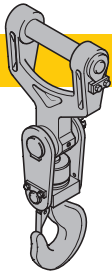
## Multiple Tine Grapples

open tines

semi-closed tines

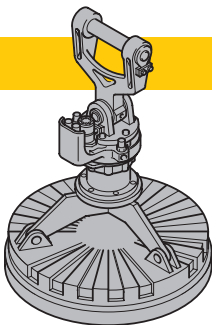
closed tines

<b>Grapple Model 64</b> (4 tines)	Capacity	yd <sup>3</sup>	0.52	0.78	0.52	0.78	0.52	0.78
	Weight	lb	1,862	2,491	2,325	2,932	2,336	3,351
<b>Grapple Model 65</b> (5 tines)	Capacity	yd <sup>3</sup>	0.52	0.78	0.52	0.78	0.52	0.78
	Weight	lb	2,535	2,711	2,832	3,119	2,921	3,351
<b>Grapple Model 69</b> (4 tines)	Capacity	yd <sup>3</sup>	1.05	1.44	1.05	1.44	1.05	1.44
	Weight	lb	2,965	3,075	3,384	3,615	4,188	4,541
<b>Grapple Model 70 C</b> (5 tines)	Capacity	yd <sup>3</sup>	1.05	1.44	1.05	1.44	1.05	1.44
	Weight	lb	3,273	3,505	3,758	4,100	4,299	4,398



## Crane Hook with Suspension

Max. load	lb	27,557
Height with suspension	ft	3'
Total weight	lb	211



## Electromagnets with Suspension

Magnet information on request

For further information see color brochure "Add-on tools for material-handling technology". To operate a magnet the installation of a generator is required; please contact your Liebherr dealer or the factory for further information.

# Equipment



## Undercarriage

	S	O
Two-stage travel motors	•	
Idler protection	•	
Lifetime lubricated track rollers	•	
Track guide at each track frame	•	
Tracks sealed and greased	•	
Track guides front of sprocket and in center		•
B 60 or D 6 C sprocket with material ejector		•
Reinforced bottom plate of center-piece		•
Change kit track B 60 into D 6 C		•



## Uppercarriage

	S	O
Engine hood with lift help and mechanical locking	•	
Lockable tool box	•	
Handrails, non slip surfaces	•	
Tool kit	•	
Maintenance-free swing brake lock	•	
Maintenance-free HD-batteries	•	
Sound insulation	•	
Electric fuel tank filler pump		•
Foot pedal swing positioning brake		•
Customized colors		•



## Hydraulics

	S	O
Electronic pump regulation	•	
Stepless work mode selector	•	
Pressure storage for controlled lowering of attachments with engine turned off	•	
Hydraulic tank shut-off valve	•	
Pressure compensation	•	
Flow compensation	•	
Filter with integrated fine filter area (5 µm)	•	
Pressure test ports	•	
Additional hydraulic circuits		•
Bio-degradable hydr. oil		•
Filter for secondary circuit		•



## Engine

	S	O
Direct injection	•	
Turbo-charged and after-cooled	•	
Dry-type air cleaner w/pre-cleaner, main and safety element	•	
Sensor controlled engine idling	•	
Engine cold starting aid		•



## Operator's Cab

	S	O
Roof hatch	•	
Tinted windows	•	
Right window made of one piece (without post)	•	
Door with sliding window	•	
Rain hood over front window opening	•	
Wiper/washer	•	
Emergency exit rear window	•	
Sun visor	•	
Seat and consoles independently adjustable (6-way adjustable seat)		•
Storage tray	•	
Closed storage space	•	
Coat hook	•	
Removable customized foot mat	•	
Dome light	•	
Inside rear mirror	•	
Cigarette lighter and ashtray	•	
Seat belt	•	
Mechanical hour meters, readable from outside the cab	•	
Displays for engine operating condition	•	
Automatic air conditioning with defroster	•	
Pre-mounting for radio	•	
Radio		•
Electric cooler		•
Auxiliary heating		•
Additional flood lights		•
Wiper in lower front windows		•
Roof window wiper		•
Bullet proof window (fixed installation – cannot be opened)		•
FOPS Protection		•
Air pressure operator seat with heating and head-rest		•
Electronic theft protection		•
Beacon		•
Extinguisher		•



## Attachment

	S	O
Flood lights	•	
Hydr. lines for clam operation in stick	•	
Sealed pivots	•	
Liebherr semi-automatic central lubrication system	•	
Safety check valves on hoist cylinder, regenerative	•	
Safety check valves on stick cylinder, regenerative	•	
Hose quick connection	•	
Cylinders with shock absorber	•	
Safety lift hook		•
Liebherr line of clams		•
Liebherr fully-automatic central lubrication system		•
Customized colors		•
Overload warning device		•

S = Standard, O = Option

**Options and/or special attachments, supplied by vendors other than Liebherr, are only to be installed with the knowledge and approval of Liebherr to retain warranty.**

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