

Mining Excavator

R 9250

Operating Weight with Backhoe Attachment:	250,000 kg / 551,155 lb
with Shovel Attachment:	253,500 kg / 558,870 lb
Engine Output:	960 kW / 1287 hp
Bucket Capacity:	13,00 – 17,00 m ³ / 17.0 – 22.2 yd ³
Shovel Capacity:	13,00 – 17,00 m ³ / 17.0 – 22.2 yd ³



LIEBHERR

Technical Data



Engine

1 Cummins diesel engine	
Rating per SAE J 1995	960 kW (1287 hp) at 1800 rpm
Model	QSK45
Type	12 cylinder turbocharged V-engine after-cooler
	two separate water cooling circuits direct injection system
Displacement	45 l/2745 in ³
Bore/Stroke	159/190 mm / 6.26/7.48 in
Engine cooling system	fans driven via hydraulic piston motor
Air cleaner	dry-type air cleaner with pre-cleaner, with automatic dust ejector, primary and safety elements
Fuel tank	5440 l/1434 gal
Electrical system	
Voltage	24 V
Batteries	6 x 170 Ah/12 V
Alternator	24 V/260 Amp
Engine idling	sensor controlled
Electronic engine control system	engine speed sensing over the entire engine RPM range. Provides integration of engine with other machine systems



Hydraulic System

Hydraulic pumps for attachment and travel drive	3 variable flow axial piston pumps
Max. flow	2 x 771 l/min. + 1 x 579 l/min./ 2 x 204 gpm + 1 x 153 gpm
Max. hydr. pressure	320 bar/4640 psi
Hydraulic pump for swing drive	2 reversible swash plate pumps, closed-loop circuit
Max. flow	2 x 352 l/min./2 x 93 gpm
Max. hydr. pressure	320 bar/5076 psi
Pump regulation	electro-hydraulic pressure compensation flow compensation automatic oil flow optimizer
Hydraulic tank capacity	2281 l/602 gal
Hydraulic system capacity	4050 l/1070 gal
Hydraulic oil filter	filtration of entire return flow, 1 high pressure filter for each main pump
Hydraulic oil cooler	cooler with temperature controlled fans driven via hydraulic piston motor



Hydraulic Controls

Servo circuit	independent, electric over hydraulic proportional controls of each function
Emergency control	via accumulator for all attachment functions with stopped engine
Power distribution	via monoblock control valves with integrated primary relief valves and flanged on secondary valves for travel
Flow summation	to attachment and travel drive
Control functions	
Attachment and swing	proportional via joystick levers
Travel	proportional via foot pedals or hand levers
Bottom dump bucket	proportional via foot pedals



Swing Drive

Hydraulic motor	2 Liebherr axial piston motors
Swing gear	2 Liebherr planetary reduction gears
Swing ring	Liebherr, sealed triple roller swing ring, internal teeth
Swing speed	0 – 4.1 rpm
Swing torque	800 kNm/59,004 lbf ft
Swing-Holding brake	hydraulically actuated, maintenance-free, multi-disc brakes integrated in each swing gear



Uppercarriage

Design	torque resistant designed upper frame in box type construction for superior strength and durability
Attachment mounting	parallel longitudinal main girders in box-section construction
Catwalks	on the left side of the uppercarriage



Service Flap

Design	hydraulically actuated service flap, easily accessible from ground level to allow: <ul style="list-style-type: none">– fuel fast refill– engine oil quick change– swing ring teeth grease barrel refilling via grease filter– attachment/swing ring bearing grease barrel refilling via grease filter– hydraulic oil refill– hydraulic oil draining– splitterbox oil refill– windshield wash water refilling
Quick coupler	upon request

Technical Data



Operator's Cab

Design	resiliently mounted, sound insulated, large windows for all around visibility, integrated falling object protection FOPS
Operator's seat	suspended, body-contoured with shock absorber, adjustable to operator's weight
Cabin windows	20,5 mm/0.8 in tinted armored glass for front window and right hand side windows, all other windows in tinted safety glass, high pressure windshield-washer system 75 l/20 gal watertank, sun louvers on all windows in heavy duty design
Heating system/ Air conditioning	heavy duty, high output air conditioner and heater unit
Cabin pressurization	ventilation with filter
Controls	joystick levers integrated into armrest of seat
Monitoring	via LCD-Display, data memory
Automatic engine shut off	engine self-controlled shut off
Destroking of main pumps	in case of low hydraulic oil level
Safety functions	additional gauges with constant display for: engine speed, hourmeter, voltmeter, safety mode for engine speed control and pump regulation
Noise emission ISO 6396	L_{pA} (inside cab) = 77,2 dB(A)



Undercarriage

Design	3-piece undercarriage, box type structures for center piece and side frames, stress relieved
Hydraulic motor	2 axial piston motors per side frame
Travel gear	Liebherr planetary reduction gear
Travel speed	0 – 2,1 – 2,7 km/h / 0 – 1.30 – 1.68 mph
Parking brake	spring engaged, hydraulically pressure released wet multi-disc brakes for each travel motor, maintenance-free
Track components	D 12, maintenance-free
Track rollers/ Carrier rollers	9/2
Automatic track tensioner	hydraulic and grease tensioner
Transport	undercarriage side frames are removable



Central Lubrication System

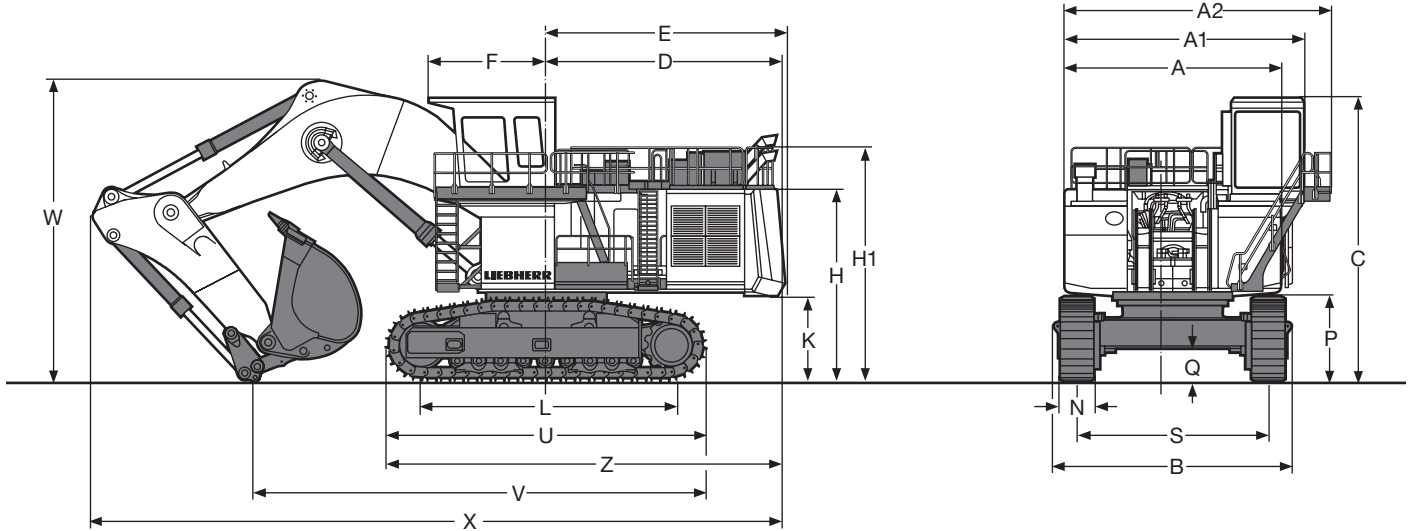
Type	Lincoln Centromatic lubrication system, for the entire attachment and swing ring
Grease pumps	Lincoln Flowmaster pump plus separate pump for swing ring teeth
Capacity	80 l/21.1 gal bulk container for attachment and swing ring, separated 15 l/4.0 gal bulk container for swing ring teeth
Refill	via the service flap for both containers, fill line with grease filters
Option	200 l/53 gal grease bulk container for attachment and swing ring refilling via grease filter from service flap



Attachment

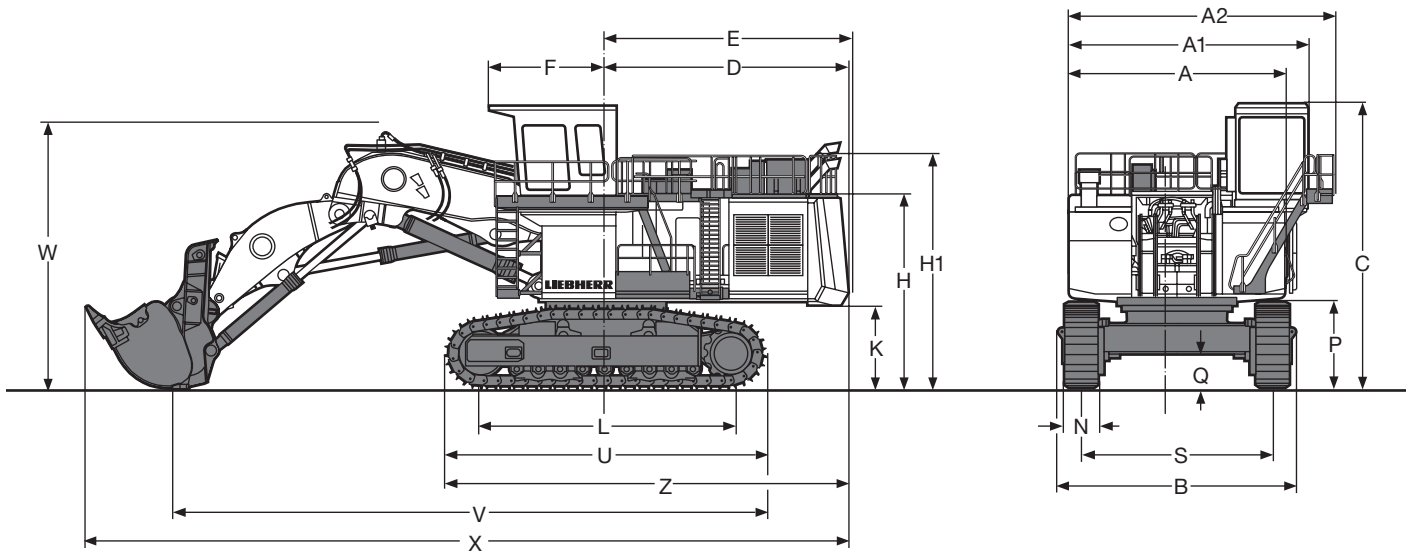
Design	box-type structure with large steel castings in all high-stress areas
Stick	wear protection underneath lower beam plate
Pivots	sealed and floating pins
Hydraulic cylinder	Liebherr design, sealed bearings, electronically controlled end-cushioning
Hydraulic connections	pipes and hoses equipped with SAE split-flange connections
Pivots bucket-to-stick Pivots bucket-to-link	O-ring sealed and completely enclosed
Lubrication	connected to the centralized lubrication system, each lubrication point independently lubricated

Dimensions



	mm/ft in
A	5500/18' 1"
A1	6100/20'
A2	6800/22' 4"
C	7250/23' 9"
D	6100/20'
E	6140/20' 2"
F	2993/ 9'10"
H	4905/16' 1"
H1	6000/19' 8"
K	2205/ 7' 3"
L	6400/20'12"

	mm/ft in
P	2200/ 7' 3"
Q	870/ 2'10"
S	4900/16' 1"
U	8240/27'
Z	10240/33' 7"
N	850/ 2' 9"
B	6040/19'10"
V	11600/38' 1"
W	7800/25' 7"
X	17800/58' 5"

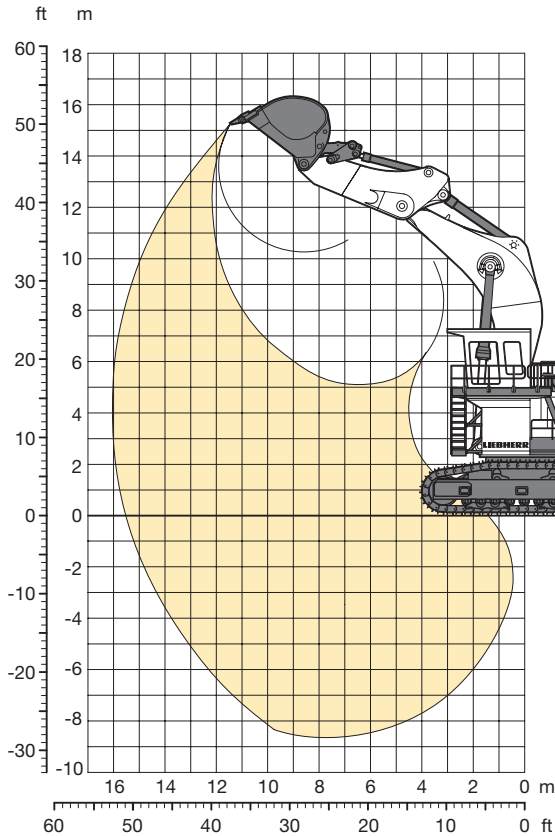


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P	2200/ 7' 3"
Q	870/ 2'10"
S	4900/16' 1"
U	8240/27'
Z	10240/33' 7"
N	850/ 2' 9"
B	6040/19'10"
V	17400/57'
W	6700/21' 9"
X	19600/64' 3"

Backhoe Attachment

with Gooseneck Boom 9,00 m/29'6" and Stick 4,00 m/13'1"



Digging Envelope

Max. reach at ground level	15,50 m/50'10"
Max. teeth height	15,20 m/49'10"
Max. dump height	10,30 m/33'10"
Max. digging depth	8,70 m/28' 7"

Max. digging force	780 kN (79,5 t)/175,350 lbf (175,267 lb)
Max. breakout force	859 kN (87,5 t)/193,111 lbf (192,904 lb)

Operating Weight and Ground Pressure

The operating weight includes the basic machine with backhoe attachment and a 15,00 m³/19.6 yd³ bucket.

Pad width	mm/in	850/34
Weight	kg/lb	250000/551,155
Ground pressure	kg/cm ² /psi	2,08/29.58

Buckets

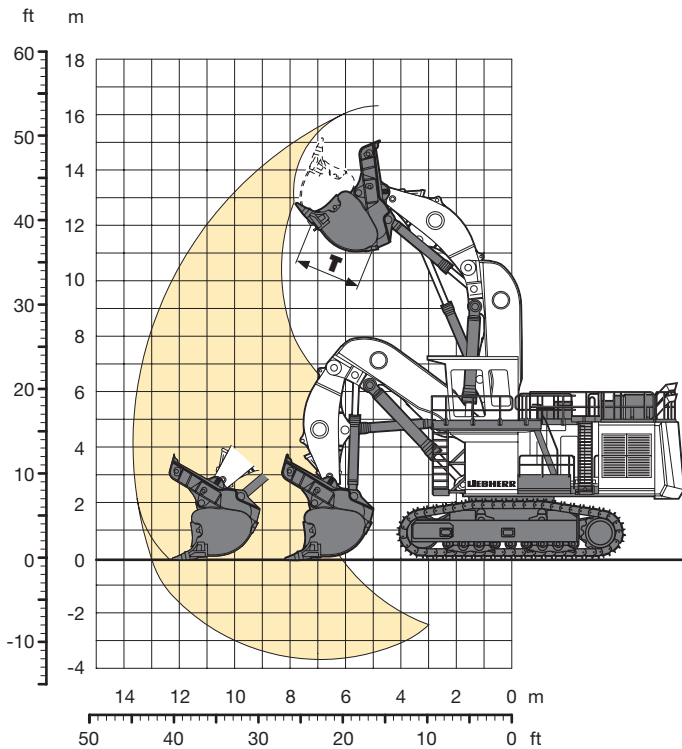
Cutting width	mm/in	2950/116 ¹⁾	3300/130 ¹⁾	3700/145 ¹⁾
Capacity ISO 7451	m ³ /yd ³	13,00/17.00	15,00/19.62	17,00/22.24
Weight	kg/lb	14100/31,090	14500/31,970	15900/35,060
Suitable for material up to a specific weight of	t/m ³ /lb/yd ³	2,00/3,400	1,80/3,060	1,50/2,550

¹⁾ Heavy duty rock bucket with teeth size 85 SV 2

Additional buckets on request

Shovel Attachment

with Shovel Boom 6,37 m/20'9" and Stick 4,20 m/13'8"



Digging Envelope

Max. reach at ground level	13,00 m/42'8"
Max. dump height	11,00 m/36'
Max. crowd length	4,00 m/13'
Bucket opening width T	2,15 m/ 7'1"
Crowd force at ground level	1050 kN (107,2 t)/236,336 lbf (236,050 lb)
Max. crowd force	1210 kN (123,5 t)/272,271 lbf (272,019 lb)
Max. breakout force	935 kN (95,4 t)/210,321 lbf (210,197 lb)

Operating Weight and Ground Pressure

The operating weight includes the basic machine with front shovel attachment and a 15,00 m³/19.6 yd³ bucket.

Pad width	mm/in	850/33
Weight	kg/lb	253500/558,870
Ground pressure	kg/cm ² /psi	2,12/30.15

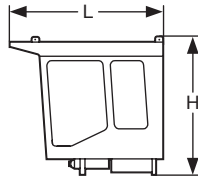
Buckets

Cutting width	mm/in	3700/145 ¹⁾	3700/145 ¹⁾	3700/145 ¹⁾
Capacity ISO 7451	m ³ /yd ³	13,00/17.0	15,00/19.6	17,00/22.2
Weight	kg/lb	27500/60,630	27000/59,520	27200/59,970
Suitable for material up to a specific weight of	t/m ³ /lb/yd ³	2,00/3,400	1,80/3,000	1,50/2,500

¹⁾ Bottom dump bucket with Delta cutting edge and teeth size 85 SV 2

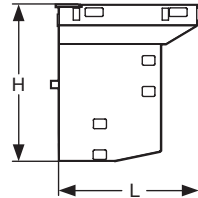
Additional bottom dump buckets on request

Component Dimensions and Weights



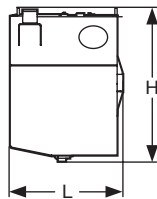
Cab

L Length	mm/ft in	3215/10'6"
H Height	mm/ft in	2885/ 9'6"
Width	mm/ft in	1900/ 6'3"
Weight	kg/lb	3400/7,500



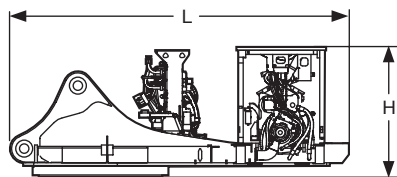
Cab Elevation

L Length	mm/ft in	2315/7' 6"
H Height	mm/ft in	2457/8'
Width	mm/ft in	1496/8'19"
Weight	kg/lb	2802/6,177



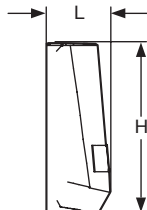
Fuel Tank

L Length	mm/ft in	2550/ 8'3"
H Height	mm/ft in	3450/11'3"
Width	mm/ft in	3045/10'
Weight	kg/lb	1950/4,300



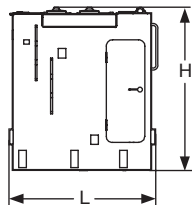
Rotation Deck (with swing ring, swing gears, control valve bracket and engine with pumps)

L Length	mm/ft in	7670/25' 2"
H Height	mm/ft in	2855/ 9' 4"
Width	mm/ft in	4099/13'44"
Weight	kg/lb	39500/87,082



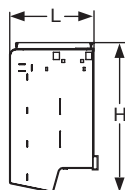
Counterweight

L Length	mm/ft in	1025/ 3'3"
H Height	mm/ft in	2730/ 8'9"
Width	mm/ft in	6000/19'7"
Weight	kg/lb	25320/55,820



Hydraulic Tank

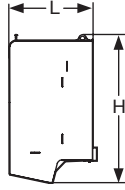
L Length	mm/ft in	2325/7'6"
H Height	mm/ft in	2582/8'5"
Width	mm/ft in	1354/4'4"
Weight	kg/lb	5390/11,883



Oil Radiator Installation

L Length	mm/ft in	1595/5'2"
H Height	mm/ft in	2660/8'7"
Width	mm/ft in	2070/6'8"
Weight	kg/lb	1750/3,858

Component Dimensions and Weights



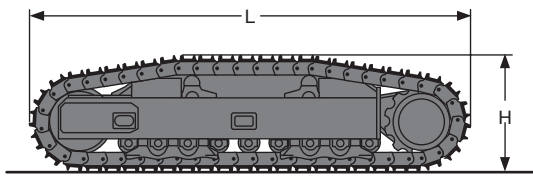
Water Radiator Installation

L Length	mm/ft in	1565/5'1"
H Height	mm/ft in	2660/8'7"
Width	mm/ft in	2430/7'9"
Weight	kg/lb	2980/6,569



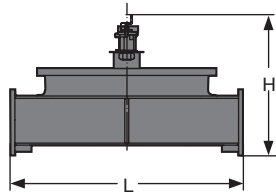
Small Pieces

L Length	mm/ft in	4500/14'7"
H Height	mm/ft in	2600/ 8'5"
Width	mm/ft in	2000/ 6'5"
Weight	kg/lb	4500/9,920



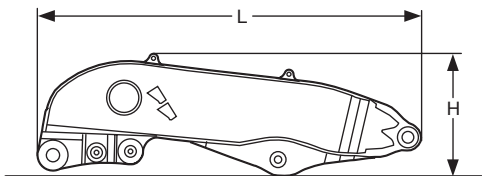
Side Frame (two)

L Length	mm/ft in	8240/27'
H Height	mm/ft in	2180/ 7'1"
Width over travel drive	mm/ft in	2190/ 7'2"
Width without travel drive	mm/ft in	1335/ 4'4"
Weight	kg/lb	2 x 37000/2 x 81,570



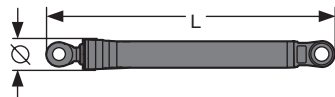
Undercarriage Central Girder

L Length	mm/ft in	3650/12'
H Height	mm/ft in	2190/ 7'2"
Width	mm/ft in	4420/ 4'5"
Weight	kg/lb	18500/40,785



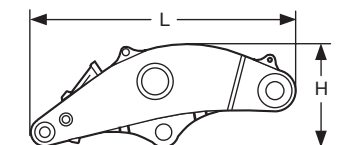
Shovel Boom

L Length	mm/ft in	7000/23'
H Height	mm/ft in	2600/ 8'5"
Width	mm/ft in	3300/10'8"
Weight	kg/lb	19240/42,417



Hoist Cylinder (two) for Shovel Attachment

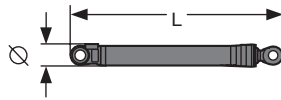
L Length	mm/ft in	4300/14'1"
Ø Diameter	mm/ft in	500/ 1'6"
Weight	kg/lb	2 x 3088/2 x 6,807



Shovel Stick

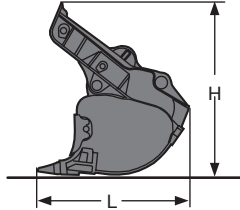
L Length	mm/ft in	4800/15'7"
H Height	mm/ft in	2000/ 6'5"
Width	mm/ft in	3100/10'1"
Weight	kg/lb	11750/25,904

Component Dimensions and Weights



Crowd Cylinder (two)

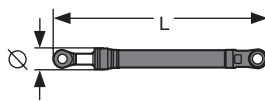
L Length	mm/ft in	3640/12' "
Ø Diameter	mm/ft in	365/ 1'2"
Weight	kg/lb	2 x 1340/2 x 2,954



Bottom Dump Bucket

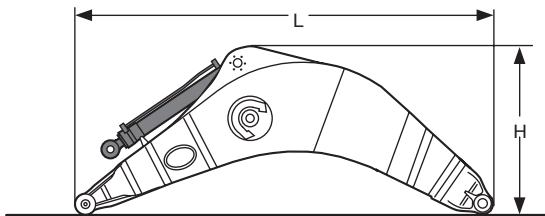
15,00 m³/19.6 yd³

L Length	mm/ft in	3600/11'8"
H Height	mm/ft in	3900/12'8"
Width	mm/ft in	3800/12'5"
Weight	kg/lb	27000/59,524



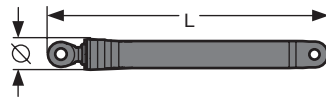
Bucket Tilt Cylinder (two)

L Length	mm/ft in	3830/12'5"
Ø Diameter	mm/ft in	365/ 1'2"
Weight	kg/lb	2 x 1545/2 x 3,406



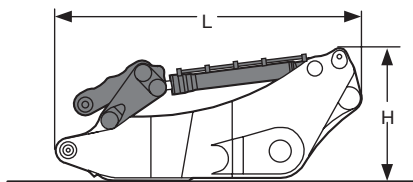
Gooseneck Boom with Stick Cylinders

L Length	mm/ft in	9600/31'5"
H Height	mm/ft in	3900/12'8"
Width	mm/ft in	2200/ 7'2"
Weight	kg/lb	24500/54,013



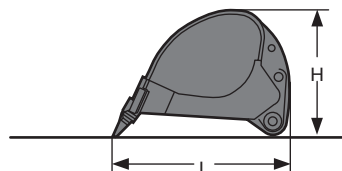
Hoist Cylinders (two) for Backhoe Attachment

L Length	mm/ft in	4580/15'
Ø Diameter	mm/ft in	500/ 1'6"
Weight	kg/lb	2 x 3140/2 x 6,922



Stick with Bucket Cylinders

L Length	mm/ft in	5900/19'3"
H Height	mm/ft in	2600/ 8'5"
Width	mm/ft in	2000/ 6'5"
Weight	kg/lb	16020/35,318



Backhoe Bucket

15,00 m³/19.6 yd³

L Length	mm/ft in	3900/12'8"
H Height	mm/ft in	2900/ 9'5"
Width	mm/ft in	3400/11'1"
Weight	kg/lb	13150/28,990

Illustrations and data may differ from standard equipment. Subject to change without notice. All indicated loads are based in accordance with ISO 9248.

The Liebherr Group of Companies

Wide product range

The Liebherr Group is one of the largest construction equipment manufacturers in the world. Liebherr's high-value products and services enjoy a high reputation in many other fields, too. The wide range includes domestic appliances, aerospace and transportation systems, machine tools and maritime cranes.

Exceptional customer benefit

Every product line provides a complete range of models in many different versions. With both its technical excellence and acknowledged quality, Liebherr products offer a maximum of customer benefits in practical application.

State-of-the-art technology

To provide consistent, top quality products, Liebherr attaches great importance to each product area, its components and core technologies. Important modules and components are developed and manufactured in-house, for instance the entire drive and control technology for construction equipment.

Worldwide and independent

Hans Liebherr founded the Liebherr family company in 1949. Since that time, the enterprise has steadily grown to a Group of 100 companies with over 30,000 employees located on all continents. The corporate headquarters of the Group is Liebherr-International AG in Bulle, Switzerland. The Liebherr family is the sole owner of the company.

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