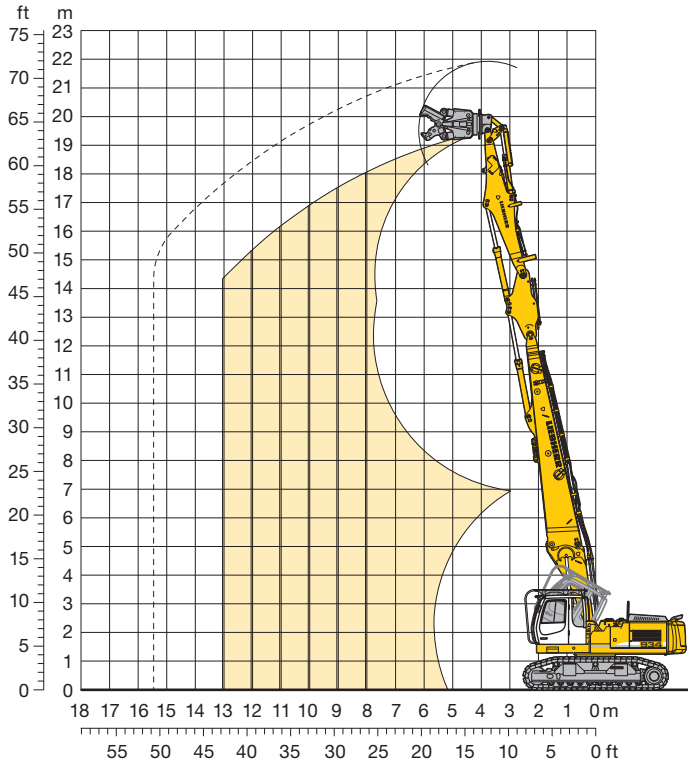


Attachment Information

Liebherr Crawler Excavator
with Demolition Attachment



Demolition Attachment 19,50 m



To order a complete machine you need the following

- Hydraulic control for rotary drive
- Hydraulic control for demolition attachment
- Hoist cylinders with regeneration plus and load holding valves
- Cab tiltable 30°

For demolition application, following additional items are also required:

- Demolition boom 7,50 m
- Intermediate boom 2,10 m
- Demolition stick 5,20 m standard (linkage 922 Li)
- Tool (backhoe bucket, demolition shears, concrete nibblers, etc.)
- Storage racks for demolition attachment
- Integral protection grid

Optional

- Integral protection grid for cab on tilting device
- Hydraulic accessory for quick change adapter on basic boom

Reach Limitation

	8 m	9 m	10 m	11 m	12 m	13 m
Demolition boom 7,50 m + Intermediate boom + Demolition stick 5,20 m	Tool weight* in t					
S-HD-Undercarriage	2,00	1,80	1,50	1,00	-	-
VH-HD-Undercarriage	2,50	2,50	2,50	2,00	1,75	1,50

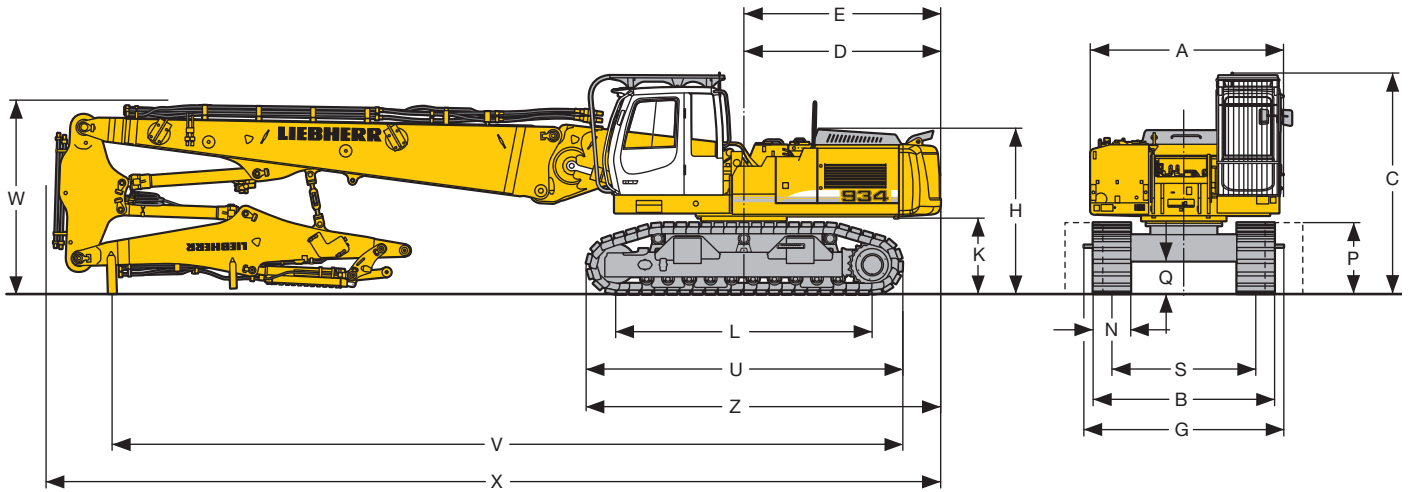
* included quick change adapter, adapter plate and tool

Operating Weight and Ground Pressure

Operating weight includes basic machine with heavy counterweight 6,5 t (7,5 t for the S-HD-Undercarriage), the cab tiltable 30°, demolition boom 7,50 m, intermediate boom, demolition stick 5,20 m standard and working tool 1,5 t.

Undercarriage		S-HD	VH-HD
Pad width	mm	600	600
Weight	kg	42500	47550
Ground pressure	kg/cm ²	0,82	0,90

Dimensions

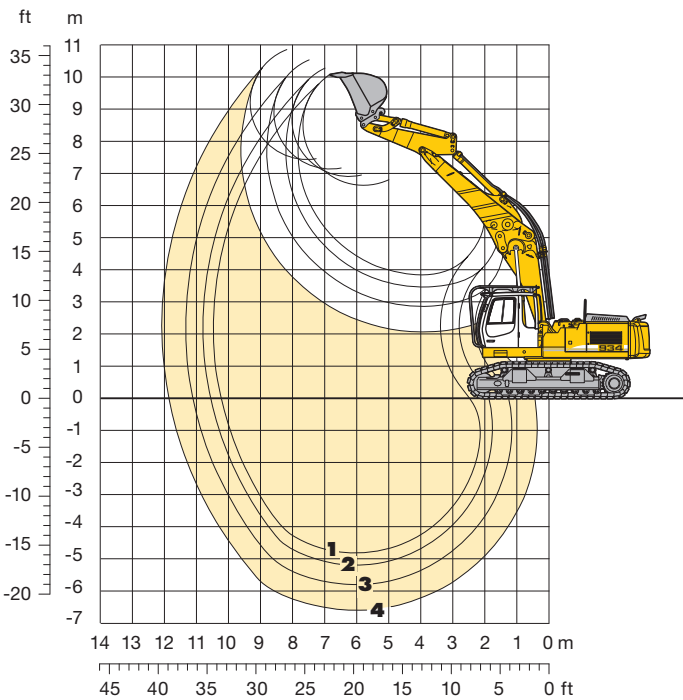
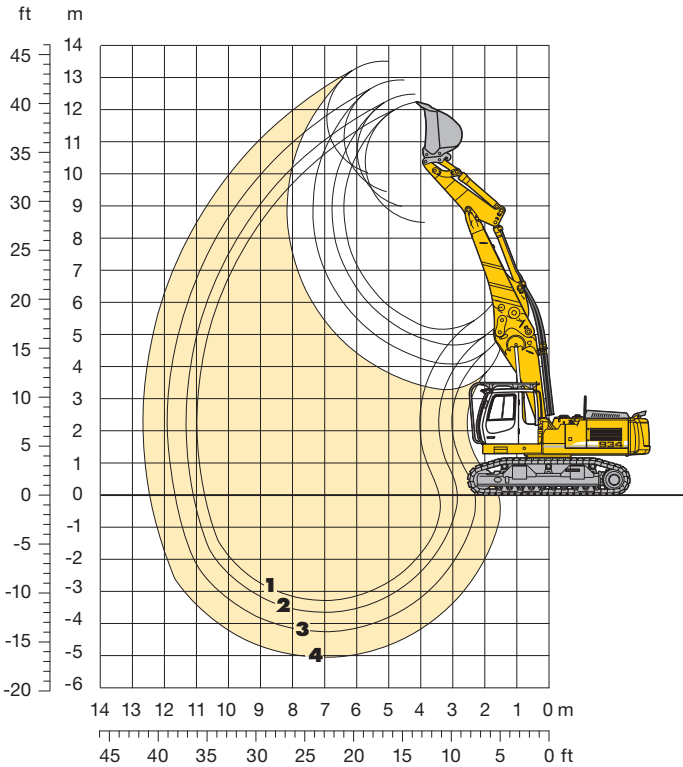


	VH-HD	mm	S-HD	mm
A		3050		3050
C		3500		3500
D		3145		3236
E		3145		3236
H		2650		2650
K		1210		1210
L		4100		4000
P		1140		1120
Q		437		537
U		5030		4900
S		2300 – 3200		2400
N		600	500 600	750
B		2900 – 3800	2998 3000	3150
G		3215 – 4115	3195 3195	3195
Z		5670		5690

	Demolition Boom 7,50 m			mm
	VH-HD	S-HD		
V		12600		12550
W		3100		3100
X		14300		14400

Backhoe Attachment

with Main Boom 4,25 m



For backhoe application, following items are required

- Main boom 4,25 m
- Stick 2,00 m
- Stick 2,50 m
- Stick 3,10 m
- Stick 3,90 m
- Storage racks for backhoe attachment

Optional

- Hydraulic lines AHS* for main boom 4,25 m
- Hydraulic lines AHS* for stick 2,00 m
- Hydraulic lines AHS* for stick 2,50 m
- Hydraulic lines AHS* for stick 3,10 m
- Hydraulic lines AHS* for stick 3,90 m
- Hydraulic lines rotary drive for main boom 4,25 m
- Hydraulic lines rotary drive for stick 2,00 m
- Hydraulic lines rotary drive for stick 2,50 m
- Hydraulic lines rotary drive for stick 3,10 m
- Hydraulic lines rotary drive for stick 3,90 m
- Backhoe bucket – as required

* AHS = hydraulic control for hydraulic accessory

Digging Envelope Main Boom pinned in upper (in lower) bearing

		1	2	3	4
Stick lengths	m	2,00	2,50	3,10	3,90
Max. digging depth	m	3,28 (4,82)	3,65 (5,19)	4,25 (5,79)	5,05 (6,59)
Max. reach at ground level	m	10,75 (10,23)	11,10 (10,55)	11,69 (11,11)	12,47 (11,87)
Max. dump height	m	8,47 (6,52)	8,99 (6,90)	9,44 (7,12)	10,04 (7,42)
Max. teeth height	m	12,23 (10,08)	12,47 (10,27)	12,91 (10,52)	13,49 (10,84)

Digging Forces with Quick Change Adapter

		1	2	3	4
Digging force ISO	kN	161	137	119	102
	t	16,4	13,9	12,1	10,4
Breakout force ISO	kN	187	155	155	155
	t	19,1	15,8	15,8	15,8

without Quick Change Adapter

Digging force ISO	kN	170	146	126	106
	t	17,3	14,9	12,8	10,8
Breakout force ISO	kN	213	184	184	184
	t	22,1	18,8	18,8	18,8

Max. breakout force with ripper bucket

264 kN (27,9 t)

Operating Weight and Ground Pressure

Operating weight includes basic machine with heavy counterweight 6,5 t (7,5 t for the S-HD-Undercarriage), the cab tiltable 30°, main boom 4,25 m, stick 2,50 m, quick change adapter 66 and backhoe bucket 0,95 m³ (860 kg).

Undercarriage		S-HD	VH-HD
Pad width	mm	600	600
Weight	kg	39900	44950
Ground pressure	kg/cm ²	0,77	0,85

Buckets

		without Quick Change Adapter										with Quick Change Adapter											
Cutting width	mm	1050	1250	1400	1550	1550	1700	1200 ¹⁾	1350 ¹⁾	1500 ¹⁾	1650 ¹⁾	1650 ¹⁾	1050	1250	1400	1550	1550	1700	1200 ¹⁾	1350 ¹⁾	1500 ¹⁾	1650 ¹⁾	1650 ¹⁾
Capacity ISO 7451	m ³	0,95	1,15	1,35	1,50	1,80	2,00	1,30	1,50	1,75	1,95	2,20	0,95	1,15	1,35	1,50	1,80	2,00	1,30	1,50	1,75	1,95	2,20
Max. possible material weight	S-HD t/m ³	1,8	1,8	1,8	1,5	1,2	-	1,8	1,8	1,5	1,2	-	1,8	1,8	1,8	1,5	1,2	-	1,8	1,5	1,2	-	-
	VH-HD t/m ³	1,8	1,8	1,8	1,8	1,8	1,8	1,8	1,8	1,8	1,8	1,8	1,8	1,8	1,8	1,8	1,8	1,8	1,8	1,8	1,8	1,8	1,8
Weight of STD bucket with Liebherr teeth Z 16	kg	860	960	1020	1080	1160	1200	-	-	-	-	-	860	940	1050	1130	1180	1300	-	-	-	-	-
Weight of HD bucket with Liebherr teeth Z 20	kg	1060	1160	1270	1340	-	-	1350	1440	1520	1660	1780	1100	1210	1320	1410	-	-	1360	1480	1560	1710	1780
Max. stick length for machine stability per ISO 10567:																							
S-HD-Undercarriage	m	3,90	3,10	2,50	2,50	2,50	-	2,00	2,00	2,00	2,00	-	3,90	3,10	2,50	2,50	2,50	-	2,00	2,00	2,00	-	-
VH-HD-Undercarriage	m	3,90	3,90	3,10	3,10	2,50	2,50	2,00	2,00	2,00	2,00	2,00	3,90	3,10	3,10	2,50	2,50	2,50	2,00	2,00	2,00	2,00	2,00

¹⁾ R 944 B Litronic buckets

Lift Capacities

with Main Boom 4,25 m

Stick 2,00 m

Height (m)	Under-carriage	Radius of load from centerline of machine (m)					
		3,0	4,5	6,0	7,5	9,0	10,5
10,5	S-HD						
	VH-HD						
9,0	S-HD			8,5# (8,5#)			
	VH-HD			8,5# (8,5#)			
7,5	S-HD			8,9 (10,3#)	5,9 (7,8#)		
	VH-HD			10,3# (10,3#)	7,8# (7,8#)		
6,0	S-HD	13,2 (14,2#)	8,3 (11,1#)	5,8 (9,3#)			
	VH-HD	14,2# (14,2#)	11,1# (11,1#)	8,6 (9,3#)			
4,5	S-HD		7,6 (12,0#)	5,4 (9,5)	4,0 (7,0)		
	VH-HD		11,6 (12,0#)	8,3 (9,7#)	6,2 (7,4#)		
3,0	S-HD		6,9 (12,7)	5,0 (9,1)	3,8 (6,9)		
	VH-HD		10,8 (12,8#)	7,9 (10,1#)	6,0 (7,9)		
1,5	S-HD		6,4 (12,2)	4,8 (8,7)	3,7 (6,7)		
	VH-HD		10,4 (13,1#)	7,6 (10,1)	5,9 (7,7)		
0	S-HD		6,3 (12,0)	4,6 (8,6)	3,7 (6,7)		
	VH-HD		10,2 (12,6#)	7,4 (9,9)	5,8 (7,7)		
-1,5	S-HD		6,4 (11,3#)	4,7 (8,6)			
	VH-HD		10,3 (11,3#)	7,5 (9,1#)			
-3,0	S-HD						
	VH-HD						

Stick 2,50 m

Height (m)	Under-carriage	Radius of load from centerline of machine (m)					
		3,0	4,5	6,0	7,5	9,0	10,5
10,5	S-HD						
	VH-HD						
9,0	S-HD			7,1# (7,1#)			
	VH-HD			7,1# (7,1#)			
7,5	S-HD			8,0# (8,0#)	6,3 (6,9#)		
	VH-HD			8,0# (8,0#)	6,9# (6,9#)		
6,0	S-HD		11,6# (11,6#)	8,7 (10,0#)	6,0 (8,6#)	4,3 (4,9#)	
	VH-HD		11,6# (11,6#)	10,0# (10,0#)	8,6# (8,6#)	4,9# (4,9#)	
4,5	S-HD		12,1 (16,0#)	8,0 (11,8#)	5,7 (9,7#)	4,2 (7,3)	
	VH-HD		16,0# (16,0#)	11,8# (11,8#)	8,5 (9,7#)	6,4 (7,3#)	
3,0	S-HD			7,2 (12,8#)	5,3 (9,3)	4,0 (7,1)	
	VH-HD			11,2 (12,8#)	8,1 (10,2#)	6,2 (8,1)	
1,5	S-HD			6,7 (12,5)	5,0 (9,0)	3,9 (6,9)	
	VH-HD			10,7 (13,3#)	7,8 (10,3)	6,0 (7,9)	
0	S-HD		8,7# (8,7#)	6,5 (12,2)	4,8 (8,8)	3,8 (6,8)	
	VH-HD		8,7# (8,7#)	10,4 (13,1#)	7,6 (10,1)	5,9 (7,8)	
-1,5	S-HD			6,5 (12,1#)	4,8 (8,8)	3,8 (6,8)	
	VH-HD			10,5 (12,1#)	7,6 (9,6#)	6,0 (7,4#)	
-3,0	S-HD						
	VH-HD						

Stick 3,10 m

Height (m)	Under-carriage	Radius of load from centerline of machine (m)					
		3,0	4,5	6,0	7,5	9,0	10,5
10,5	S-HD			4,9# (4,9#)			
	VH-HD			4,9# (4,9#)			
9,0	S-HD				4,8# (4,8#)		
	VH-HD				4,8# (4,8#)		
7,5	S-HD			6,3# (6,3#)	6,0# (6,0#)	3,5# (3,5#)	
	VH-HD			6,3# (6,3#)	6,0# (6,0#)	3,5# (3,5#)	
6,0	S-HD		7,4# (7,4#)	6,2 (7,0#)	4,4 (5,6#)		
	VH-HD		7,4# (7,4#)	7,0# (7,0#)	5,6# (5,6#)		
4,5	S-HD	12,8 (14,9#)	8,2 (11,2#)	5,8 (9,0#)	4,3 (6,9#)		
	VH-HD	14,9# (14,9#)	11,2# (11,2#)	8,7 (9,0#)	6,5 (6,9#)		
3,0	S-HD	11,0 (14,5#)	7,4 (12,3#)	5,4 (9,4)	4,0 (7,1)		
	VH-HD	14,5# (14,5#)	11,5 (12,3#)	8,2 (9,8#)	6,2 (8,1)		
1,5	S-HD	8,2# (8,2#)	6,8 (12,6)	5,0 (9,0)	3,8 (6,9)		
	VH-HD	8,2# (8,2#)	10,8 (13,1#)	7,8 (10,2#)	6,0 (7,9)		
0	S-HD	9,3# (9,3#)	6,5 (12,2)	4,8 (8,7)	3,7 (6,7)		
	VH-HD	9,3# (9,3#)	10,4 (13,2#)	7,6 (10,1)	5,9 (7,7)		
-1,5	S-HD	9,8 (12,5#)	6,4 (12,1)	4,7 (8,7)	3,7 (6,7)		
	VH-HD	12,5# (12,5#)	10,3 (12,5#)	7,5 (9,9#)	5,9 (7,7)		
-3,0	S-HD						
	VH-HD						

Stick 3,90 m

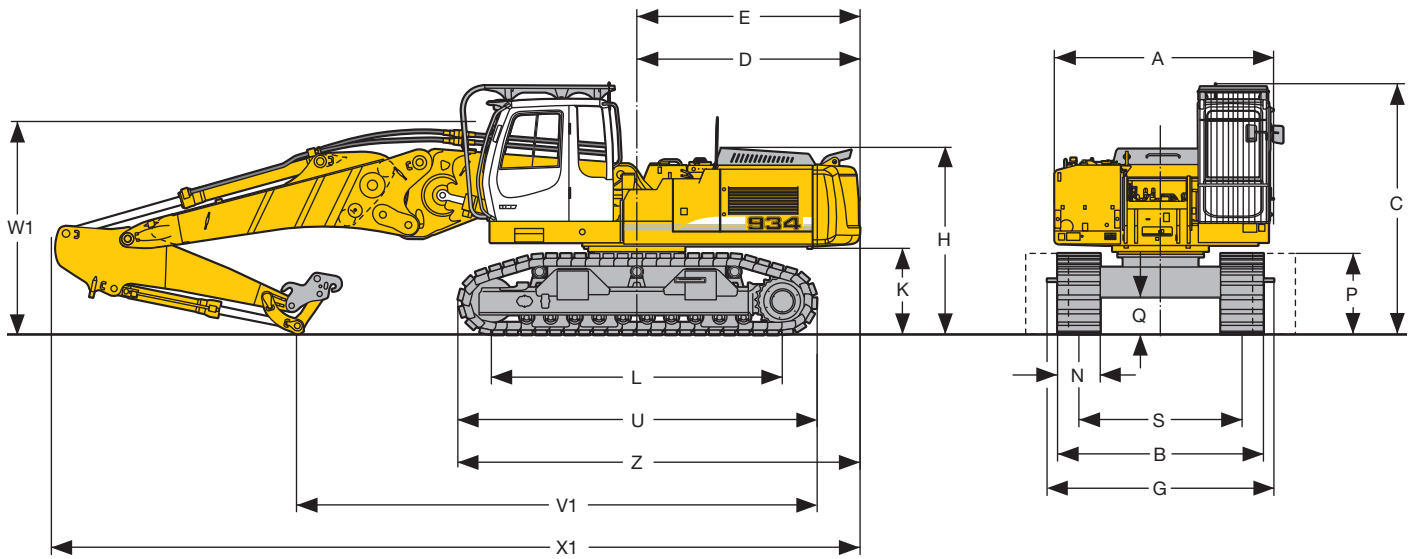
Height (m)	Under-carriage	Radius of load from centerline of machine (m)					
		3,0	4,5	6,0	7,5	9,0	10,5
10,5	S-HD				3,2# (3,2#)		
	VH-HD				3,2# (3,2#)		
9,0	S-HD				4,5# (4,5#)		
	VH-HD				4,5# (4,5#)		
7,5	S-HD				4,8# (4,8#)	4,2# (4,2#)	
	VH-HD				4,8# (4,8#)	4,2# (4,2#)	
6,0	S-HD			5,2# (5,2#)	5,3# (5,3#)	4,6 (4,9#)	2,8# (2,8#)
	VH-HD			5,2# (5,2#)	5,3# (5,3#)	4,9# (4,9#)	2,8# (2,8#)
4,5	S-HD	17,7# (17,7#)	8,7# (8,7#)	7,3# (7,3#)	6,0 (6,6#)	4,4 (5,7#)	3,3 (4,0#)
	VH-HD	17,7# (17,7#)	8,7# (8,7#)	7,3# (7,3#)	6,6# (6,6#)	5,7# (5,7#)	4,0# (4,0#)
3,0	S-HD		11,8 (15,9#)	7,8 (11,6#)	5,5 (9,3#)	4,1 (7,0#)	3,1 (4,7#)
	VH-HD		15,9# (15,9#)	11,6# (11,6#)	8,4 (9,3#)	6,3 (7,0#)	4,7# (4,7#)
1,5	S-HD		10,4 (11,7#)	7,0 (12,6#)	5,1 (9,1)	3,9 (6,9)	3,0 (5,2#)
	VH-HD		11,7# (11,7#)	11,0 (12,6#)	7,9 (9,9#)	6,0 (7,9)	4,8 (5,2#)
0	S-HD	3,5# (3,5#)	9,7 (10,0#)	6,5 (12,3)	4,8 (8,8)	3,7 (6,7)	2,9 (5,2#)
	VH-HD	3,5# (3,5#)	10,0# (10,0#)	10,5 (13,1#)	7,6 (10,1)	5,8 (7,7)	4,7 (5,2#)
-1,5	S-HD		9,6 (11,6#)	6,3 (12,0)	4,6 (8,6)	3,6 (6,6)	2,9 (3,9#)
	VH-HD		11,6# (11,6#)	10,2 (12,8#)	7,4 (9,9)	5,7 (7,6)	3,9# (3,9#)
-3,0	S-HD			6,3 (11,9#)	4,6 (8,6)	3,6 (6,6)	
	VH-HD			10,2 (11,9#)	7,4 (9,3#)	5,8 (7,3#)	

The lift capacities on the load hook of the Liebherr quick change adapter 66 without attachment are stated in metric tonnes (t), and can be lifted 360° on firm, level supporting surface. Values quoted in brackets are valid for the undercarriage when in longitudinal position. Capacities are valid for 600 mm 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 #). Maximum load for the quick change adapter's load hook is 12 t. Without quick change adapter the lift capacities will increase by 330 kg/410 kg*, without bucket cylinder, link and lever they increase by an additional 410 kg/530 kg*. Lifting capacity of the excavator is limited by machine stability, hydraulic capacity and maximum permissible load of the load hook.

According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic check valves on the hoist cylinders, when they are used for lifting operations which require the use of lifting accessories.

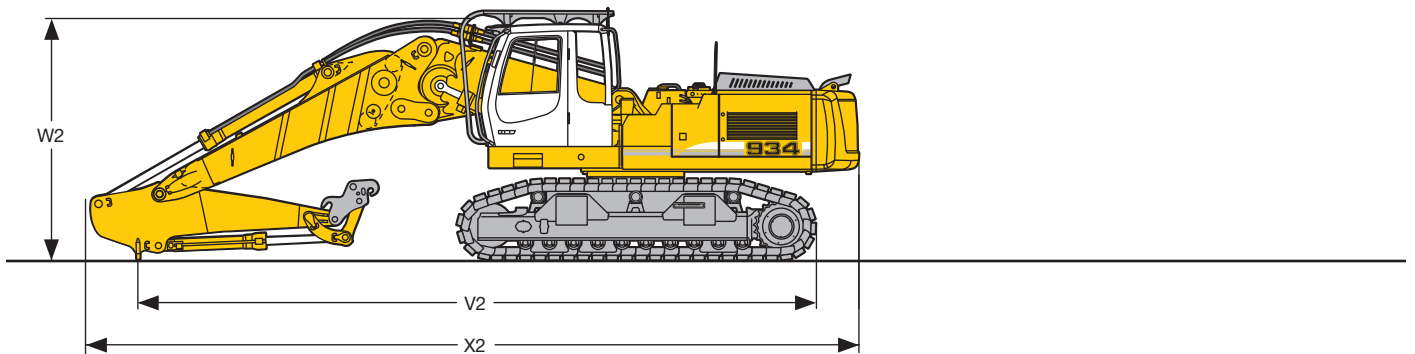
* capacities only for stick 2,00 m

Dimensions

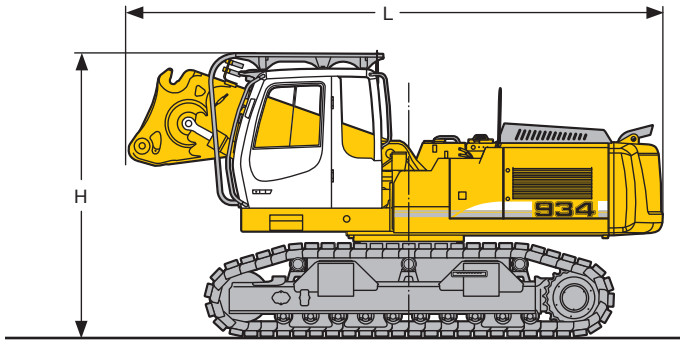


	VH-HD	mm	S-HD	mm
A		3050		3050
C		3500		3500
D		3145		3236
E		3145		3236
H		2650		2650
K		1210		1210
L		4100		4000
P		1140		1120
Q		437		537
U		5030		4900
S	2300 – 3200			2400
N		600	500 600	750
B	2900 – 3800		2998 3000	3150
G	3215 – 4115		3195 3195	3195
Z		5670		5690

	Stick Lengths	VH-HD	S-HD
	m	mm	mm
V1	2,00	8250	8200
	2,50	7350	7300
	3,10	6950	6900
	3,90	6450	6400
W1	2,00	3200	3200
	2,50	3000	3000
	3,10	3200	3200
	3,90	3400	3400
X1	2,00	11550	11650
	2,50	11400	11500
	3,10	11450	11550
	3,90	11550	11650
V2	2,00	7450	7400
	2,50	9550	9500
	3,10	8950	8900
	3,90	5300	5250
W2	2,00	3600	3600
	2,50	3400	3400
	3,10	3400	3400
	3,90	3450	3450
X2	2,00	11050	11150
	2,50	10900	11000
	3,10	10900	11000
	3,90	10900	11000

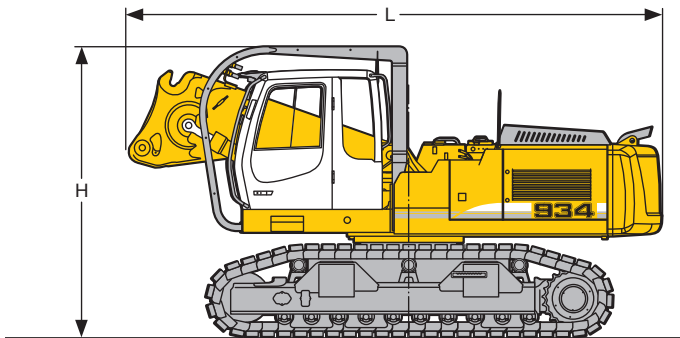


Dimensions and Weights



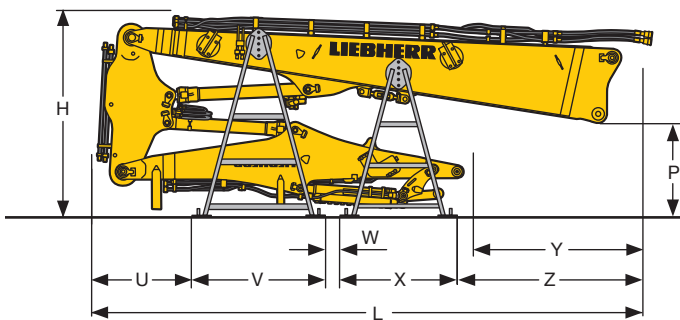
Basic machine with cab tiltable 30° and integral protection grid

Undercarriage		S-HD	VH-HD
Pad width	mm	600	600
L	mm	6750	6650
H	mm	3500	3500
Weight	kg	35200	40250



Basic machine with cab tiltable 30° and integral protection grid on tilting device

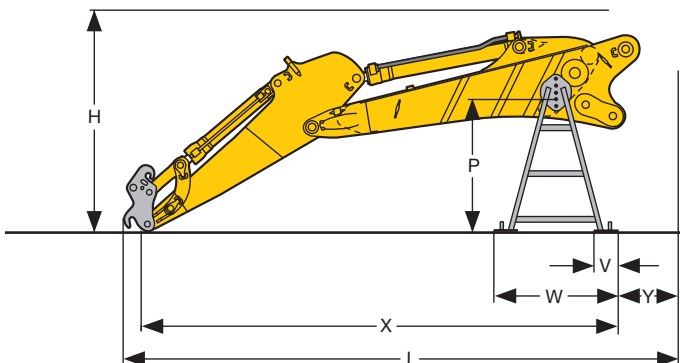
Undercarriage		S-HD	VH-HD
Pad width	mm	600	600
L	mm	6750	6650
H	mm	3600	3600
Weight	kg	35550	40600



Demolition Attachment with Support

Demolition Boom 7,50 m

L Length	mm	8600
H Height	mm	3200
P	mm	1400
U	mm	1565
V	mm	2080
W	mm	226
X	mm	1830
Y	mm	2650
Z	mm	2900
Width	mm	2400
Weight without working tool	kg	7800

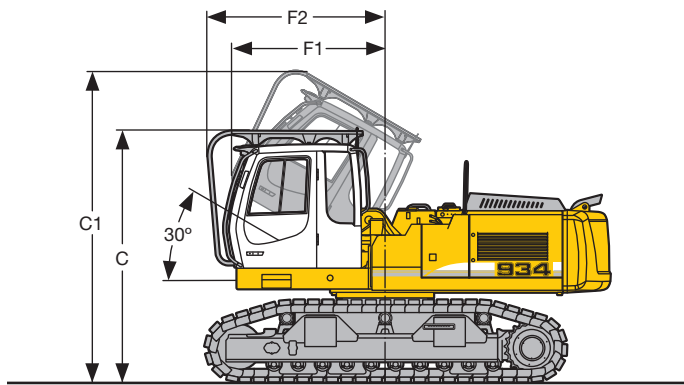


Backhoe Attachment with Supports with Quick Change Adapter 66

Main Boom 4,25 m

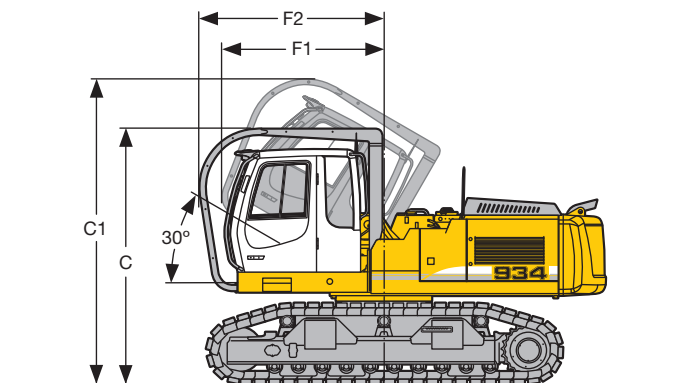
Stick lengths	m	2,00	2,50	3,10	3,90
L Length	mm	6800	7300	7900	8700
H Height	mm	2900	2900	2900	2900
P	mm	1730	1730	1820	1820
V	mm	300	300	300	300
W	mm	1620	1620	1620	1620
X	mm	5750	6250	6850	7650
Y	mm	800	800	800	800
Width	mm	2400	2400	2400	2400
Weight without bucket	kg	5650	5450	5600	5750

Choice of Cab Elevations



Version tiltable 30° with integral protection grid

Undercarriage		S-HD	VH-HD
C	mm	3500	3500
C1	mm	4320	4320
F1	mm	2140	2140
F2	mm	2475	2475



Version tiltable 30° with integral protection grid on tilting device

Undercarriage		S-HD	VH-HD
C	mm	3600	3600
C1	mm	4300	4300
F1	mm	2300	2300
F2	mm	2600	2600

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