

# SAMSUNG

# SE450LC-2

## HYDRAULIC EXCAVATOR TECHNICAL DATA



**Operating Weight .....99,200 lb. 45,000 kg**

**Flywheel HP .....296 hp/221 kW @ 2000 rpm**

**Bucket Capacity.....2.56 - 3.20 yd<sup>3</sup> 1.96 - 2.45 m<sup>3</sup>**

**ENGINE**

Model	Cummins M11-C
Type	4 cycle diesel, water-cooled, direct injection
Aspiration	Turbocharged, Aftercooled
No. of cylinders	6
Piston displacement	610 cu. in. 10.0 liters
Bore and stroke	4.92" x 5.35" 125mm x 136mm
Net flywheel horsepower	
SAE J1349	296 hp @ 2000 rpm
DIN 6270 "B"	221 kW @ 2000 rpm
Maximum torque	976 lb-ft 135 kg.m @ 1300 rpm
Air cleaner	Heavy duty, 2-stage dry type with auto dust ejector and restriction indicator
Electrical system	24 volt 7.8 kW 50 amp alternator 780 cold cranking amps @ 0°F (32°C)

The engine can be quickly decelerated to idle speed with a simple push of the auto decel button on the computer keypad. This deceleration system helps to reduce fuel consumption and noise.

**HYDRAULIC SYSTEM**

Unique "CA-MAX" hydraulic system provides operating smoothness, enhanced controllability and perfect simultaneous operation with precise movement of the implement, swing and travel controls. This system increases machine productivity in pipelaying, trench digging and any jobs performed perpendicularly to the direction of travel. A one-touch power-up button is standard for tough digging or lifting applications that require a short boost of extra power.

- Main pumps.....2-variable displacement axial piston pumps
- Maximum oil flow.....2 x 87 gpm 2 x 330 l/min
- Pilot control pump.....Gear type
- Maximum oil flow.....7.9 gpm 30 l/min
- Hydraulic motors
- Travel.....2 axial piston motor with parking brake
- Swing.....2 axial piston motor with swing holding brake
- Control valves.....7 spools includes 1 auxiliary valve
- Main relief valve pressure.....4550/4980 psi 320/350 kg/cm<sup>2</sup>
- Relief valve settings
- Boom, arm, bucket circuits.....5190 psi 365 kg/cm<sup>2</sup>
- Swing circuit.....3415 psi 240 kg/cm<sup>2</sup>
- Travel circuit.....4686 psi 330 kg/cm<sup>2</sup>
- Pilot circuit.....568 psi 40 kg/cm<sup>2</sup>

**HYDRAULIC CYLINDERS**

High strength piston rods and tubes are used. Cylinder cushion mechanisms are provided for all cylinders to absorb shock when pistons reach their stroke ends.

Cylinder	Qty	Bore x Rod x Stroke
Boom	2	6.5" x 4.3" x 62.6" 165mm x 110mm x 1590mm
Arm	1	7.5" x 5.1" x 74" 190mm x 130mm x 1880mm
Bucket	1	6.5" x 4.3" x 52.6" 165mm x 110mm x 1335mm

**HYDRAULIC FILTERS**

All hydraulic circuits have high quality hydraulic filters for protection against oil contamination and longer life of hydraulic components. A 105µ suction filter is built into the suction line and 10µ full flow filters are in the return circuit and swing/travel motor drain lines.

**CONTROLS**

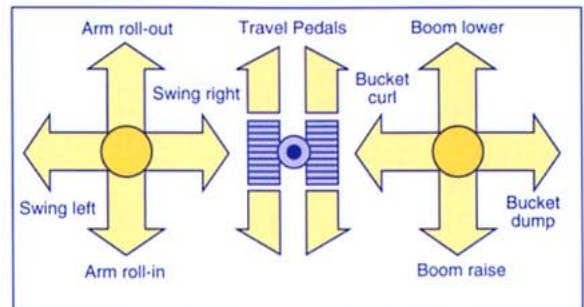
Power assisted pilot controls operated by ergonomically designed, semi-long hand levers. Two joystick hand levers actuate boom, arm, bucket and swing. Two foot pedals control steering and travel functions.

**IMPLEMENT LEVERS**

Right lever controls boom raise and lower and bucket curl and dump. Left lever controls arm roll-out and roll-in and direction of swing. Diagonal movement of either lever operates two functions simultaneously.

**TRAVEL**

Two rocker pedals, with detachable hand levers, control steering and travel function. One pedal and lever controls the left track; the other pedal and lever controls the right track. Pushing both pedals or levers forward or backward provides straight travel. Moving one pedal or lever forward or backward more than the other results in a gradual turn. Moving one pedal or lever forward and the other pedal or lever backwards counter-rotates the tracks for spot turns.



**SWING DRIVE**

High torque axial piston motor with planetary reduction gear. Swing cushion valve built into swing motor absorbs shocks when stopping swing. Swing ring is a single row ball bearing with induction hardened internal gear. Internal gear and pinion immersed in oil. Swing brake is spring applied/hydraulic-released disc type; automatically applied 5 seconds after swing control is released. Swing lock clamps the superstructure for transportation. Swing speed.....0 to 8.0 rpm

**TRAVEL DRIVE**

Fully hydrostatic. Each track driven by an independent, two-speed, axial piston hydraulic motor with planetary reduction gear. Drive motors are protected within the shoe width. Automatically operated parking brake is spring applied when machine is stationary. Engaging foot pedals or levers automatically releases the brake.

- Drawbar Pull
- Low Speed.....72,970 lb. 33,100 kg
- High Speed.....46,300 lb. 21,000 kg
- Travel Speed
- Low.....1.7 mph 2.8 km/h
- High.....2.7 mph 4.3 km/h
- Gradeability.....40 degrees (80% continuous)

**STRUCTURE**

Modular designed upper frame is torque resistant. Boom tower and main rails are made of high-tensile steel plates. Redesigned boom and thicker plates increase boom strength and durability. "X"-shaped carbody made of durable and high-tensile steel. This design more evenly spreads stresses throughout the roller frame than "H"-shaped designs. Upper and lower frames are reinforced for longer life.

Counterweight .....19,841 lb. 9,000 kg

**OPERATOR'S CAB**

Futuristic and spacious rounded cab design optimizes operator visibility, comfort and increased ventilation. The all-weather, modular steel cab is mounted on anti-vibration rubber pads that reduce noise and extend cab life.

Curved front window slides upwards in a single motion for storage. Lower front window is removeable. Tinted safety glass is standard throughout. Standard equipment also includes 3 speed wiper with washer, air conditioning, 2 speed heater, AM/FM stereo cassette radio, deluxe Bostrom 8-way adjustable cloth seat with seat belt, digital clock, sun visor, coat hook and towel bar, cigarette lighter, glove box, horn, 2 rearview mirrors, hydraulic safety lock, lockable door, dome light, illuminated monitor display.

Cab dimensions (lhxwx) 6'2" x 5'7" x 3'2" 1880mm x 1700mm x 975mm

**SELF-DIAGNOSTIC MONITOR SYSTEM**

The system monitors six vital machine functions, identifies any problem and simplifies the troubleshooting procedures.

- 1 Main power failure
- 2 Detection engine speed sensor
- 5 Proportional pressure reducing valve
- 6 High-speed operation function
- 7 Low speed operation function
- 0 CPU self diagnosis

**SAFETY**

Air horn, electrically operated. Automatic self-diagnostic monitor. Hydraulic safety lock. Light package includes 2 lights mounted on upper frame and 4 on boom. Main relief valves, anti-cavitation valves, overload relief valves and hydraulic brake valves protect the hydraulic system. Parking brake, spring applied/hydraulic-released disc type. Swing brake, spring applied/hydraulic-released disc type. Waterproof electrical connectors.

Monitor system, illuminated.

Gauges .....	Engine rpm
.....	Fuel
.....	Hourmeter
.....	Hydraulic oil temperature
.....	Engine coolant temperature
Indicator lights .....	Air cleaner restriction
.....	Battery charge
.....	Head lights
.....	Low fuel level
Warning lamps .....	Low engine oil pressure
.....	High engine coolant temperature
.....	Engine oil filter

**UNDERCARRIAGE**

Durable heavy-duty box section carbody is welded with high-tensile strength steel. Track roller frames are reinforced and welded securely to the carbody. Greater dependability and longer life of links, rollers, idlers, sprockets, pins and bushings are achieved through increased hardness and improved material composition. Rollers, idlers and sprockets are permanently lubricated. Undercarriage includes; hydraulic track adjusters, center mounted track guides, travel motor guards and triple grouser track shoes.



Upper rollers, per side.....	2
Lower rollers, per side.....	10
Track shoes, per side .....	52
Track shoes, standard.....	29.5" 750mm
optional.....	24" 600mm
optional.....	35.5" 900mm
Track gauge.....	9"5" 2870mm
Track length.....	17'8" 5380mm
Ground clearance .....	1'10" 550mm
Ground contact area	
24" 600mm shoes.....	8776 in <sup>2</sup> 5.7 m <sup>2</sup>
29.5" 750mm shoes .....	10,970 in <sup>2</sup> 7.1 m <sup>2</sup>
35.5" 900mm shoes .....	13,164 in <sup>2</sup> 8.5 m <sup>2</sup>

**WEIGHTS**

Machine equipped with one piece boom, 23'0" (7.0m), standard 11'0" (3.35m) arm, 2.56 cu yd. bucket and full fuel tank.

Shoe width	Operating Weight	Ground Pressure
24" 600mm	97,570 lb 44,260 kg	11.11 psi 0.78 kg/cm <sup>2</sup>
29.5" 750mm	99,200 lb 45,000 kg	9.04 psi 0.64 kg/cm <sup>2</sup>
35.5" 900mm	100,940 lb 45,790 kg	7.67 psi 0.54 kg/cm <sup>2</sup>

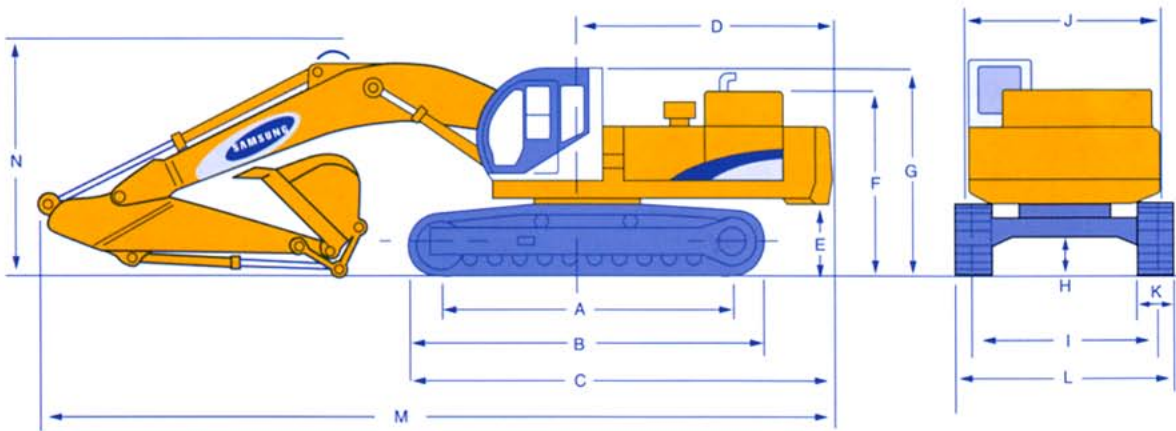
**MODE SELECTION SYSTEM**

Three operating modes allow the selection of the proper speed and power to fit job conditions: H mode - heavy duty, S mode - standard duty, L mode - light duty. Engine speed controlled by a micro-computer to improve working efficiency. A throttle control is available for the S and L operating modes. Travel speed switch allows the operator a choice of either low speed or high speed.

**SERVICE REFILL CAPACITIES**

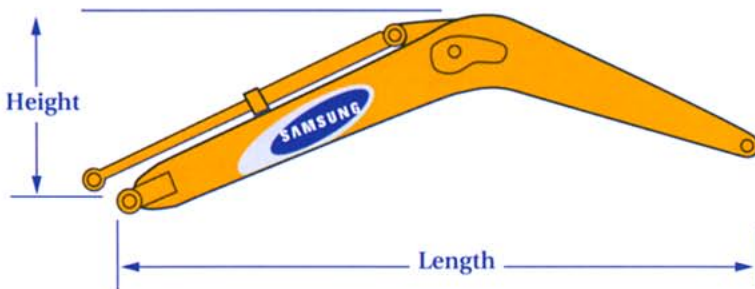
	gallons	liters
Cooling system .....	11.9	45
Lubricant		
Engine oil.....	9.0	34.0
Swing drive.....	1.3	5.0
Track drive (each) .....	1.4	5.4
Hydraulic tank .....	79.3	300
Fuel tank.....	171.7	650

**SHIPPING DIMENSIONS**



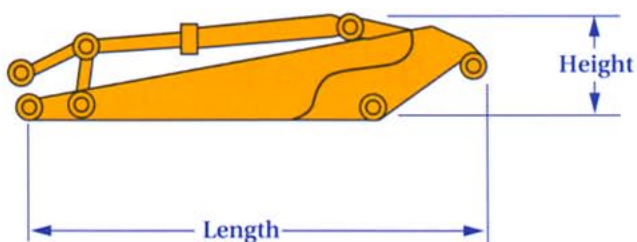
A	Distance between tumblers	14'4"	(4370 mm)
B	Undercarriage length	17'8"	(5380 mm)
C	Length of base machine	21'2"	(6440 mm)
D	Tail swing radius	12'6"	(3800 mm)
E	Counterweight clearance	3'11"	(1200 mm)
F	Height without cab	9'2"	(2800 mm)
G	Overall height of cab	10'8"	(3250 mm)
H	Minimum ground clearance	1'10"	( 550 mm)
I	Track gauge	9'5"	(2870 mm)
J	Upper frame width	9'9"	(2960 mm)
K	Track shoe width (std)	29.5"	( 750 mm)
L	Overall width	11'10.5"	(3620 mm)
M	Overall length	39'2"	(11950 mm)
N	Overall height of boom	11'1"	(3390 mm)

**BOOM**



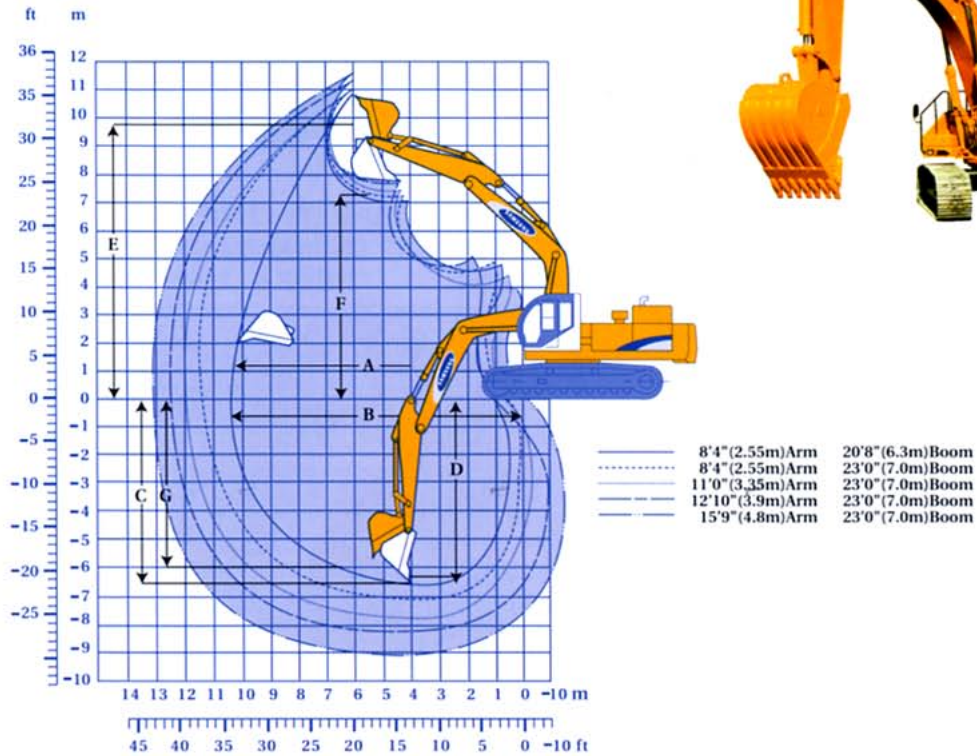
Size	23'0"	7.0 m	20'8"	6.3 m
Length	23'9"	7250 mm	21'6"	6550 mm
Height	5'11"	1800 mm	6'1"	1850 mm
Width	3'2"	970 mm	3'2"	970 mm
Weight	8115 lb	3681 kg	7760 lb	3521 kg

**ARM**



Size	11'0"	3.35 m	12'10"	3.9 m	15'9"	4.8 m	8'4"	2.55 m
Length	15'1"	4590 mm	16'11"	5150 mm	20'1"	6120 mm	11'10"	3620 mm
Height	3'9"	1130 mm	3'9"	1140 mm	3'9"	1140 mm	4'0"	1210 mm
Width	1'6"	450 mm	1'6"	450 mm	1'6"	450 mm	1'6"	450 mm
Weight	5610 lb	2545 kg	6030 lb	2735 kg	6360 lb	2885 kg	5950 lb	2700 kg

**WORKING RANGES**



Boom length	23'0" 7.0 m				20'8" 6.3 m	
Arm length	11'0" 3.35 m	12'10" 3.9 m	15'9" 4.8 m	8'4" 2.55 m		
A Maximum digging reach	39'6" 12040 mm	41'3" 12560 mm	43'4" 13220 mm	35'5" 10800 mm		
B Maximum digging reach at ground	38'9" 11820 mm	40'6" 12350 mm	42'9" 13030 mm	34'10" 10610 mm		
C Maximum digging depth	25'5" 7740 mm	27'2" 8290 mm	30'2" 9190 mm	21'2" 6460 mm		
D Maximum digging depth at 8 ft. (2440mm) level	24'11" 7590 mm	26'9" 8160 mm	29'9" 9080 mm	20'2" 6150 mm		
E Maximum digging height	36'0" 10980 mm	36'9" 11220 mm	36'0" 10980 mm	35'8" 10870 mm		
F Maximum dumping height	25'0" 7610 mm	25'9" 7850 mm	25'5" 7740 mm	23'10" 7270 mm		
G Maximum vertical wall digging	22'11" 6980 mm	24'6" 7460 mm	28'6" 8700 mm	19'8" 5990 mm		
Arm digging force	42,110 lb 19,100 kg	38,140 lb 17,300 kg	34,830 lb 15,800 kg	51,150 lb 23,200 kg		
Bucket digging force	49,160 lb 22,300 kg	49,160 lb 22,300 kg	49,160 lb 22,300 kg	49,160 lb 22,300 kg		

**BUCKET and ARM COMBINATION**

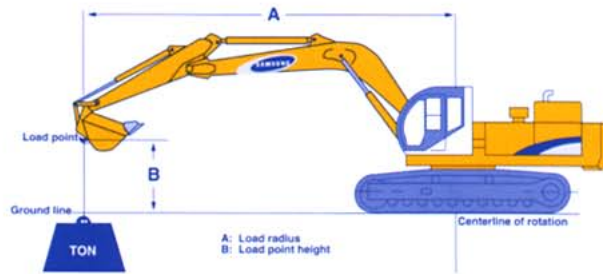
Bucket	Capacity		Width		No. of Teeth	Weight		Arm		
	yd <sup>3</sup>	m <sup>3</sup>	inches	mm		lb	kg	11'0" 3.35m	12'10" 3.90m	15'9" 4.8m
General Purpose	2.15	1.64	48	1220	6	2819	1279	A	A	A
	2.45	1.87	54	1370	6	2989	1356	A	A	B
	2.74	2.10	60	1525	7	3095	1404	A	C	D
	4.17	3.19	72	1830	8	5256	2384	B	D	D
Heavy Duty	2.15	1.64	48	1220	5	3320	1506	A	A	B
	2.45	1.87	54	1370	5	3578	1623	A	A	B
	2.74	2.10	60	1525	6	3771	1711	B	C	D
	4.17	3.19	72	1830	6	5864	2660	B	D	D

Material weights:

A - up to 3040 lb/yd<sup>3</sup> (1803 kg/m<sup>3</sup>)  
 B - up to 2520 lb/yd<sup>3</sup> (1494 kg/m<sup>3</sup>)

C - up to 2020 lb/yd<sup>3</sup> (1198 kg/m<sup>3</sup>)  
 D - Not usable

LIFTING CAPACITIES



SE 450 LC-2 LIFT CAPACITY CHART

BOOM = 23'0" (7.0 m)  
ARM = 11'0" (3.35 m)

BUCKET = SAE 2.56 cu yd (3307 lb)  
SHOE = 30" (750 mm)

LOAD POINT HEIGHT**	UNIT	LOAD RADIUS																
		5' 1.5 m		10' 3.0 m		15' 4.6 m		20' 6.1 m		25' 7.6 m		30' 9.1 m		MAXIMUM LOAD RADIUS				
		Front	Side	Front	Side	Front	Side	Front	Side	Front	Side	Front	Side	Front	Side	Radius		
30' 9.1 m	lb. kg															* 12983 * 5889	* 12983 * 5889	24.44 ft 7.45 m
25' 7.6 m	lb. kg									* 14711 * 6673	* 14711 * 6673					* 12097 * 5487	* 12097 * 5487	28.32 ft 8.63 m
20' 6.1 m	lb. kg									* 15704 * 7123	* 15704 * 7123	* 15011 6809	14348 6508	* 11851 * 5376	* 11851 * 5376	30.91 ft 9.42 m		
15' 4.6 m	lb. kg					* 27703 * 12566	* 27703 * 12566	* 20879 * 9471	* 20879 * 9471	* 17532 * 7953	* 17532 * 7953	* 15747 * 7143	* 14120 * 6405	* 12038 * 5460	* 12038 * 5460	32.53 ft 9.92 m		
10' 3.0 m	lb. kg					* 35782 * 16231	* 35782 * 16231	* 24814 * 11256	* 24814 * 11256	* 19694 * 8933	18646 8458	* 16879 * 7656	13739 6232	* 12618 * 5724	11333 5141	33.31 ft 10.15 m		
5' 1.5 m	lb. kg					* 36136 * 16391	* 36136 * 16391	* 28090 * 12742	25154 11410	* 21678 * 9833	17919 8128	* 17990 * 8160	13367 6063	* 13644 * 6189	11152 5059	33.32 ft 10.16 m		
GROUND LINE	lb. kg					* 41115 * 18650	38111 17287	* 29933 * 13578	24420 11077	* 23035 * 10449	17435 7909	* 18719 * 8491	13119 5951	* 15287 * 6934	11496 5215	32.56 ft 9.92 m		
-5' -1.5 m	lb. kg			* 30731 * 13940	* 30731 * 13940	* 41355 * 18759	38249 17350	* 30363 * 13773	34221 15523	* 23421 * 10624	17262 7830	* 18952 * 8597	13091 5938	* 17685 * 8022	12486 5664	30.98 ft 9.44 m		
-10' -3.0 m	lb. kg			* 47083 * 21357	* 47083 * 21357	* 33686 * 15280	* 33686 * 15280	* 29078 * 13190	24463 11096	* 22370 * 10147	17439 7910			* 18366 * 8331	14489 6572	28.42 ft 8.66 m		
-15' -4.6 m	lb. kg			* 45570 * 20671	* 45570 * 20671			* 25418 * 11530	25170 11417					* 18765 * 8512	18601 8437	24.58 ft 7.49 m		

SEE NOTES BELOW.

SE 450 LC-2 LIFT CAPACITY CHART

BOOM = 23'0" (7.0 m)  
ARM = 12'10" (3.9 m)

BUCKET = SAE 2.56 cu yd (3307 lb)  
SHOE = 30" (750 mm)

LOAD POINT HEIGHT**	UNIT	LOAD RADIUS																
		5' 1.5 m		10' 3.0 m		15' 4.6 m		20' 6.1 m		25' 7.6 m		30' 9.1 m		MAXIMUM LOAD RADIUS				
		Front	Side	Front	Side	Front	Side	Front	Side	Front	Side	Front	Side	Front	Side	Radius		
30' 9.1 m	lb. kg															* 12216 * 5541	* 12216 * 5541	26.73 ft 8.15 m
25' 7.6 m	lb. kg											* 12708 * 5764	* 12708 * 5764	* 11433 * 5186	* 11433 * 5186	30.31 ft 9.24 m		
20' 6.1 m	lb. kg									* 14869 * 6745	* 14869 * 6745	* 14304 * 6488	* 14304 * 6488	* 11134 * 5050	* 11134 * 5050	32.74 ft 9.98 m		
15' 4.6 m	lb. kg							* 19146 * 8685	* 19146 * 8685	* 16541 * 7503	* 16541 * 7503	* 15105 * 6852	14408 6535	* 11173 * 5068	* 11173 * 5068	34.27 ft 10.45 m		
10' 3.0 m	lb. kg					* 31671 * 14366	* 31671 * 14366	* 22828 * 10355	* 22828 * 10355	* 18589 * 8432	18439 8364	* 16237 * 7365	13777 6249	* 11514 * 5223	10549 4785	35.02 ft 10.67 m		
5' 1.5 m	lb. kg					* 37431 * 16979	36503 16558	* 26172 * 11872	24043 10906	* 20582 * 9336	17377 7882	* 17402 * 7894	16489 5979	* 12186 * 5528	10302 4673	35.03 ft 10.68 m		
GROUND LINE	lb. kg	* 21516 * 9760	* 21516 * 9760	* 28928 * 13122	* 28928 * 13122	* 40020 * 18153	35132 15936	* 28431 * 12896	22897 10386	* 22108 * 10028	16630 7543	* 18307 * 8304	12756 5786	* 13294 * 6030	10490 4758	34.31 ft 10.46 m		
-5' -1.5 m	lb. kg	* 32263 * 14634	* 32263 * 14634	* 40936 * 18569	* 40936 * 18569	* 40192 * 18231	34950 15853	* 29327 * 13303	22455 10186	* 22843 * 10362	16284 7386	* 18618 * 8445	12598 5714	* 15076 * 6838	11194 5078	32.80 ft 10.00 m		
-10' -3.0 m	lb. kg			* 47934 * 21743	* 47934 * 21743	* 38474 * 17452	35461 16085	* 28740 * 13036	22593 10248	* 22439 * 10178	16370 7425	* 17674 * 8017	12856 5831	* 17263 * 7830	12662 5743	30.40 ft 9.27 m		
-15' -4.6 m	lb. kg					* 34584 * 15687	* 34584 * 15687	* 26226 * 11896	23287 10563	* 20050 * 9095	17009 7715			* 17733 * 8044	15577 7066	26.86 ft 8.19 m		
-20' -6.1 m	lb. kg					* 27108 * 12296	* 27108 * 12296	* 19934 * 9042	* 19934 * 9042					* 17457 * 7918	* 17457 * 7918	21.60 ft 6.58 m		

- Notes:
1. Ratings are based on SAE J1097
  2. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity.
  3. Ratings marked \* are limited by hydraulic capacity.
  4. Lift Capacity will vary depending upon the actual weight of bucket or attachment.

**LIFTING CAPACITIES**



**SE 450 LC-2 LIFT CAPACITY CHART**

**BOOM = 23'0" (7.0 m)**  
**ARM = 15'9" (4.8 m)**

**BUCKET = SAE 2.56 cu yd (3307 lb)**  
**SHOE = 30" (750 mm)**

LOAD POINT HEIGHT**	UNIT	LOAD RADIUS																
		5' 1.5 m		10' 3.0 m		15' 4.6 m		20' 6.1 m		25' 7.6 m		30' 9.1 m		MAXIMUM LOAD RADIUS				
		Front	Side	Front	Side	Front	Side	Front	Side	Front	Side	Front	Side	Front	Side	Radius		
30' 9.1 m	lb. kg													* 7732 * 3507	* 7732 * 3507	* 6844 * 3104	* 6844 * 3104	30.32 ft 9.24 m
25' 7.6 m	lb. kg													* 11004 * 4991	* 11004 * 4991	* 6422 * 2913	* 6422 * 2913	33.52 ft 10.22 m
20' 6.1 m	lb. kg													* 11600 * 5262	* 11600 * 5262	* 6295 * 2855	* 6295 * 2855	35.73 ft 10.89 m
15' 4.6 m	lb. kg									* 13925 * 6316	* 13925 * 6316	* 12783 * 5798	* 12783 * 5798	* 6392 * 2899	* 6392 * 2899			37.13 ft 11.32 m
10' 3.0 m	lb. kg					* 27505 * 12476	* 27505 * 12476	* 20166 * 9147	* 20166 * 9147	* 16449 * 7461	* 16449 * 7461	* 14290 * 6482	13778 6250	* 6696 * 3037	* 6696 * 3037			37.82 ft 11.53 m
5' 1.5 m	lb. kg					* 35145 * 15942	* 35145 * 15942	* 24396 * 11066	* 24396 * 11066	* 18987 * 8613	18056 8190	* 15853 * 7191	13244 6007	* 7228 * 3279	* 7228 * 3279			37.83 ft 11.53 m
GROUND LINE	lb. kg			* 22605 * 10254	* 22605 * 10254	* 39830 * 18067	38647 17530	* 27629 * 12533	24583 11151	* 21104 * 9573	17307 7850	* 17195 * 7800	12800 5806	* 8054 * 3653	* 8054 * 3653			37.16 ft 11.33 m
-5' -1.5 m	lb. kg	* 21917 * 9942	* 21917 * 9942	* 29580 * 13417	* 29580 * 13417	* 41665 * 18899	37868 17177	* 29470 * 13368	23905 10843	* 22467 * 10191	16838 7638	* 18041 * 8183	12519 5679	* 9307 * 4222	9266 4203			35.78 ft 10.91 m
-10' -3.0 m	lb. kg	* 30058 * 13634	* 30058 * 13634	* 38642 * 17528	* 38642 * 17528	* 41270 * 18720	37853 17170	* 29815 * 13524	23716 10758	* 22806 * 10345	16680 7566	* 18037 * 8182	12463 5653	* 11282 * 5118	10402 4718			33.60 ft 10.24 m
-15' -4.6 m	lb. kg	* 39418 * 17880	* 39418 * 17880	* 50493 * 22904	* 50493 * 22904	* 38728 * 17567	* 38388 17413	* 28448 * 12904	23955 10866	* 21691 * 9839	16858 7647	* 16303 * 7395	12744 5781	* 14701 * 6668	12482 5662			30.44 ft 9.28 m
-20' -6.1 m	lb. kg			* 47802 * 21683	* 47802 * 21683	* 33344 * 15125	* 33344 * 15125	* 24556 * 11139	* 24556 * 11139	* 17968 * 8150	17524 7949			* 16321 * 7403	* 16321 * 7403			25.93 ft 7.90 m

SEE NOTES BELOW.

**SE 450 LC-2 LIFT CAPACITY CHART**

**BOOM = 20'8" (6.3 m)**  
**ARM = 8'4" (2.55 m)**

**BUCKET = SAE 2.56 cu yd (3307 lb)**  
**SHOE = 30" (750 mm)**

LOAD POINT HEIGHT**	UNIT	LOAD RADIUS													
		5' 1.5 m		10' 3.0 m		15' 4.6 m		20' 6.1 m		MAXIMUM LOAD RADIUS					
		Front	Side	Front	Side	Front	Side	Front	Side	Front	Side	Radius			
30' 9.1 m	lb. kg												* 22023 * 9990	* 22023 * 9990	18.51 ft 5.64 m
25' 7.6 m	lb. kg												* 20092 * 9114	* 20092 * 9114	23.42 ft 7.14 m
20' 6.1 m	lb. kg									* 20731 * 9404	* 20731 * 9404	* 18449 * 8368	17425 7904		26.51 ft 8.08 m
15' 4.6 m	lb. kg					* 30955 * 14041	* 30955 * 14041	* 23666 * 10735	* 23666 * 10735	* 17780 * 8065	15230 6908				28.38 ft 8.65 m
10' 3.0 m	lb. kg							* 27118 * 12301	26998 12246	* 17844 * 8094	14224 6452				29.28 ft 8.92 m
5' 1.5 m	lb. kg							* 29845 * 13538	25893 11745	* 18573 * 8425	14068 6381				29.29 ft 8.93 m
GROUND LINE	lb. kg					* 42789 * 19409	39629 17976	* 31002 * 14063	25306 11479	* 19889 * 9022	14743 6687				28.42 ft 8.66 m
-5' -1.5 m	lb. kg					* 40609 * 18420	39874 18087	* 30185 * 13692	25246 11452	* 19912 * 9032	16531 7498				26.58 ft 8.10 m
-10' -3.0 m	lb. kg			* 47141 * 21383	* 47141 * 21383	* 35652 * 16172	* 35652 * 16172	* 26490 * 12016	25728 11670	* 19227 * 8721	* 19227 * 8721				23.54 ft 7.17 m

- Notes:
1. Ratings are based on SAE J1097
  2. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity.
  3. Ratings marked \* are limited by hydraulic capacity.
  4. Lift Capacity will vary depending upon the actual weight of bucket or attachment.

## SE450<sub>LC-2</sub> STANDARD and OPTIONAL EQUIPMENT

<b>ENGINE</b> 24 volt starting system ● 780 cold cranking amps @ 0°F (32°C) ● Air cleaner w/precleaner, dust ejector ● Air filter, dual element, dry type ● Alternator, 50 amp ● Antifreeze ● Auto deceleration button, one touch ● Cold weather starting aid ● Coolant auxiliary tank ● Cummins engine ● Engine air heater, electric ▲ Engine fan guard ● Fuel filling pump, automatic ▲ Fuel warmer ▲ Hinged side doors ● Hood, tiltable, includes locks ● Master electrical disconnect switch ● Muffler ● Oil filter, cartridge type ●	Triple grouser shoes 29.5" (750mm) ● 24" (600mm) ▲ 35.5" (900mm) ▲  <b>OPERATOR'S AREA</b> Air conditioning ● AM/FM stereo cassette radio ● Cigarette lighter ● Clock, digital ● Coat hook ● Diagnostic system, automatic Main power failure ● Detection engine speed sensor ● Proportional pressure reducing valve ● High-speed operation function ● Low-speed operation function ● CPU self-diagnosis ● Front windshield 3 Speed wiper w/washer ● Removable lower front window ● Roll up front windshield ● Heater, 2 speed ● Horn ● Hourmeter ● Hydraulic safety lock ● Illuminated monitor display ● Lockable door ● Mirrors, 2 rearview ● Mode selection 3 Operating modes ● 2 Travel speed ● Monitor System Battery charge warning light ● Engine coolant temperature gauge ● Engine oil pressure ● Fuel level warning light ● Headlights & boom light indicators ● Hydraulic oil temperature gauge ● Master switch indicator light ● Safety glass, tinted ● Suspension seat, 8-way w/seat belt ●	Sound isolation mounted cab ● Sun visor ● Travel pedals w/hand levers ●  <b>FRONT ATTACHMENTS</b> Booms 23'0" (7.0m) ● 20'8" (6.3m) ▲ Arms 11'0" (3.35m) ● 12'10" (3.9m) ▲ 15'9" (4.8m) ▲ 8'4" (2.55m) ▲ Attachment quick coupler ▲ Buckets General purpose ▲ Heavy duty ▲ Severe duty, plate lip ▲ Side cutters ▲ Teeth ▲ Hydraulic breaker piping kit ▲ Single ripper tooth ▲  <b>MISCELLANEOUS</b> Counterweight ● Electric power socket, external ● Grease gun ▲ Grease injection points, centralized ● Lights Boom-4 ● Front frame-2 ● Operator's manual ● Parts manual ● Tailights, recessed ● Tool compartment ● Tool kit ▲
<b>HYDRAULIC SYSTEM</b> 7 Spool control valve ● Auxiliary hydraulic valve ● Hydraulic oil cooler ● One-touch power up button ● Pilot circuit - gear pump ● Swing and travel motor w/auto disc brake and cushion valve ● Variable displacement pump, dual position ●		
<b>UNDERCARRIAGE</b> Anti-slip step ● Hydrostatic drive ● Track adjusters, hydraulic ● Track frames, reinforced ● Track guide, center mounted ● Track rollers ● Upper-2 ● Lower-10 ● Travel motor guards ●		

KEY ● Standard Equipment-North American Configuration ▲ Optional Equipment

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