

DOOSAN DAEWOO HYDRAULIC EXCAVATOR

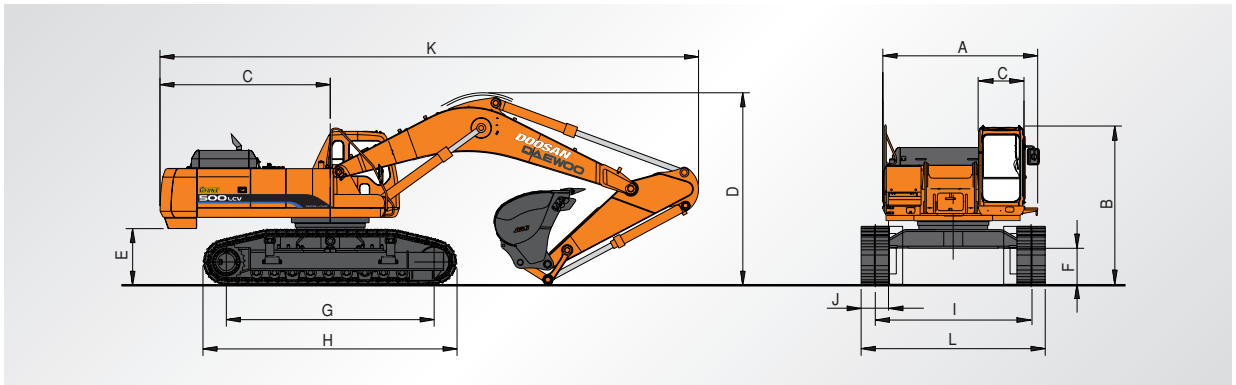
GIANT
SOLAR **500 LCV**

DOOSAN DAEWOO NEW CRAWLER TYPE

- Operating Weight : 49,900 kg (110,000 lb)
- Bucket Capacity (PCSA) : 2.01~3.6m³ (2.63~4.71cu .yd)
 - Width for 3.2m³(PCSA) with cutter : 2,101mm(6'11")
 - without cutter : 2,024mm(6'8")
 - Width for 3.6m³(PCSA) with cutter : 2,306mm(7'7")
 - without cutter : 2,229mm(7'4")
- Rated Engine Power : 312HP / 2,000 rpm
232kw / 2,000 rpm

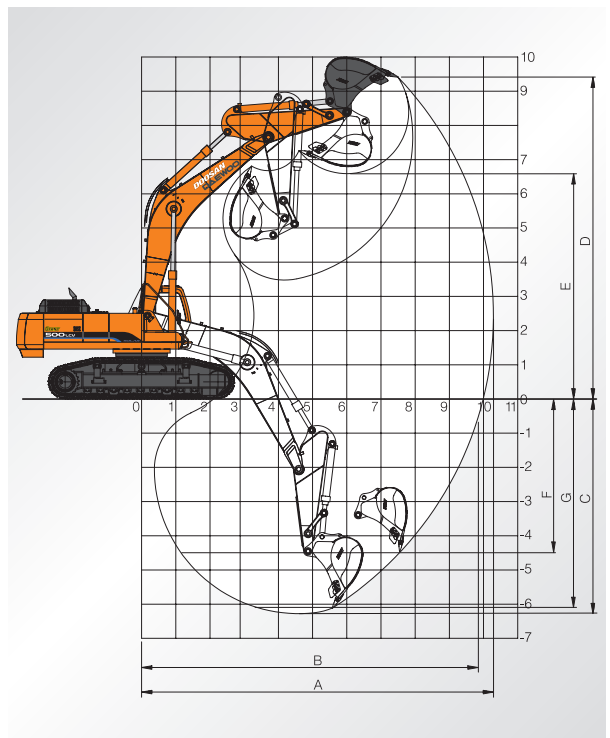


Dimensions (6.3m(20' 8") Boom, 2.4m(7' 10") Arm, 600mm(24") Shoe)



	S500LC-V Giant
A Overall width of upper structure/with cat walk	2,990mm(9'10")/3,278mm(10'9")
B Overall height of cab	3,350mm(11')
C Tail swing radius	3,665mm(12')
D Overall height(2.4m arm/2.9m arm)	4,140mm(13'7")/4,250mm(13'11")
E Clearance under counterweight	1,220mm(4')
F Ground clearance	760mm(2'6")
G Tumbler distance	4,470mm(14'8")
H Track length	5,465mm(17'11")
I Track gauge (Extend/Retract)	3,300mm(10'10")/2,740mm(8'12")
J Track shoe width	600mm(24")
K Overall length(2.4m arm/2.9m arm)	11,590mm(38')/11,390mm(37'4")
L Overall track width with 600mm(24") shoe	3,900mm(12'9")/3,340mm(10'11")

Working ranges



Digging forces(Maximum radial tooth forces)

	2.4m (7'10")Arm	2.9m (9'6")Arm
Bucket digging force *	27,300 kgf	27,500 kgf
	268 KN	270 KN
	60,200 lbf	60,600 lbf
Arm digging force *	29,400 kgf	25,400 kgf
	288 KN	249 KN
	64,800 lbf	56,000 lbf

*At power boost

Boom length	6.3m (20'8")	
	2.4m (7'10")	2.9m (9'6")
A. Max. digging reach	10,290mm (33' 9")	10,720mm (35'2")
B. Max. digging reach at ground level	9,990mm (32' 9")	10,430mm (34'3")
C. Max. digging depth	6,280mm (26' 7")	6,780mm (22'3")
D. Max. digging height	9,410mm (30' 10")	9,540mm (31'4")
E. Max. dumping height	6,590mm (21' 7")	6,680mm (21'11")
F. Max. vertical wall digging depth	521mm (1' 9")	1,090mm (3'7")
G. Max. digging depth (8' level)	6,050mm (21' 7")	6,570mm (21' 7")

Technical Data



Engine

Model DOOSAN DE12TIS
Displacement (Total dis. volume) 11,051cc (2.9gallon)
Rated Power/R.P.M 316 PS/232KW (2,000rpm)



Hydraulic system

e-EPOS (Electronic Power Optimizing System) allows the operator to maximize work efficiency over a full range of operating conditions and to minimize fuel consumption.

- Hydraulic system assures fully independent and combined operations.
- Automatic 2 speed travel system for high traction force and travel speed.
- Cross-sensing and fuel saving pump system.
- Auto idle system.
- 2-Working / 2-power mode selection system.
- Computer aided engine-pump control.

Pumps type variable displacement axial piston

Max. flow rate 2 × 359 ℓ / min (2 × 94.8 gallon)

Main relief set pressure

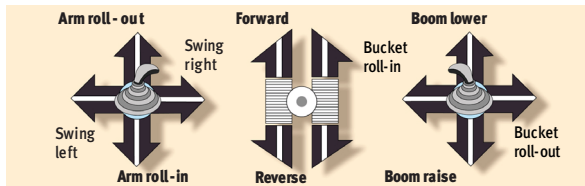
Boom/Arm/ Bucket Normal : 320 kgf/cm² (4,550 psi)
 Power Boost : 350 kgf/cm² (4,970 psi)
 Travel circuit 320 kgf/cm² (4,550 psi)



Controls. 2 implement levers

Lever control type Hydraulic pilot

Lever pattern ISO



Front

Arm and boom have been much more strengthened than S450LC-V GIANT.

Buckets

Capacity		Width		Weight	Recommendation	
PCSA, heaped	CECE, heaped	Without side cutters	With side cutters		6.3m (20'8") Boom	
					2.4m (7'10") Arm	2.9m (9'6") Arm
2.01m ³ (2.63yd ³)	1.8m ³	1,374mm (54")	1,451mm (57")	1,970kg (4,343lb)	A	A
2.85m ³ (3.73yd ³)	2.55m ³	1,824mm (72")	1,901mm (75")	2,420kg (5,335lb)	A	A
3.2m ³ (4.19yd ³)	2.87m ³	2,024mm (80")	2,101mm (83")	2,675kg (5,897lb)	A	A
3.6m ³ (4.71yd ³)	3.2m ³	2,229mm (88")	2,306mm (91")	2,860kg (6,305lb)	A	B

A. Suitable for materials with density of 2,000 kg/m³ (3,370 lb / cu.yd) or less
 B. Suitable for materials with density of 1,600 kg/m³ (2,700 lb / cu.yd) or less



Undercarriage

Tractor type undercarriage. Heavy-duty track frame, all welded stress-relieved structure. Top grade materials are used for toughness. Side frames are welded, securely and rigidly, to the track frame. Lifetime-lubricated track rollers, idlers with floating seals and sprockets. Track shoes of induction-hardened rolled alloy with triple grousers. Specially heat-treated connecting pins. Hydraulic track adjusters with shock-absorbing recoil springs.

Using retract chasis ≥ 50 tons class to achieve high stability and productivity.

Shoe width 600mm (1'12")

Tumbler distance 4,470mm (14'8")



Weight

Equipped with 6.3m(20'8")boom, 2.4m(7'10")arm, and 3.2m³(4.19yd³; PCSA heaped) bucket and 600mm(24") shoes.

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	600mm (24")	49,900kg (110,000lb)	0.86kg/cm ² (84kpa, 12.2psi)
	750mm (30")	50,600kg (111,500lb)	0.70kg/cm ² (68kpa, 9.9psi)
	800mm (32")	50,900kg (112,200lb)	0.66kg/cm ² (64kpa, 9.4psi)
	900mm (35")	51,400 kg (113,300lb)	0.59kg/cm ² (58kpa, 8.4psi)

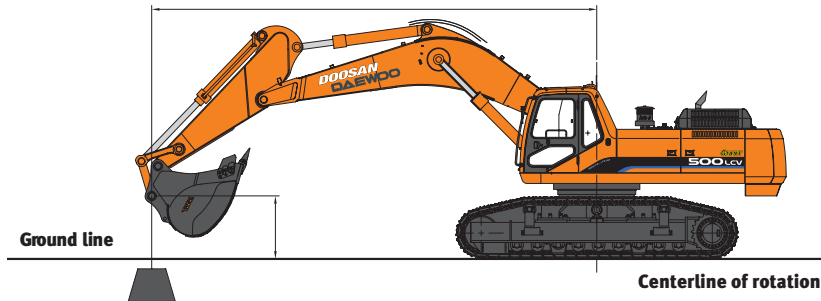


Service refill capacities

	Liters	US gal	Imp gal
Fuel tank	620	164	136.4
Cooling system	58	15.3	12.8
Lubrication	Liters	US gal	Imp gal
Engine oil	28	7.4	6.2
Swing drive (each)	4.0	1.1	0.9
Final drive (each)	6.0	1.6	1.3
Hydraulic tank	265	70	58.3

Lifting Capacities

Standard



Boom : 6.3m (20'7")
 Arm : 2.4m (7'9")
 Bucket: PCSA 3.2m³ (CECE 2.87m³)
 Shoe : 600mm

Metric

Unit : 1,000 kg

A (m)	2		3		4		5		6		7		8		Max. Reach		A (m)		
	☐	☐☐	☐	☐☐	☐	☐☐	☐	☐☐	☐	☐☐	☐	☐☐	☐	☐☐	☐	☐☐			
7												*11.26	*11.26			*11.26	*11.26	7.00	
6												*11.64	*11.64			*11.31	*11.31	7.57	
5							*15.79	*15.79	*13.68	*13.68	*12.32	*12.32					*11.46	10.91	7.98
4							*18.07	*18.07	*15.05	*15.05	*13.16	*13.16	*11.91	10.67			*11.68	10.15	8.24
3							*20.22	*20.22	*16.40	*16.40	*14.02	13.00	*12.42	10.48			*11.97	9.72	8.37
2							*21.80	21.64	*17.51	16.19	*14.76	12.71	*12.87	10.29			*12.30	9.56	8.38
1					*23.53	*23.53	*22.60	21.23	*18.22	15.87	*15.26	12.49	*13.15	10.15			*12.69	9.65	8.26
0(Ground)					*28.49	*28.49	*22.66	21.03	*18.44	15.68	*15.43	12.35	*13.15	10.06			*13.11	10.02	8.02
-1			*23.66	*23.66	*27.21	*27.21	*22.06	21.00	*18.13	15.62	*15.16	12.29					*13.58	10.77	7.64
-2	*25.80	*25.80	*30.65	*30.65	*25.30	*25.30	*20.80	*20.80	*17.21	15.66	*14.29	12.34					*14.05	12.11	7.09
-3	*32.27	*32.27	*27.06	*27.06	*22.56	*22.56	*18.73	*18.73	*15.47	*15.47							*14.45	*14.45	6.33
-4			*21.94	*21.94	*18.59	*18.59	*15.43	*15.43									*14.56	*14.56	5.28

Feet

Unit : 1,000 lb

A (ft)	10'		15'		20'		25'		Max. Reach		A (ft)		
	☐	☐☐	☐	☐☐	☐	☐☐	☐	☐☐	☐	☐☐			
20'											*24.91	*24.91	24' 8"
15'			*40.33	*40.33	*31.02	*31.02	*26.40	25.83	*25.46	23.23			26' 7"
10'			*49.68	*49.68	*35.42	*35.42	*28.52	25.03	*26.35	21.47			27' 5"
5'			*54.83	54.75	*38.75	34.45	*30.25	24.32	*27.51	21.09			27' 4"
0			*55.01	53.98	*39.92	33.72	*30.77	23.89	*28.91	22.10			26' 4"
-5'	*61.81	*61.81	*51.61	*51.61	*38.42	33.60			*30.48	25.09			24' 2"
-10'	*58.70	*58.70	*44.42	*44.42	*33.20	*33.20			*31.90	*31.90			20' 8"
-15'									*31.24	*31.24			14' 8"

- Note 1. The load point is a hook located on the back of the bucket.
 2. *Rated loads are based on hydraulic capacity.
 3. Rated loads do not exceed 87% of hyd. capacity or 75% of tipping capacity.

☐ : Rating over front
 ☐☐ : Rating over side or 360 degree
 0 : Ground

Option

Metric

Boom : 6.3m (20'7") Arm : 2.9m (9' 5") Bucket : PCSA 3.2m³(CECE 2.87m³) Shoe : 600mm (24") Unit : 1,000kg

B (m)	A (m)		2		3		4		5		6		7		8		Max. Reach				
	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	A (m)		
7																			*9.92	*9.92	7.60
6													*10.65	*10.65	*10.22	*10.22	*10.18	*10.18			8.13
5											*12.55	*12.55	*11.41	*11.41	*10.64	*10.64	*10.36			9.75	8.50
4						*21.14	*21.14	*16.61	*16.61	*14.01	*14.01	*12.34	*12.34	*11.21	10.67	*10.60				9.13	8.75
3						*25.17	*25.17	*18.97	*18.97	*15.50	*15.50	*13.31	13.03	*11.82	10.45	*10.88				8.77	8.87
2						*27.92	*27.92	*20.90	*20.90	*16.81	16.28	*14.19	12.71	*12.39	10.24	*11.22				8.62	8.88
1						*25.65	*25.65	*22.12	21.36	*17.76	15.90	*14.86	12.45	*12.82	10.07	*11.59				8.68	8.77
0 (Ground)						*15.79	*15.79	*27.73	*27.73	*22.60	21.05	*18.25	15.65	*15.23	12.27	*13.02	9.95	*12.02		8.96	8.54
-1	*16.24	*16.24	*21.01	*21.01	*28.25	*28.25	*22.39	20.93	*18.24	15.52	*15.21	12.17	*12.87	9.88	*12.48				9.54	8.18	
-2	*21.40	*21.40	*26.83	*26.83	*26.73	*26.73	*21.52	20.95	*17.66	15.51	*14.69	12.16							12.98	10.55	7.68
-3	*26.99	*26.99	*30.50	*30.50	*24.43	*24.43	*19.91	*19.91	*16.38	15.60									13.49	12.29	6.99
-4	*32.83	*32.83	*25.89	*25.89	*21.09	*21.09	*17.30	*17.30	*14.08	*14.08									13.91	13.91	6.05
-5			*19.42	*19.42	*16.13	*16.13													13.90	13.90	4.72

Feet

Unit : 1,000 lb

B (ft)	A (ft)		10'		15'		20'		25'		Max. Reach			
	□	□	□	□	□	□	□	□	□	□	□	□	A (ft)	
25'												*21.56	*21.56	23' 55"
20'									*22.73	*22.73	*22.41	*22.41	26' 52"	
15'							*28.66	*28.66	*24.65	*24.65	*23.05	20.83	28' 29"	
10'				*46.33	*46.33	*33.46	*33.46	*27.09	25.01	*23.96		19.35	29' 10"	
5'				*53.23	*5.23	*37.46	34.57	*29.26	24.22	*25.11		19.00	29' 01"	
0	*35.66	*35.66	*55.24	54.06	*39.49	33.64	*30.39	23.67	*26.50		19.76		28'	
-5'	*53.64	*53.64	*53.28	*53.28	*38.99	33.32	*29.71	23.48	*28.09		22.05		26' 1"	
-10'	*66.09	*66.09	*47.58	*47.58	*35.28	33.56			*29.79		27.34		22' 10"	
15'	*49.09	*49.09	*36.47	*36.47					*30.89		*30.89		17' 57"	

Metric

Boom : 6.3m (20'7") Arm : 2.4m (7' 9") Bucket : PCSA 3.6m³(CECE 3.2m³) Shoe : 600mm (24") Unit : 1,000kg

B (m)	A (m)		2		3		4		5		6		7		8		Max. Reach				
	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	A (m)		
7													*11.10	*11.10					*11.10	*11.10	7.00
6													*11.49	*11.49					*11.15	*11.15	7.57
5									*15.63	*15.63	*13.52	*13.52	*12.17	*12.17					*11.30	10.78	7.98
4									*17.91	*17.91	*14.89	*14.89	*13.01	*13.01	*11.76	10.54	*11.53		10.02		8.24
3									*20.05	*20.05	*16.24	*16.24	*13.86	12.87	*12.27	10.34	*11.81		9.59		8.37
2									*21.62	21.49	*17.34	16.05	*14.60	12.58	*12.71	10.16	*12.14		9.42		8.38
1									*23.40	*23.40	*22.42	21.07	*18.05	15.72	*15.10	12.35	*12.99	10.01	*12.53	9.51	8.26
0 (Ground)									*28.29	*28.29	*22.48	20.87	*18.27	15.53	*15.26	12.21	*12.99	9.92	*12.95	9.89	8.02
-1				*23.53	*23.53	*27.02	*27.02	*21.88	20.84	*17.96	15.47	*14.99	12.15						13.41	10.64	7.64
-2	*25.67	*25.67	*30.43	*30.43	*25.11	*25.11	*20.62	*20.62	*17.04	15.52	*14.12	12.20							13.88	11.97	7.09
-3	*32.03	*32.03	*26.86	*26.86	*22.37	*22.37	*18.55	*18.55	*15.30	*15.30									14.29	14.29	6.33
-4			*21.74	*21.74	*18.41	*18.41	*15.26	*15.26											14.39	14.39	5.28

Feet

Unit : 1,000 lb

B (ft)	A (ft)		10'		15'		20'		25'		Max. Reach			
	□	□	□	□	□	□	□	□	□	□	□	□	A (ft)	
20'												*24.57	*24.57	24' 8"
15'				*39.97	*39.97	*30.68	*30.68	*26.06	25.54	*25.11		22.94		26' 7"
10'				*49.29	*49.29	*35.06	*35.06	*28.17	24.73	*26.00		21.18		27' 5"
5'				*54.42	54.38	*38.38	34.14	*29.89	24.02	*27.16		20.80		27' 4"
0				*54.59	53.61	*39.55	33.40	*30.42	23.59	*28.56		21.80		26' 4"
-5'	*61.52	*61.52	*51.20	*51.20	*38.04	33.28			*30.12		24.78		24' 2"	
-10'	*58.26	*58.26	*44.02	*44.02	*32.83	*32.83			*31.53		*31.53		20' 8"	
15'									*30.87		*30.87		14' 8"	

Note 1. The load point is a hook located on the back of the bucket.
 2. *Rated loads are based on hydraulic capacity.
 3. Rated loads do not exceed 87% of hyd. capacity or 75% of tipping capacity.

□ : Rating over front
 □ : Rating over side or 360 degree
 0 : Ground

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* Specifications are subject to change without prior notice

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