

Technical Description

Hydraulic Excavator R 954 Litronic®



High Lift

Operating weight with backhoe attachment

100,780 – 107,000 lb/45.6 – 48.4 t

Engine output 294 hp/216 kW

Bucket capacity up to 5.0 cuyd/3.8 m³



Litronic - The "total" system comprised of intelligent electronics and functional hydraulics - monitors, controls, regulates and coordinates all key systems of the excavator.

Liebherr Diesel Engine - Durable and efficient. Specifically designed for use in construction equipment.

Hydraulic Pumps - Two variable flow axial piston Liebherr pumps for attachment and travel. One reversible swash plate pump for closed-loop swing circuit.

ECO-Control - Stepless adjustment of machine performance to match the application.

Electronic Pump Regulation - Optimum use of available engine output within adjustable RPM range through "engine speed sensing regulation". Prevents engine overload.

Flow Summation - Automatically combines flow of both main pumps to increase speed and power to a single attachment function.

Automatic Oil Flow Optimizer - Optimum flow distribution to individual functions.

Pressure Compensation - For minimum energy loss when maximum pressure is reached.

Flow Compensation - Reduces pump flow to a minimum when joysticks and foot pedals are in neutral position.

Integrated Travel Drive - Liebherr axial piston motor and the planetary reduction gear are integrated into the track frame for best protection. Fast travel speed and high drawbar pull.

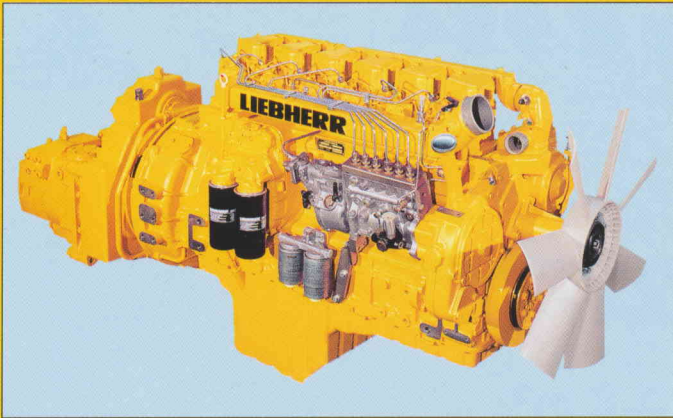
Counterweight - Hydraulically removable for easier transport.

LIEBHERR

The Better Machine.



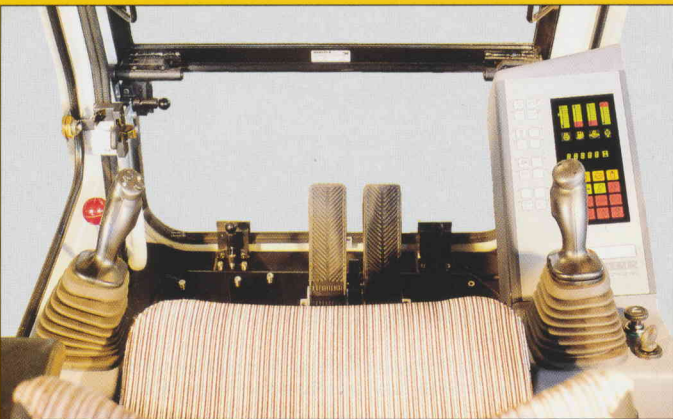
Engine



Liebherr diesel engine	
Rating per SAE	282 Bhp (210 kW) at 2000 RPM
Rating per DIN/ISO	210 kW (286 hp) at 2000 RPM
Model	D 926 TI
Type	6 cylinders in-line, water-cooled, direct injection, turbo-charged after-cooler
Displacement	610 cu. in/10 l
Bore/Stroke	4.80/5.60 in 122/142 mm
Air cleaner	dry-type air cleaner with pre-cleaner and automatic dust ejector, primary and safety elements
Fuel tank	187 gal/706 l
Electrical system	
Voltage	24 V
Batteries	2 x 110 Ah/12 V
Alternator	24 V/50 Amp
Option	sensor controlled engine idling



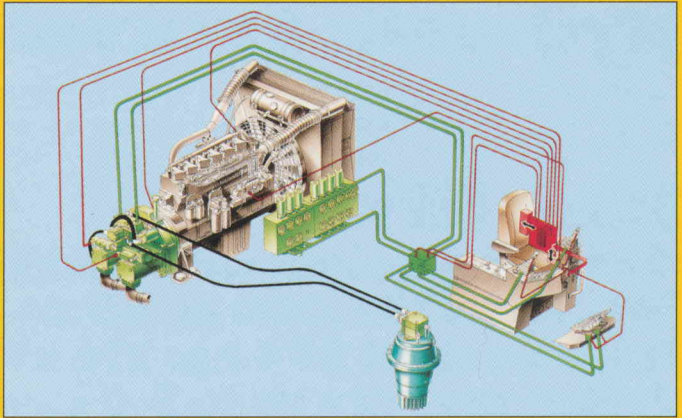
Hydraulic Controls



Power distribution	via control valves with integrated primary and secondary safety valves
Flow summation	to boom and stick
Servo circuit	
Attachment and swing	proportional via joystick levers
Travel	proportional via foot pedals or hand levers for all travel functions
Additional functions	via foot pedals or joystick push buttons



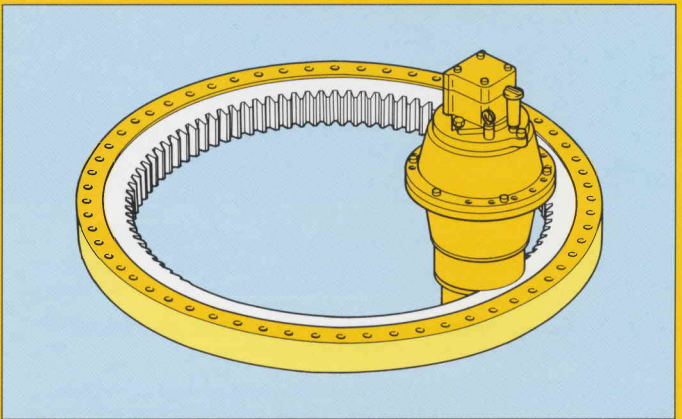
Hydraulic System



Hydraulic pumps	
for attachment and travel drive	2 variable flow axial piston Liebherr pumps
Max. flow	2 x 92.5 gpm/2 x 350 l/min
Max. hydr. pressure	4640 PSI/320 bar
High lift circuit	for heavy lifting
Hydraulic pump	
for swing drive	1 reversible swash plate pump, closed-loop circuit
Max. flow	49 gpm/185 l/min
Max. hydr. pressure	4930 PSI/340 bar
Pump regulation	electro-hydraulic, pressure compensation, flow compensation, automatic oil flow optimizer
Hydraulic tank capacity	119 gal/450 l
Hydraulic system capacity	211 gal/800 l
Hydraulic oil filter	2 full flow filters in return line, 1 high pressure filter for each main pump compact radiator/cooler - consists of an after-cooler, gear oil and hydraulic oil cooler, mounted in front of the radiator
Hydraulic oil cooler	
ECO control	adjustment of machine performance to match application - "high" mode setting for high performance in severe applications - "Econo" mode setting for general digging and loading - "fine control" mode for precision work and lifting
Electronic engine speed sensing	over the entire RPM range



Swing Drive

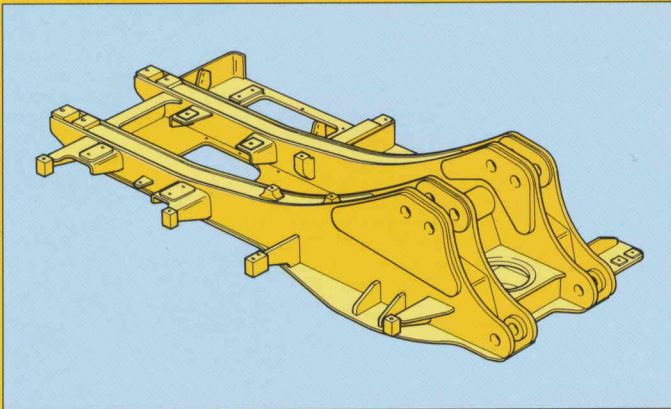


Hydraulic motor	Liebherr axial piston motor
Gear	Liebherr planetary reduction gear
Swing ring	Liebherr, sealed single race ball bearing swing ring, internal teeth
Swing speed	0 - 6.2 RPM
Holding brake	hydraulically-actuated wet multi-disc brake, maintenance free

Technical Data



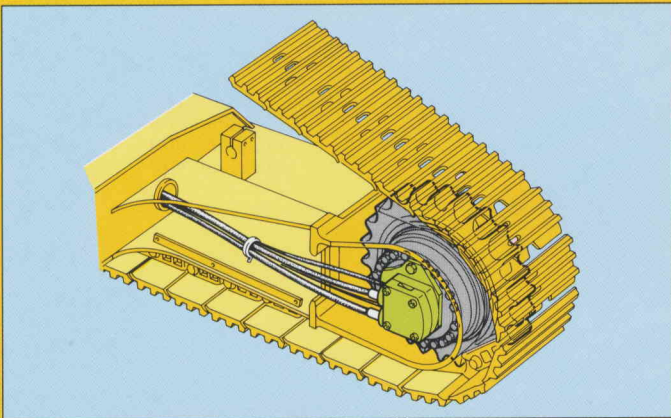
Uppercarriage



Design _____ torque resistant modular design upper frame
Attachment mounting _____ parallel length girders



Undercarriage

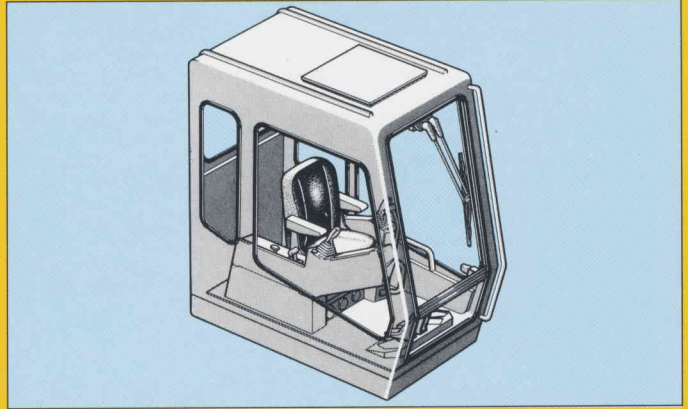


Hydraulic motor _____ Liebherr axial piston motor
Travel gear _____ Liebherr planetary reduction gear
Travel speed _____ 0 - 2.0 mph / 0 - 3.3 km/h
Gradeability _____ 80 %
Parking brake _____ hydraulically actuated wet multi-disc brakes, maintenance free

Hydraulic brake valve _____ integrated in main valve block
Track components _____ D7G, maintenance free
Track rollers/ carrier rollers _____ 10/2
Track pads _____ triple grouser
Track chain adjustment _____ hydraulic



Operator's Cab



Design _____ resiliently mounted, sound insulated, large window for 360° visibility, front windows stores overhead

Operator's seat _____ fully adjustable, suspended, body-contoured with shock absorber, adjustable to operator's weight integrated into control panel, adjustable independently from seat via multi-color Liquid Crystal Display (LCD)

Controls _____

Monitoring _____ adjustable into control panel

Diagnostic system _____ machine malfunctions stored in memory for quick troubleshooting in case of low engine oil pressure or low coolant level

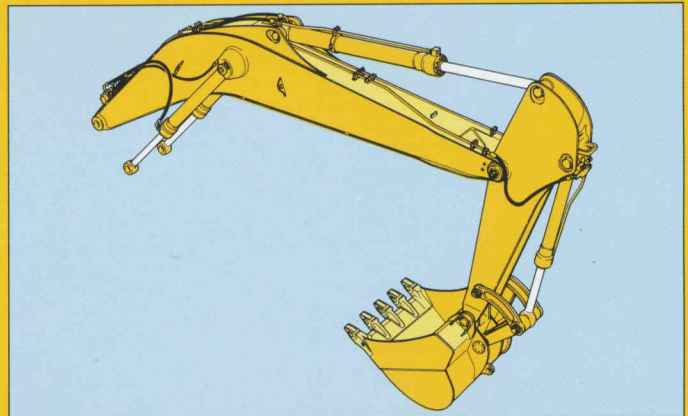
Acoustic signal _____

Destroking of main pumps _____ in case of engine overheating or low hydraulic oil level

Heating system _____ hot water heat exchanger, to provide heated fresh air, circulated air, or fresh cool air



Attachment



Design _____ box-type, welded structures with large cast steel components

Pivots _____ sealed and lubricated

Pivots bucket-to-stick, bucket-to-link _____ O-ring sealed and completely enclosed

Lubrication _____ easily accessible centralized lubrication

Hydraulic cylinder _____ Liebherr manufactured cylinders, special seals, hydraulic piston cushioning

Hydraulic connections _____ pipes and hoses equipped with SAE split-flange connections

Technical Description

Diesel Engine

The heavy-duty, water-cooled and turbo-charged Liebherr diesel engine was specifically designed for use in construction machines. Its low operating RPM results in lower fuel consumption, reduced emissions and a longer engine life. Highly dependable and maintenance free internal gear drive for cooling fan, water pump and auxiliary hydraulic pumps eliminate V-belts. All service points are located on one side of the engine for easier access. The electronic "engine speed sensing pump regulation" protects the engine from overload, independent of external influences, and allows full utilization of the engine's available horsepower throughout its RPM range.

Counterweight

Standard hydraulically removable counterweight makes excavator transport quick and easy. Once at the jobsite, the counterweight can be reattached with little effort.

Hydraulic Pumps

Two, splitter box mounted, variable flow axial piston Liebherr pumps for attachment and travel functions, and one reversible swash plate pump, for the closed-loop swing circuit. An automatic oil flow optimizer assures efficient power distribution to individual functions. Flow compensation reduces pump flow to a minimum, when joystick levers and foot pedals are in neutral. Energy loss and component wear are reduced, due to pressure compensation when maximum pressure is reached.

Control Valves

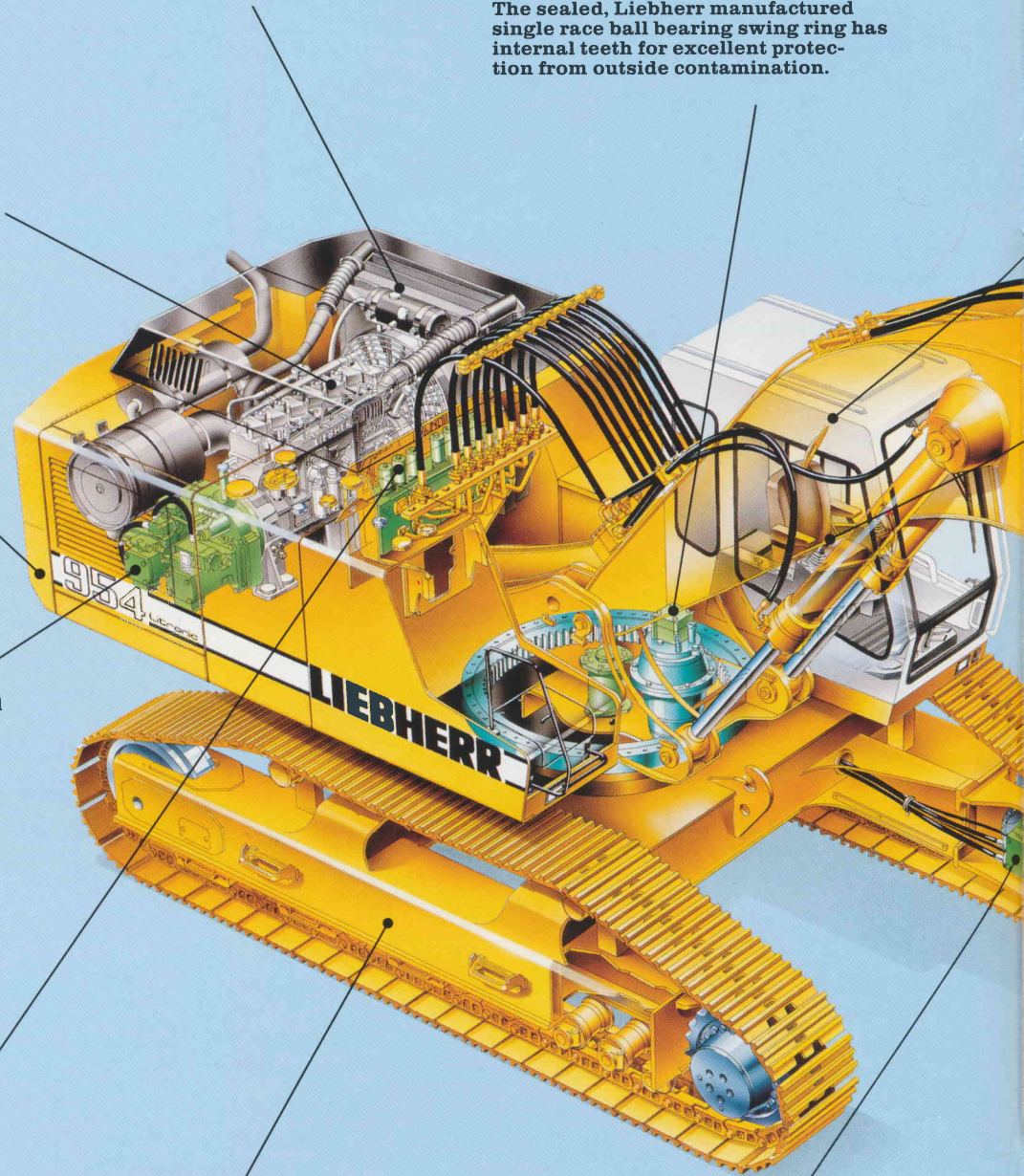
The valve blocks are easily accessible in the center of the upper structure. Hydraulic lines between pumps, valve blocks, attachment and undercarriage are short and as straight as possible, to reduce flow resistance.

Compact Cooler Unit

The compact radiator/cooler consist of an engine radiator and after-cooler, gear oil and hydraulic oil cooler. This arrangement offers a high degree of cooling efficiency. The hydraulic oil cooler with thermostatically-controlled oil flow also assures optimum operating temperatures and easy service.

Swing Drive

Acceleration of the upper is applied via an axial piston motor flanged to a Liebherr planetary reduction gear with maintenance free, wet, multi-disc brakes. Swing pump and motor are linked in an independent closed-loop circuit with swing torque control. High swing torque produces fast, powerful swing acceleration for short cycle times. The sealed, Liebherr manufactured single race ball bearing swing ring has internal teeth for excellent protection from outside contamination.



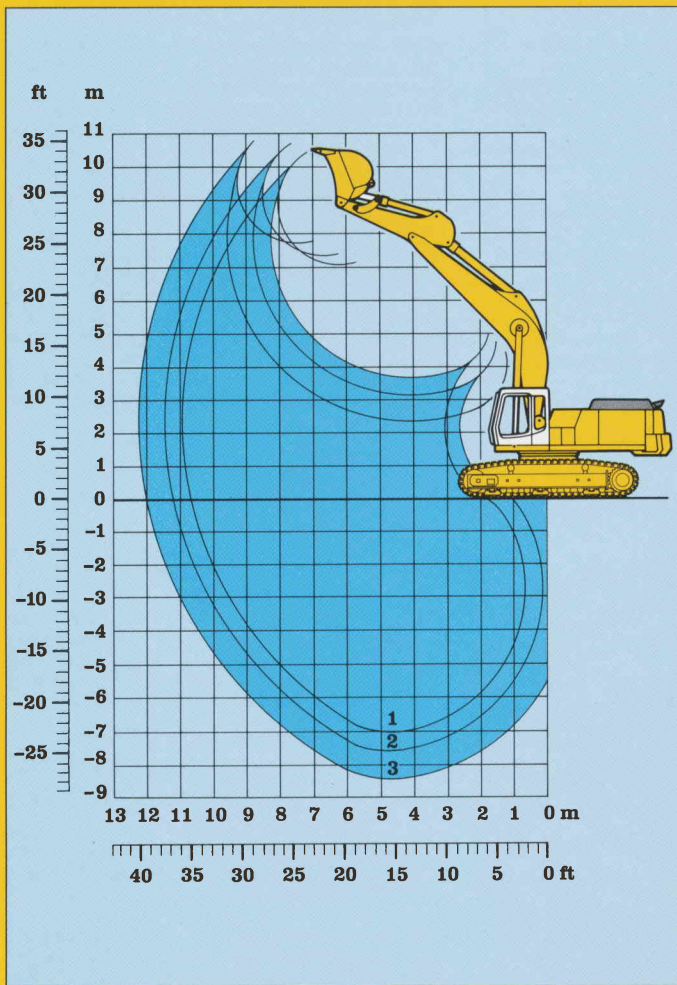
Undercarriage

An overall low center of gravity for the machine is achieved through favorable weight distribution of the machine's undercarriage, upper structure and attachment. This low center of gravity, combined with a wide undercarriage base, provides excellent stability for smooth, precise work and efficient transmission of the high dig and breakout forces. It also increases the life expectancy of undercarriage components. Standard bolt-on track chain guides on each side frame protect and improve the life expectancy of track components.

Travel Drive

The final drive consists of a Liebherr axial piston motor and a planetary reduction gear. The compact unit and all hydraulic lines are integrated into the track frame for best protection. Maintenance free, hydraulically actuated multi-disc brakes provide a safe work environment, even in the most difficult circumstances. Fast travel speed and high drawbar pull provide fast site changes, no matter what the terrain.

Technical Description



To order a complete machine you need the following

	Id. No.
● Basic machine and track pads	see page 10
● Hoist cylinders	9374332
● Gooseneck boom	22'/6700 mm 9373646
● Stick with bucket cylinder	7'9"/2350 mm 9373652 9'6"/2900 mm 9373654 12'6"/3800 mm 9373656
● High lift circuit	9379400
● Counterweight, removable part 17,650 lbs/8 t	9385425
● Bucket - size as applicable	see below

Digging envelope

1) Stick	7'9"/2350 mm
2) "	9'6"/2900 mm
3) "	12'6"/3800 mm

Stick length	ft-in/mm	7'9"/ 2350	9' 6"/ 2900	12' 6"/ 3800
Max. reach at ground level	ft-in/mm	35'5"/10800	37' 1"/11300	39'11"/12160
Max. teeth height	ft-in/mm	34'1"/10400	35' 1"/10700	36' 4"/11070
Max. dump height	ft-in/mm	23'0"/ 7000	23'11"/ 7300	25' 3"/ 7700
Max. digging depth	ft-in/mm	23'0"/ 7000	24' 7"/ 7500	27' 7"/ 8400

Max. breakout force: 50,830 lb/23,000 kg
 Max. digging force: 50,830 lb/23,000 kg

Bucket

Cutting width SAE		in/mm	49"/1250 ¹⁾	49/1250 ²⁾	57"/1450 ¹⁾	57"/1450 ²⁾	65"/1650 ¹⁾	65"/1650 ²⁾	73"/1850 ¹⁾	73"/1850 ²⁾	73"/1850 ³⁾	85"/2150 ⁴⁾
Capacity SAE	heaped	cuyd/m ³	2.0/1.55	2.0/1.55	2.4/1.85	2.4/1.85	2.9/2.2	2.9/2.2	3.4/2.6	3.4/2.6	4.1/3.1	5.0/3.8
	struck	cuyd/m ³	1.7/1.3	1.7/1.3	2.0/1.5	2.0/1.5	2.2/1.7	2.2/1.7	2.6/2.0	2.6/2.0	3.1/2.4	3.8/2.9
Weight		lb/kg	3580/1620	4200/1900	3960/1790	4620/2090	4350/1970	5080/2300	4550/2060	5390/2440	4930/2230	5260/2380
Id. No.			9374347	9374353	9374348	9374354	9374349	9374355	9374317	9374356	9374350	9374351
Suitable for material up to a specific weight of:	with stick 7'9"/2350 mm	lb/cuyd / t/m ³	-	-	-	-	3700/2.20	3700/2.20	3000/1.80	3000/1.80	2550/1.50	2000/1.20
	with stick 9'6"/2900 mm	lb/cuyd / t/m ³	-	-	3700/2.20	3700/2.20	3000/1.80	3000/1.80	2550/1.50	2550/1.50	2000/1.20	-
	with stick 12'6"/3800 mm	lb/cuyd / t/m ³	3700/2.20	3700/2.20	3000/1.80	3000/1.80	2550/1.50	2550/1.50	2000/1.20	-	-	-

¹⁾ Medium-duty bucket with Liebherr-teeth size 20 C (Appropriate for materials up to classification 5, per VOB, Section C, DIN 18300)

²⁾ Heavy duty rock bucket with Liebherr-teeth size 25 C (Appropriate for materials above classification 6, per VOB, Section C, DIN 18300)

³⁾ Loading bucket with Liebherr-teeth size 20 C

⁴⁾ Loading bucket with Liebherr-teeth size 16 C

Note:

Installation of optional side cutters onto medium-duty and loading buckets with Liebherr-teeth size 25 and 20 C, increases cutting width by approximately 6.3"/160 mm and 6.7"/170 mm, respectively.

Side cutter installation kit consists of:

- set of weld-on adaptors (Id. No. 9352588)

- set of bolt-on side cutters (Id. No. 9352587)

Backhoe Attachment with Gooseneck Boom 22'/6700 mm

Stick 7'9"/2350 mm		Lift capacities- Over-End Radius of load from centerline of machine									
Load point height		15 ft	4.5 m	20 ft	6 m	25 ft	7.5 m	30 ft	9 m	35 ft	10.5 m
feet	meter	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg
25	7.5					17920+	8130+				
20	6					18740+	8500+				
15	4.5	32300+	14650+	24380+	11060+	20680+	9380+	18810+	8530+		
10	3	42150+	19120+	28900+	13110+	23060+	10460+	19950+	9050+		
5	1.5	46390°	21040°	32610+	14790+	25220+	11440+	21080+	9560+		
Ground level		48680+	22080+	34570+	15680+	26610+	12070+	21740+	9860+		
- 5	- 1.5	47180+	21400+	34660+	15720+	26790+	12150+				
- 10	- 3	43530+	19740+	32690+	14830+	25090+	11380+				
- 15	- 4.5	36680+	16640+	24540+	12490+						

Stick 9'6"/2900 mm		Lift capacities- Over-End Radius of load from centerline of machine									
Load point height		15 ft	4.5 m	20 ft	6 m	25 ft	7.5 m	30 ft	9 m	35 ft	10.5 m
feet	meter	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg
25	7.5					16780+	7610+	14130°	6410+		
20	6					18850+	8550+	17220+	7810°		
15	4.5			21910+	9940+	18850+	8550+	17220+	7810°		
10	3	38100+	17280+	26650+	12090+	21380+	9700+	18560+	8420+		
5	1.5	45350+	20570+	30840+	13990+	23830+	10810+	19910+	9030+		
Ground level		48040+	21790+	33470+	15180+	25600+	11610+	20900+	9480+		
- 5	- 1.5	47640+	21610+	34240+	15530+	26280+	11920+	21010+	9530+		
- 10	- 3	44890+	20360+	33050+	14990+	25380+	11510+				
- 15	- 4.5	39290+	17820+	29260+	13270+						
- 20	- 6	28510+	12930+								

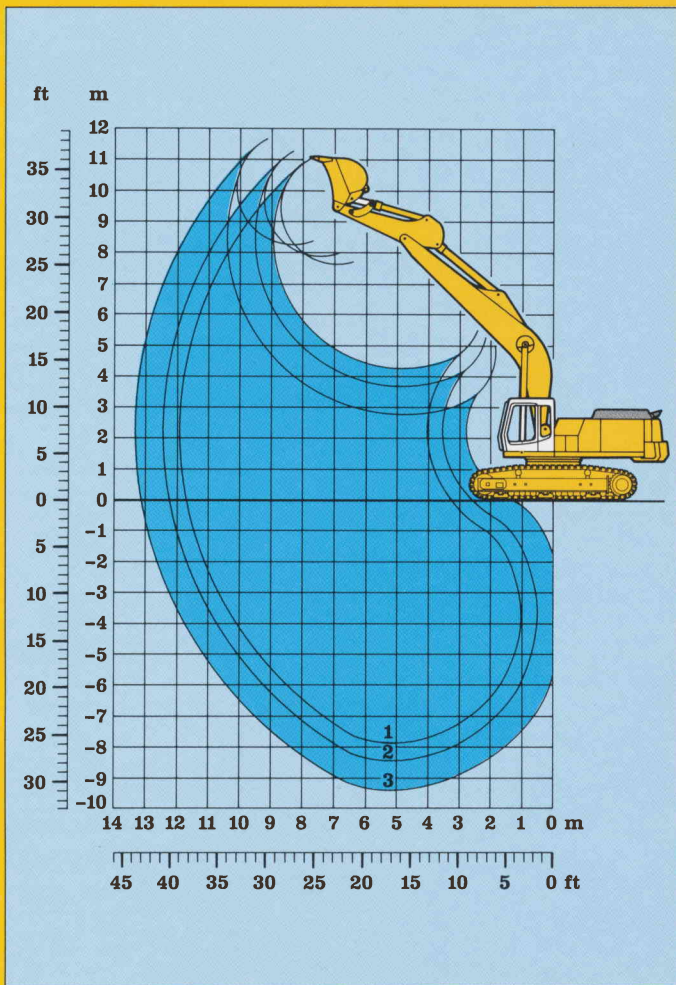
Stick 12'6"/3800 mm		Lift capacities- Over-End Radius of load from centerline of machine									
Load point height		15 ft	4.5 m	20 ft	6 m	25 ft	7.5 m	30 ft	9 m	35 ft	10.5 m
feet	meter	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg
25	7.5							11510°	5220°		
20	6							14370+	6520+		
15	4.5					16730+	7590+	15560+	7060+	9150°	4150°
10	3	32390+	14690+	23740+	10770+	19530+	8860+	17170+	7790+	12570°	5700°
5	1.5	41450+	18800+	28590+	12970+	22350+	10140+	18850+	8550+	13960°	6330°
Ground level		46630+	21150+	32190+	14600+	24670+	11190+	20260+	9190+	12170°	5520°
- 5	- 1.5	48240+	21880+	34040+	15440+	26040+	11810+	21050+	9550+		
- 10	- 3	47130+	21380+	34040+	15440+	26120+	11850+	20700+	9390+		
- 15	- 4.5	43410+	19690+	31880+	14460+	24290+	11020+				
- 20	- 6	35940+	16300+	26300+	11930+						

The load point is the Liebherr safety hook on the backhoe bucket (weight of bucket cylinder with link and lever 1500 lb/680 kg, weight of 1.6 cuyd/1.25 m³ bucket 3270 lb/1480 kg).
 Indicated loads are based on SAE standard J 1097 and do not exceed 75 % of tipping or 87 % of hydraulic capacity.
 Machine situated on firm, level supporting surface.

+ Rating limited by hoist cylinders ° Rating limited by stick cylinder

High lift circuit for heavy lifting increases attachment circuit pressure to 5220 PSI/360 bar and slows attachment speed for precise control.

Lift Capacities with Gooseneck Boom 22'/6700 mm and High Lift activated



To order a complete machine you need the following

Id. No.

- Basic machine and track pads see page 10
- Hoist cylinders 9374332
- Gooseneck boom 24'11"/7600 mm 9373648
- Stick with bucket cylinder 7' 9"/2350 mm 9373652
9' 6"/2900 mm 9373654
12' 6"/3800 mm 9373656
- High lift circuit 9379400
- Counterweight, removable part 17,650 lbs/8 t 9385425
- Bucket - size as applicable see below

Digging envelope

- 1) Stick 7'9"/2350 mm
- 2) " 9'6"/2900 mm
- 3) " 12'6"/3800 mm

Stick length	ft-in/mm	7'9"/ 2350	9' 6"/ 2900	12'6"/ 3800
Max. reach at ground level	ft-in/mm	38'5"/11700	40' 0"/12200	43'0"/13100
Max. teeth height	ft-in/mm	36'1"/11000	37' 1"/11300	38'5"/11700
Max. dump height	ft-in/mm	25'3"/ 7700	25'11"/ 7900	27'3"/ 8300
Max. digging depth	ft-in/mm	25'7"/ 7800	27' 7"/ 8400	30'6"/ 9300

Max. breakout force: 50,830 lb/23,000 kg
 Max. digging force: 50,830 lb/23,000 kg

Bucket

Cutting width SAE	in/mm	41"/1050 ¹⁾	41"/1050 ²⁾	49"/1250 ¹⁾	49"/1250 ²⁾	57"/1450 ¹⁾	57"/1450 ²⁾	65"/1650 ¹⁾	65"/1650 ²⁾	73"/1850 ¹⁾	73"/1850 ²⁾	73"/1850 ³⁾
Capacity SAE heaped	cuyd/m ³	1.6/1.25	1.6/1.25	2.0/1.55	2.0/1.55	2.4/1.85	2.4/1.85	2.9/2.2	2.9/2.2	3.4/2.6	3.4/2.6	4.1/3.1
struck	cuyd/m ³	1.3/1.02	1.3/1.02	1.7/1.3	1.7/1.3	2.0/1.5	2.0/1.5	2.2/1.7	2.2/1.7	2.6/2.0	2.6/2.0	3.1/2.4
Weight	lb/kg	3270/1480	3820/1730	3580/1620	4200/1900	3960/1790	4620/2090	4350/1970	5080/2300	4550/2060	5390/2440	4930/2230
Id. No.		9374346	9374352	9374347	9374353	9374348	9374354	9374349	9374355	9374317	9374356	9374350
Suitable for material up to a specific weight of:	with stick 7'9"/2350 mm	lb/cuyd / t/m ³	-	-	-	3700/2.20	3700/2.20	3000/1.80	3000/1.80	2550/1.50	2550/1.50	2000/1.20
	with stick 9'6"/2900 mm	lb/cuyd / t/m ³	-	-	3700/2.20	3700/2.20	3000/1.80	3000/1.80	2550/1.50	2550/1.50	2000/1.20	-
	with stick 12'6"/3800 mm	lb/cuyd / t/m ³	3700/2.20	3700/2.20	3000/1.80	3000/1.80	2550/1.50	2550/1.50	2000/1.20	-	-	-

- ¹⁾ Medium-duty bucket with Liebherr-teeth size 20 C (Appropriate for materials up to classification 5, per VOB, Section C, DIN 18300)
- ²⁾ Heavy duty rock bucket with Liebherr-teeth size 25 C (Appropriate for materials above classification 6, per VOB, Section C, DIN 18300)
- ³⁾ Loading bucket with Liebherr-teeth size 20 C

Note:

Installation of optional side cutters onto medium-duty and loading buckets with Liebherr-teeth size 25 and 20 C, increases cutting width by approximately 6.3"/160 mm or 6.7"/170 mm, respectively.

Side cutter installation kit consists of:

- set of weld-on adaptors (Id. No. 9352588)
- set of bolt-on side cutters (Id. No. 9352587)

Backhoe Attachment with Gooseneck Boom 24'11"/7600 mm

Stick 7'9"/2350 mm		Lift capacities- Over-End Radius of load from centerline of machine									
Load point height		15 ft	4.5 m	20 ft	6 m	25 ft	7.5 m	30 ft	9 m	35 ft	10.5 m
feet	meter	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg
20	6					17020+	7720+	15610+	7080+		
15	4.5	35340+	26030+	23900+	10840+	19180+	8700+	16710+	7580+		
10	3			28220+	12800+	21540+	9770+	18030+	8180+		
5	1.5			31260+	14180+	23570+	10690+	19270+	8740+		
Ground level		27380°	12420°	32560+	14770+	24820+	11260+	20110+	9120+		
-5	-1.5	43060+	19530+	32430+	14710+	25130+	11400+	20260+	9190+		
-10	-3	40390+	18320+	30970+	14050+	24290+	11020+				
-15	-4.5	35830+	16250+	27820+	12620+	21580+	9790+				
-20	-6	27930+	12670+	21210+	9620+						

Lift capacities- Over-Side											
20	6					17020+	7720+	15120	6860		
15	4.5	35340+	26030+	23900+	10840+	19180+	8700+	14460	6560		
10	3			24890	11290	18140	8230	13690	6210		
5	1.5			23100	10480	17000	7710	12990	5890		
Ground level		27380°	12420°	22290	10110	16270	7380	12520	5680		
-5	-1.5	35190	15960	22160	10050	16010	7260	12350	5600		
-10	-3	35870	16270	22490	10200	16140	7320				
-15	-4.5	35830+	16250+	23280	10560	16800	7620				
-20	-6	27930+	12670+	21210+	9620+						

Stick 9'6"/2900 mm		Lift capacities- Over-End Radius of load from centerline of machine									
Load point height		15 ft	4.5 m	20 ft	6 m	25 ft	7.5 m	30 ft	9 m	35 ft	10.5 m
feet	meter	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg
25	7.5							13470+	6110+		
20	6					15300+	6940+	14130	6410+		
15	4.5	30530+	13850+	21610+	9800+	17550+	7960+	15340+	6960+	14180+	4820
10	3	28570°	12960°	26120+	11850+	20040+	9090+	16780+	7610+	14930+	4630
5	1.5	21890°	9930°	29700+	13470+	22290+	10110+	18190+	8250+	15670+	4430
Ground level		30000°	13610°	31640+	14350+	23880+	10830+	19220+	8720+	15920	4290
-5	-1.5	41840+	18980°	32080+	14550+	24540+	11130+	19670+	8920+		
-10	-3	41760+	18940+	31150+	14130+	24140+	10950+	19180+	8700+		
-15	-4.5	37770+	17130+	28660+	13000+	22220+	10080+				
-20	-6	31020+	14070+	23590+	10700+						

Lift capacities- Over-Side											
25	7.5							13470+	6110+		
20	6					15300+	6940+	14130	6410+		
15	4.5	30530+	13850+	21610+	9800+	17550+	7960+	14310	6490	10630	6430+
10	3	28570°	12960°	25220	11440	18080	8200	13470	6110	10210	6770+
5	1.5	21890°	9930°	23150	10500	16800	7620	12700	5760	9770	7110+
Ground level		30000°	13610°	22020	9990	15940	7230	12130	5500	9460	7220
-5	-1.5	34350	15580	21650	9820	15520	7040	11820	5360		
-10	-3	34900	15830	21780	9880	15500	7030	11860	5380		
-15	-4.5	35910	16290	22380	10150	15940	7230				
-20	-6	31020+	14070+	23590+	10700+						

Stick 12'6"/3800 mm		Lift capacities- Over-End Radius of load from centerline of machine									
Load point height		15 ft	4.5 m	20 ft	6 m	25 ft	7.5 m	30 ft	9 m	35 ft	10.5 m
feet	meter	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg
25	7.5									7390°	3350°
20	6							12680+	5750+	12300°	5580+
15	4.5					15790+	7160+	14040+	6370+	13010+	5900+
10	3	34660+	15720+	23590+	10700+	18500+	8390+	15650+	7100	13980+	6340+
5	1.5	33600°	15240°	27800+	12610+	21050+	9550+	17280+	7840+	14970+	6790+
Ground level		32890°	14920°	30640+	13900+	23080+	10470+	18630+	8450+	15790+	7160+
-5	-1.5	39310°	17830°	31990+	14510+	24290+	11020+	19490+	8840+	15830	7180
10	-3	43980°	19950+	31950+	14490+	24540+	11130+	19620+	8900+	13670°	6200°
-15	-4.5	41070+	18630+	30450+	13810+	23570+	10690+	18560+	8420+		
-20	-6	35980+	16320+	27030+	12260+	20680+	9380+				
-25	-7.5	27010+	12250+	19800+	8980+						

Lift capacities- Over-Side											
25	7.5									7390°	3350°
20	6							12680+	5750+	11600	5260
15	4.5					15790+	7160+	14040+	6370+	11180	5070
10	3	34660+	15720+	23590+	10700+	18500+	8390+ <th>14040</th> <th>6370</th> <th>10630</th> <th>4820</th>	14040	6370	10630	4820
5	1.5	33600°	15240°	24290	11020	17500	7940	13160	5970	10100	4580
Ground level		32890°	14920°	22660	10280	16400	7440	12430	5640	9660	4380
-5	-1.5	34190	15510	21870	9920	15720	7130	11950	5420	9390	4260
-10	-3	34410	15610	21690	9840	15480	7020	11790	5350	9390	4260
-15	-4.5	35140	15940	22000	9980	15650	7100	11990	5440		
-20	-6	35980+	16320+	22820	10350	16310	7400				
-25	-7.5	27010+	12250+	19800+	8980+						

The load point is the Liebherr safety hook on the backhoe bucket (weight of bucket cylinder with link and lever 1500 lb/680 kg, weight of 1.6 cuyd/1.25 m³ bucket 3270 lb/1480 kg).

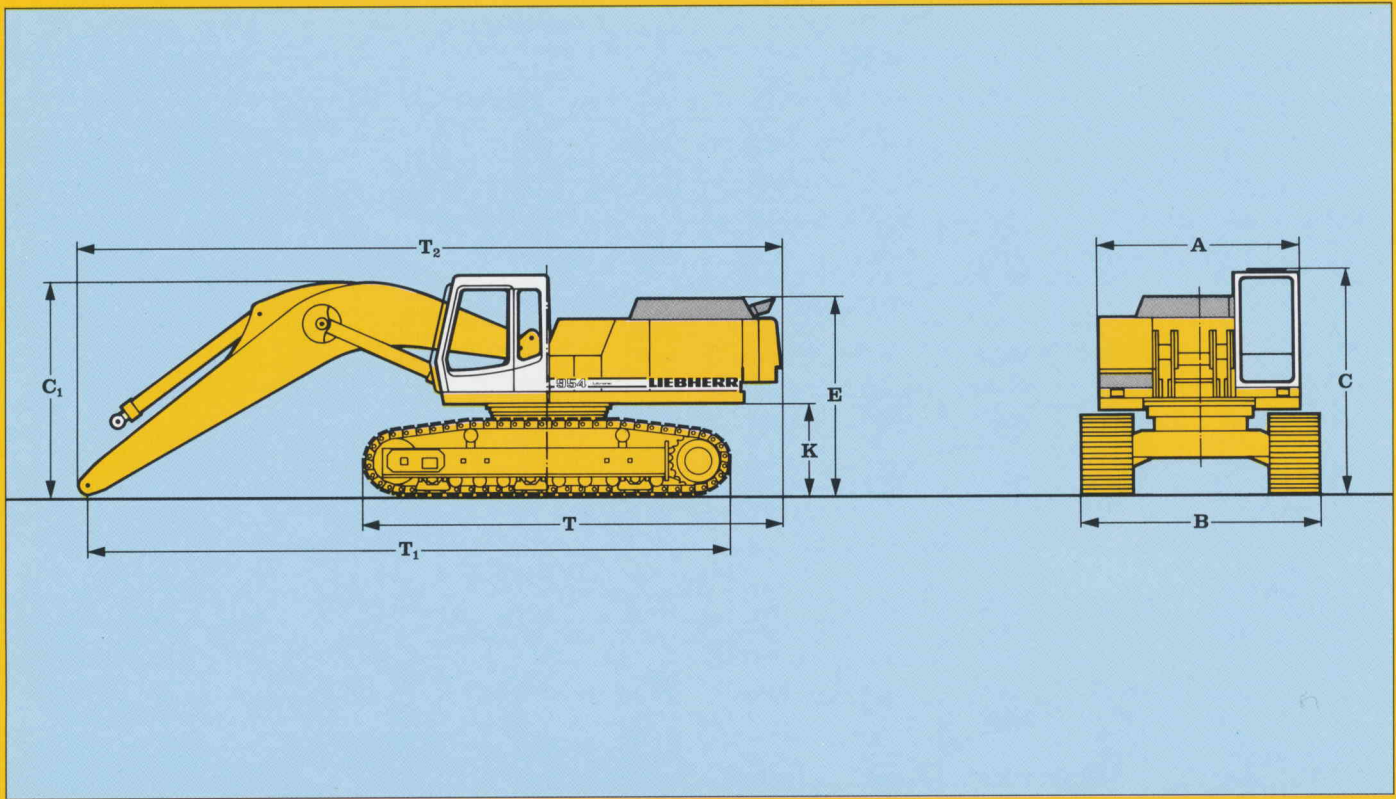
Indicated loads are based on SAE standard J 1097 and do not exceed 75 % of tipping or 87 % of hydraulic capacity.

Machine situated on firm, level supporting surface.

+ Rating limited by hoist cylinders ° Rating limited by stick cylinder

High lift circuit for heavy lifting increases attachment circuit pressure to 5220 PSI/360 bar and slows attachment speed for precise control.

Lift Capacities with Gooseneck Boom 24'11"/7600 mm and High Lift activated



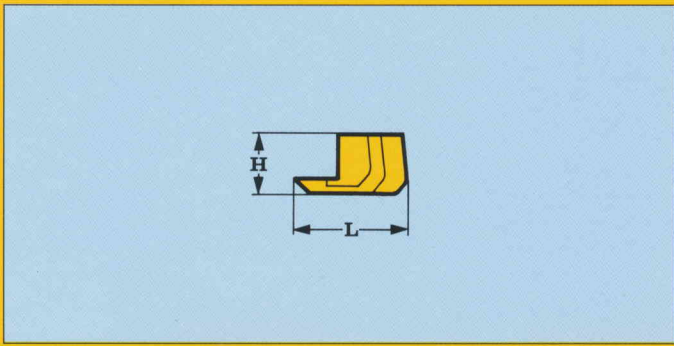
Basic machine

with gooseneck boom length

A	
B	with 20"/500 mm pads with 24"/600 mm pads with 30"/750 mm pads
C	
E	
K	
T	
C₁	
T₁	
T₂	
Weight	with 20"/500 mm pads with 24"/600 mm pads with 30"/750 mm pads

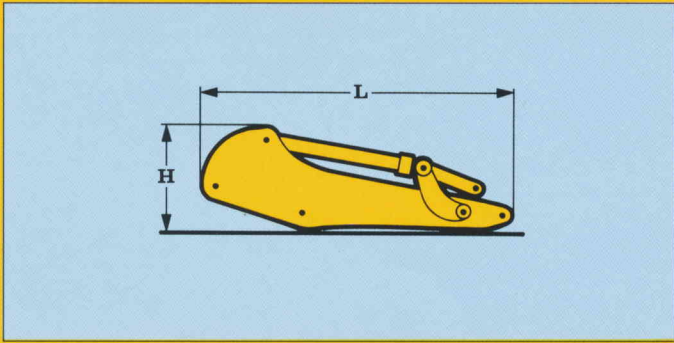
ft-in/mm	22"/ 6700	24'11"/ 7600
ft-in/mm	9' 9"/ 2980	9' 9"/ 2980
ft-in/mm	11' 4"/ 3460	11' 4"/ 3460
ft-in/mm	11' 6"/ 3500	11' 6"/ 3500
ft-in/mm	12' / 3650	12' / 3650
ft-in/mm	10' 9"/ 3276	10' 9"/ 3276
ft-in/mm	9' 7"/ 2920	9' 7"/ 2920
ft-in/mm	4' 7"/ 1400	4' 7"/ 1400
ft-in/mm	20' 6"/ 6240	20' 6"/ 6240
ft-in/mm	10'10"/ 3300	11' 2"/ 3400
ft-in/mm	31' 4"/ 9550	34' 3"/10450
ft-in/mm	34' 4"/10550	37' 9"/11500
lb/kg	74,040/33500	75,030/33950
lb/kg	75,360/34100	76,360/34550
lb/kg	78,680/35600	79,670/36050

Component Dimensions and Weights



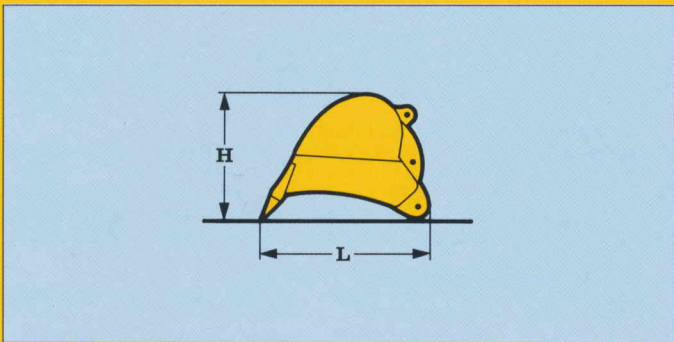
Counterweight

L Length	ft-in/mm	4'2"/1270
H Height	ft-in/mm	2'2"/670
Width	ft-in/mm	9'9"/2980
Weight	lb/kg	17,650/8000



Stick with bucket cylinder

Length of stick	in/mm	7' 9"/2350	9' 6"/2900	12' 6"/3800
L Length	ft-in/mm	12' 3"/3650	13' 8"/4175	16' 8"/5075
H Height	ft-in/mm	4' 4"/1320	4' 2"/1270	3'11"/1190
Width	ft-in/mm	1'11"/ 595	1'11"/ 595	1'11"/ 595
Weight	lb/kg	4510/2040	4820/2180	5080/2300



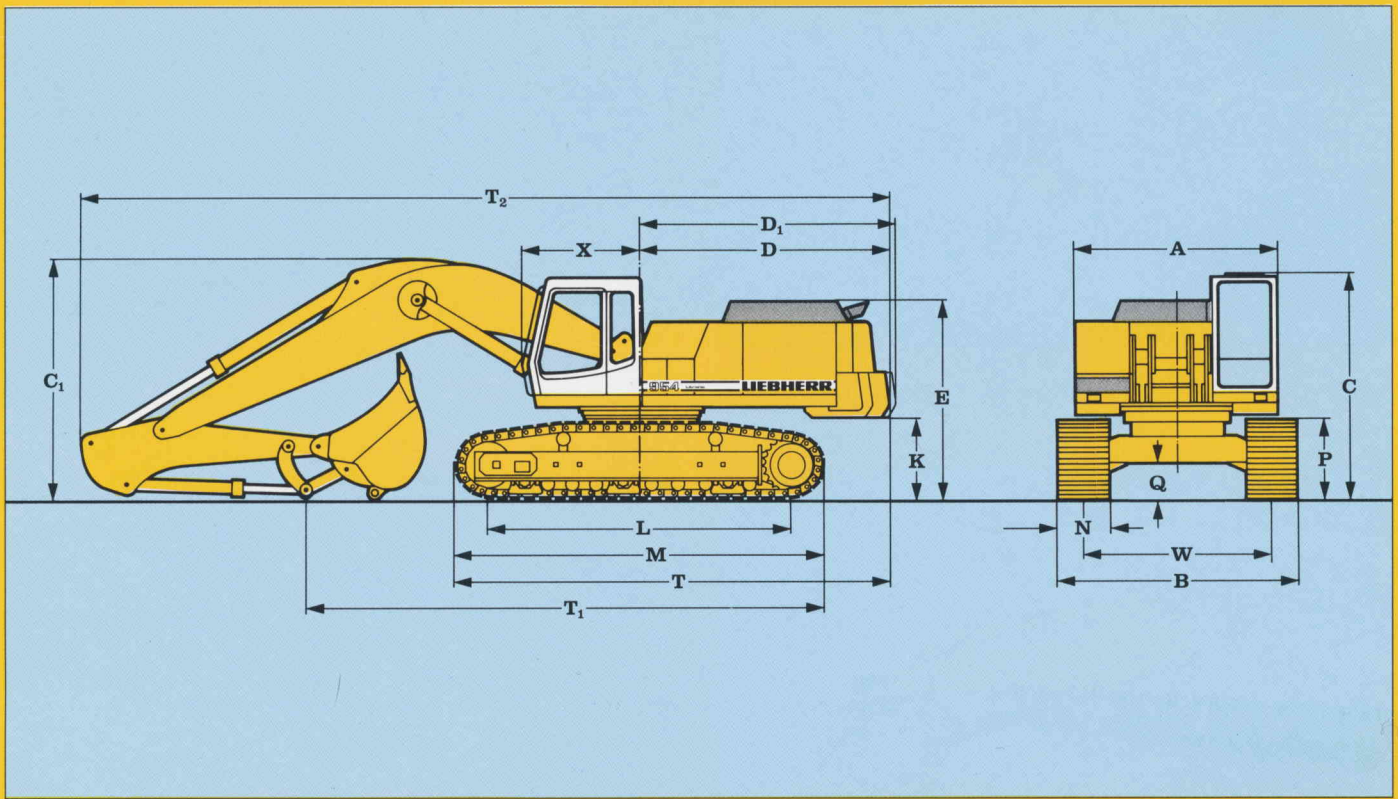
Buckets

Cutting width	in/mm	41"/1050	41"/1050	49"/1250
Capacity	cuyd/m ³	1.6/1.25	1.6/1.25	2.0/1.55
L Length	ft-in/mm	6' 5"/1950	6' 6"/1970	6' 5"/1950
H Height	ft-in/mm	4'11"/1500	4'10"/1470	4' 9"/1460
Width	ft-in/mm	41"/1050	41"/1050	49"/1250
Weight	lb/kg	3270/1480	3820/1730	3580/1620

Cutting width	in/mm	49"/1250	57"/1450	57"/1450
Capacity	cuyd/m ³	2.0/1.55	2.4/1.85	2.4/1.85
L Length	ft-in/mm	6' 6"/1970	6' 5"/1950	6' 6"/1970
H Height	ft-in/mm	4' 9"/1440	4' 9"/1440	4' 9"/1460
Width	ft-in/mm	49"/1250	57"/1450	57"/1450
Weight	lb/kg	4200/1900	3960/1790	4620/2090

Cutting width	in/mm	65"/1650	65"/1650	73"/1850
Capacity	cuyd/m ³	2.9/2.2	2.9/2.2	3.4/2.6
L Length	ft-in/mm	6' 4"/1940	6'6"/1970	6' 5"/1950
H Height	ft-in/mm	4' 9"/1460	4' 9"/1460	4'10"/1470
Width	ft-in/mm	65"/1650	65"/1650	73"/1850
Weight	lb/kg	4350/1970	5080/2300	4550/2060

Cutting width	in/mm	73"/1850	73"/1850	85"/2150
Capacity	cuyd/m ³	3.4/2.6	3.4/2.6	5.0/3.8
L Length	ft-in/mm	6' 6"/1970	6' 9"/2050	6' 8"/2030
H Height	ft-in/mm	4'10"/1470	5' 4"/1620	5' 4"/1620
Width	ft-in/mm	73"/1850	73"/1850	85"/2150
Weight	lb/kg	5390/2440	4930/2230	5260/2380



Dimensions

	ft-in/mm		ft-in/mm	
A	9' 9"/2980		Q	1' 9"/ 543
C	10' 9"/3276		T	21' 1"/6425
D	12' 3"/3735		X	5'10"/1768
D1	12' 7"/3825		W	9' 6"/2900
E	9' 7"/2920		N	20"/ 500 24"/ 600 30"/ 750
K	4' 1"/1246		B	11'4"/3460 11'6"/3500 12"/3650
L	14' 5"/4400			
M	17' 8"/5378			
P	3'10"/1170			
			with gooseneck boom 22'/6700 mm and stick	
			7' 9"/2350	9' 2"/2900 12'6"/ 3800
C1	11'6"/ 3500	11'8"/ 3550	12'6"/ 3800	
T1	25' / 7620	23'4"/ 7100	20'8"/ 6300	
T2	39'6"/12035	39'6"/12035	39'6"/12050	
			with gooseneck boom 24'11"/7600 mm and stick	
			7' 9"/ 2350	9' 2"/ 2900 12' 6"/ 3800
C1	12'/ 3650	12'2"/ 3710	12' 2"/ 3710	
T1	28' 5"/ 8670	26'7"/ 8100	23' 3"/ 7080	
T2	42' 8"/13000	42'10"/13050	42'10"/13050	

Basic Machine Contents

	Id. No.
● Basic machine R 954 Litronic ²	0001069
● Triple grouser pads	
20"/500 mm	9578648
24"/600 mm	9578649
30"/750 mm	9578650

Operating Weight and Ground Pressure

with 20"/500 mm pads:
100,780 lb/45.600 kg - 14.53 PSI/0.96 kg/cm²

with 24"/600 mm pads:
102,100 lb/46.200 kg - 11.53 PSI/0.81 kg/cm²

with 30"/750 mm pads:
105,420 lb/47.700 kg - 9.39 PSI/0.66 kg/cm²

The operating weight includes the basic machine with backhoe attachment with 22'/6700 mm gooseneck boom, 7'9"/2350 mm stick and bucket 3.4 cuyd/2.60 m³.

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With compliments: