



# TEREX

# TXC 470LC-1

## Hydraulic Excavator

<b>OPERATING WEIGHT</b>	104,900 lbs (47,600 kg)
<b>NET ENGINE POWER</b>	312 hp (232 kW) @ 2,000 rpm
<b>MAX DIG DEPTH</b>	25' 6" (7,790 mm)
<b>MAX REACH</b>	39' 8" (12,100 mm)



HYDRAULIC EXCAVATOR  
**TXC 470LC-1**

### FEATURES

- Powerful, quiet, fuel efficient, turbocharged USA EPA Tier 2 compliant diesel engine maximizes power output and utilization
- e-EPOS System uses variable displacement piston pumps ensuring high efficiency and lower fuel consumption
- Swing anti-rebound valve assures quick, precise, and smooth directional stops during dumping or cradling
- Exceptional bucket break-out and radial tooth forces for toughest digging
- Spacious, comfortable cab provides excellent visibility and ergonomic operating environment
- Advanced graphic display LCD information monitor panel makes troubleshooting easier, simplifies machine performance record keeping
- Standard equipped 3-switch joystick control and hydraulic piping to boom base facilitate installation of most attachments
- Equipped to maximize operator comfort, efficiency and performance
- More standard features to make this TEREX hydraulic excavator the most productive ever

## Specifications

Engine	
Model	DAEWOO DE12TIS
Type	Water-cooled, 4-cycle, direct injection, aspiration, turbocharged, air-to-air intercooled. USA EPA Tier 2 compliant.
No. of cylinders	6
Rated flywheel horsepower	
DIN 6271, net	316 PS (232 kW) @ 2,000 rpm
SAE J1349, net	312 HP (232 kW) @ 2,000 rpm
Piston displacement	675 cu. in. (11,051 cc)
Maximum torque	962 lbf. ft. (1,303 Nm) @ 1,400 rpm
Bore and stroke	4.8" x 6.1" (123 mm x 155 mm)
Starting system	24V electric motor
Batteries	2 x 12V x 150 AH

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.	
<b>Main pumps</b>	2 variable displacement axial piston pumps.
Max. oil flow	2 x 94 gpm (2 x 359 L/min)
<b>Pilot pump</b>	Gear pump
Max. oil flow	6.3 gpm (24 L/min)
<b>Swing motor</b>	
Relief valve	3,920 psi (275 bar)
<b>Main relief valves</b>	
Boom/Stick/Bucket	Normal: 4,550 psi (314 bar) Power Boost: 4,970 psi (343 bar)
Travel circuit	4,550 psi (314 bar)

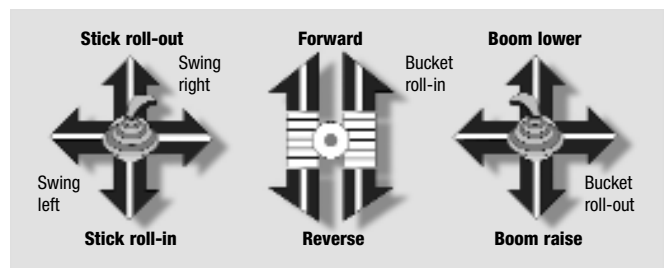
Hydraulic Cylinders		
High-strength piston rods and tubes are used. Cylinder cushion mechanism is provided for all cylinders to minimize shock during operation and extend cylinder component life.		
<b>Cylinders</b>	<b>Qty</b>	<b>Bore x Rod dia x Stroke</b>
Boom	2	6.7" x 4.5" x 63" (170 x 115 x 1,610 mm)
Stick	1	7.5" x 5.1" x 78" (190 x 130 x 1,980 mm)
Bucket	1	6.7" x 4.5" x 52.3" (170 x 115 x 1,325 mm)

Superstructure Revolving Frame
Deep full-reinforced box section constructed of heavy gauge steel plates.

Operator's Cab
Cab is independent and roomy. 4 side safety glass windows give excellent visibility. Front window slides up and stores in the roof and side window can be opened for ventilation. Fully adjustable suspension seat. Air conditioner. ISO standard cab.

Noise Levels (dynamic value)	
<b>LwA External noise</b>	
<b>Guaranteed Sound Power Level</b>	<b>108 dB(A)</b> (2,000/14/EC)
<b>Measured Sound Power Level</b>	<b>107 dB(A)</b> (2,000/14/EC)
<b>LpA Operator Noise</b>	<b>72 dB(A)</b> (ISO 6396)

Controls - 2 Implement Levers
Pilot pressure control type. Right lever is boom and bucket control, left lever for swing and stick control.



2 Travel Pedal with Levers
Pilot pressure control type. Independent drive at each track allows counter-rotation of the tracks. Levers are detachable.

Swing Mechanism	
High-torque, axial piston motor with planetary reduction gear in oil bath. Swing assembly is single row, shear type ball bearing with induction-hardened internal gear. Internal gear and pinion gear immersed in lubricant. Swing parking brake is spring-set, hydraulic-released disc type. A two position swing lock secures the superstructure for transportation.	
Swing speed	0 to 10.3 rpm
Rear swing radius	12' (3,665 mm)

Drive	
Each track is driven by an independent, high-torque, axial piston motor through planetary reduction gearing. Two levers or foot pedal control provide smooth travel or counter-rotation upon demand.	
Travel speed (High/Low)	3.1/1.9 mph (5.0/3.1 km/h)
Maximum traction force	74,080 lbf (330kN)
Gradeability	35° (70%) continuous

Brakes
Two oil disc brakes on final drive input shafts. Parking brake is spring-set, hydraulic-released disc type.

## Specifications

### Undercarriage

Tractor type undercarriage. Heavy-duty track frame, all welded stress-relieved structure. The highest grade materials are used for toughness. Side frames are welded, securely and rigidly, to the track frame. Lifetime-lubricated track rollers, idlers and sprockets with floating seals reduce field service requirements. Track shoes of induction-hardened rolled alloy with triple grousers ensure long life under the harshest applications. Specially heat-treated connecting pins reduce wear. Hydraulic track adjusters with shock-absorbing recoil springs are standard.

#### Number of rollers and shoes (each side) ground contact area

Upper rollers 3

#### (Standard Shoe)

Lower rollers 9

Track shoes 53

Overall track length 17' 11" (5,465 mm)

### Weight

Equipped with 23' 4" (7.1 m) boom, 11' 0" (3.5 m) stick, and 2.80 yd<sup>3</sup>; PCSA heaped (2.15 m<sup>3</sup>) bucket.

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	24" (600 mm)	103,400 lb. (46,900 kg)	11.5 psi (79 kpa)
Triple grouser	30" (750 mm)	104,900 lb. (47,600 kg)	9.4 psi (65 kpa)
Triple grouser	32" (800 mm)	105,600 lb. (47,900 kg)	8.8 psi (61 kpa)
Triple grouser	36" (900 mm)	106,700 lb. (48,400 kg)	7.9 psi (55 kpa)

### Service Refill Capacities

	U.S. gal	Liters
Fuel tank	164	620
Cooling system	15.3	58

Lubrication	U.S. gal	Liters
Engine oil	7.4	28
Swing drive (each)	1.1	4
Final drive (each)	1.6	6
Hydraulic system	129.5	490
Hydraulic tank	70	265

### Buckets

Capacity PCSA heaped	Width without side cutters	Width with side cutters	Weight	Stick Recommendation	
				11' 0" (3.35 m)	13' 1" (4.0 m)
1.95 yd <sup>3</sup> (1.5 m <sup>3</sup> )	61" (1,546 mm)	65" (1,655 mm)	2,665 lb. (1,209 kg)	–	–
2.35 yd <sup>3</sup> (1.8 m <sup>3</sup> )	54" (1,372 mm)	58" (1,465 mm)	3,820 lb. (1,733 kg)	A	A
2.80 yd <sup>3</sup> (2.15 m <sup>3</sup> )	63" (1,588 mm)	66" (1,681 mm)	4,239 lb. (1,923 kg)	A	B
3.12 yd <sup>3</sup> (2.39 m <sup>3</sup> )	68" (1,732 mm)	72" (1,825 mm)	4,499 lb. (2,041 kg)	B	B
3.73 yd <sup>3</sup> (2.86 m <sup>3</sup> )	80" (2,022 mm)	83" (2,115 mm)	5,055 lb. (2,293 kg)	B	C

A. Suitable for materials with density of 3,370 lb./cu.yd. (2,000 kg/m<sup>3</sup>) or less

B. Suitable for materials with density of 2,700 lb./cu.yd. (1,600 kg/m<sup>3</sup>) or less

C. Suitable for materials with density of 1,850 lb./cu.yd. (1,100 kg/m<sup>3</sup>) or less

## Standard Equipment

### Hydraulic System

Boom and stick flow regeneration • Boom and stick holding valves • Swing anti-rebound valves • Spare ports (valve) • One-touch power boost

### Cab and Interior

All weather sound suppressed cab with suspension type mounts • Air conditioner (heavy duty) and heater/ defroster • Adjustable suspension seat with head rest and adjustable arm rest • Pull-up type front window and removable lower front window with storage brackets in cab • Roof hatch/cover • Cab light • Intermittent windshield wiper • Cigar lighter and ashtray • Cup holder • Hot and cold storage container • Graphic LCD display monitor • Fuel consumption controller • AM/FM Radio and cassette player • Remote radio ON/OFF switch • 12V spare power socket • Serial communication port for laptop PC interface • Joystick levers with 3 switches

### Other

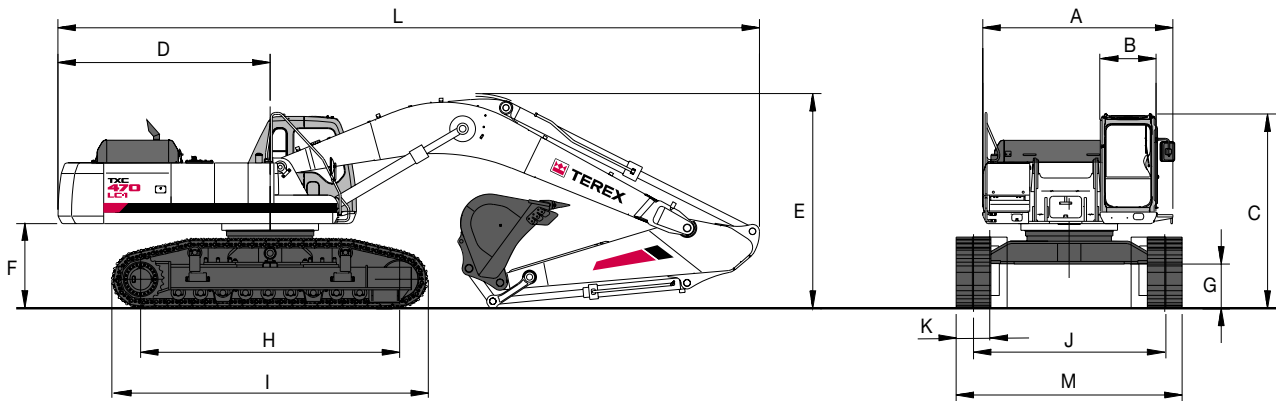
Large handrails and steps • Punched grid-type metal anti-slip upperstructure plates • Seat belt • Sun roof (hatch) • Hydraulic safety lock lever • Safety glass • Manual hammer mounted in cab for emergency use • Right and left rearview mirrors • Travel alarm • Heavy-duty fan guard • Dual element air cleaner • Pre-cleaner • Water separator • Double fuel filter • Radiator dust screen • Engine overheat prevention system • Engine restart prevention system • Self-diagnostic system • Heavy-duty alternator (24V, 80 amps) • Electric horn • Halogen working lights (frame mounted 2, boom mounted 2) • Hydraulic track adjuster • Sealed and greased track links • Track guards

## Optional Equipment

Sun visor • Cab top/front guard (ISO 10262, FOGS standard) • Rotating beacon • Piping for hammer (one way) • Piping for optional implement rotation • Additional work lights on the cab (2 front lamps, 4 front and 2 rear lamps) • Electric fuel supply pump

# Hydraulic Excavator TXC 470LC-1

**Dimensions: 23' 4" (7.1 m) Boom, 11' 0" (3.35 m) Stick, 24" (600 mm) Shoe**



## Dimensions

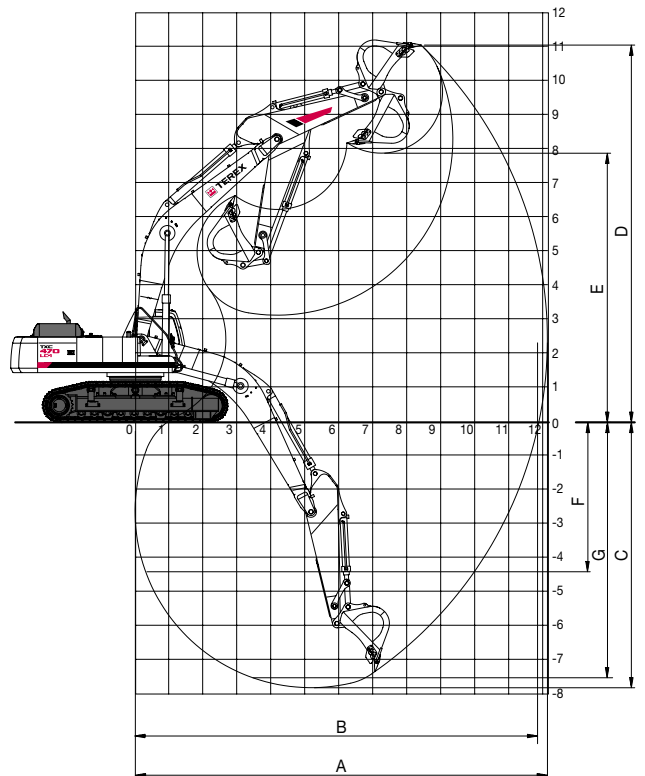
A Overall width of upperstructure/with catwalk	9' 10" (2,990 mm)/10' 9" (3,278 mm)
B Overall width of cab	3' 2" (960 mm)
C Overall height of cab	11' 0" (3,350 mm)
D Tail swing radius	12' 0" (3,665 mm)
E Overall height	12' 1" (3,705 mm)
F Clearance under counterweight	4' 9" (1,460 mm)
G Ground clearance	2' 6" (760 mm)
H Idler to sprocket distance	14' 8" (4,470 mm)
I Track length	17' 11" (5,465 mm)
J Track gauge	10' 10" (3,300 mm)/9' 0" (2,740 mm)
K Track shoe width	24" (600 mm)
L Overall length	39' 9" (12,110 mm)
M Overall track width with 24" (600 mm) shoe	12' 9" (3,900 mm)/10' 11" (3,340 mm)

## Digging Forces (Maximum radial tooth forces)

Stick	11' 0" (3.35 m)	13' 1" (4.0 m)
Bucket digging force*	59,900 lbf (267 kN)	60,600 lbf (270 kN)
Stick digging force*	48,600 lbf (216 kN)	43,800 lbf (195 kN)

\*At power boost

## Working Ranges



## Boom Length: 23' 4" (7.1 m)

Stick length	11' 0" (3.35 m)	13' 1" (4.0 m)
A. Max. digging reach	39' 8" (12,100 mm)	41' 6" (12,650 mm)
B. Max. digging reach at ground level	38' 11" (11,850 mm)	40' 9" (12,410 mm)
C. Max. digging depth	25' 6" (7,790 mm)	27' 8" (8,420 mm)
D. Max. digging height	36' 4" (11,080 mm)	36' 10" (11,230 mm)
E. Max. dumping height	25' 11" (7,900 mm)	26' 6" (8,070 mm)
F. Max. vertical wall digging depth	14' 4" (4,370 mm)	16' 2" (4,930 mm)
G. Max. digging depth (8' level)	25' 2" (7,660 mm)	27' 2" (8,290 mm)



## Lifting Capacities

Boom: 23' 4"    Stick: 11' 0"    Bucket: PCSA 2.80 yd <sup>3</sup> Shoe: 30"    Weight: 104,914 lbs.													
Height	Reach										unit: 1000 lb.		
	10ft F	10ft S	15ft F	15ft S	20ft F	20ft S	25ft F	25ft S	30ft F	30ft S	Max. F	Max. S	Reach (ft)
25 ft											*14.59	*14.59	@29.60
20 ft							*21.41	*21.41	*19.98	17.37	*15.12	*15.12	@32.00
15 ft	*61.15	*61.15			*28.49	*28.49	*23.89	23.17	*21.19	16.91	*16.08	13.82	@33.48
10 ft			*47.60	*47.60	*33.56	31.72	*26.68	22.16	*22.69	16.36	*17.51	13.01	@34.15
5 ft			*52.05	47.84	*37.61	30.16	*29.10	21.26	22.66	15.85	18.37	12.77	@34.08
0 ft	*21.34	*21.34	*51.40	46.73	*39.72	29.19	29.80	20.62	22.26	15.47	18.89	13.10	@33.25
-5 ft	*35.23	*35.23	*53.78	46.54	*39.69	28.80	29.45	20.30	22.08	15.30	20.37	14.12	@31.61
-10 ft	*50.33	*50.33	*49.52	46.90	*37.42	28.86	*28.98	20.33			23.39	16.23	@29.00
-15 ft	*56.20	*56.20	*42.15	*42.15	*32.24	29.37	*24.11	20.79			*23.89	20.63	@25.13
-20 ft			*29.57	*29.57							*22.73	*22.73	@19.24

Boom: 23' 4"    Stick: 11' 0"    Bucket: PCSA 2.80 yd <sup>3</sup> Shoe: 36"    Weight: 106,678 lbs.													
Height	Reach										unit: 1000 lb.		
	10ft F	10ft S	15ft F	15ft S	20ft F	20ft S	25ft F	25ft S	30ft F	30ft S	Max. F	Max. S	Reach (ft)
25 ft											*14.59	*14.59	@29.60
20 ft							*21.41	*21.41	*19.98	17.68	*15.12	*15.12	@32.00
15 ft	*61.15	*61.15			*28.49	*28.49	*23.89	23.56	*21.19	17.22	*16.08	14.09	@33.48
10 ft			*47.60	*47.60	*33.56	32.26	*26.68	22.55	*22.69	16.67	*17.51	13.28	@34.15
5 ft			*52.05	48.66	*37.61	30.69	*29.10	21.65	23.10	16.16	18.73	13.04	@34.08
0 ft	*21.34	*21.34	*51.40	47.55	*39.72	29.73	30.36	21.02	22.69	15.78	19.27	13.37	@33.25
-5 ft	*35.23	*35.23	*53.78	47.36	*39.69	29.33	30.01	20.70	22.51	15.61	20.78	14.41	@31.61
-10 ft	*50.33	*50.33	*49.52	47.72	*37.42	29.39	*28.98	20.72			*23.48	16.56	@29.00
-15 ft	*56.20	*56.20	*42.15	*42.15	*32.24	29.90	*24.11	21.18			*23.89	21.02	@25.13
-20 ft			*29.57	*29.57							*22.73	*22.73	@19.24

**Notes:**

1. Ratings are based on SAE J1097
2. Load point is the hook on the back of the bucket.
3. \*Rated loads are based on hydraulic capacity.
4. Rated loads do not exceed 87% of hyd. capacity or 75% of tipping capacity.

-  F = Rating over front
-  S = Rating over side or 360 degree
- 0 = Ground

# Hydraulic Excavator

## TXC 470LC-1

### Lifting Capacities

Boom: 23' 4"    Stick: 13' 1"    Bucket: PCSA 2.35 yd <sup>3</sup> Shoe: 30"    Weight: 104,694 lbs.															
Reach															unit: 1000 lb.
Height	10ft F	10ft S	15ft F	15ft S	20ft F	20ft S	25ft F	25ft S	30ft F	30ft S	35ft F	35ft S	Max. F	Max. S	Reach (ft)
30 ft													*12.79	*12.79	@27.94
25 ft									*16.42	*16.42			*12.82	*12.82	@31.30
20 ft									*18.87	17.75			*13.24	*13.24	@33.58
15 ft							*22.59	*22.59	*20.26	17.24			*14.02	12.99	@34.99
10 ft			*44.26	*44.26	*31.82	*31.82	*25.59	22.54	*21.95	16.64	18.07	12.67	*15.19	12.26	@35.64
5 ft	*14.67	*14.67	*52.19	48.80	*36.45	30.65	*28.34	21.56	22.88	16.06	17.74	12.36	*16.88	12.02	@35.57
0 ft	*23.01	*23.01	*54.84	47.20	*39.30	29.51	30.01	20.83	22.40	15.61			17.68	12.26	@34.77
-5 ft	*33.63	*33.63	*55.05	46.68	*40.05	28.94	29.55	20.41	22.12	15.35			18.89	13.09	@33.21
-10 ft	*46.12	*46.12	*51.85	46.80	*38.61	28.84	29.44	20.30	22.12	15.35			21.32	14.80	@30.74
-15 ft	*61.55	*61.55	*45.66	*45.66	*34.57	29.17	*26.44	20.57					*23.30	18.20	@27.13
-20 ft	*46.81	*46.81	*35.11	*35.11	*26.31	*26.31							*23.31	*23.31	@21.79



  

Boom: 23' 4"    Stick: 13' 1"    Bucket: PCSA 2.09 yd <sup>3</sup> Shoe: 36"    Weight: 106,457 lbs.															
Reach															unit: 1000 lb.
Height	10ft F	10ft S	15ft F	15ft S	20ft F	20ft S	25ft F	25ft S	30ft F	30ft S	35ft F	35ft S	Max. F	Max. S	Reach (ft)
30 ft													*12.79	*12.79	@27.94
25 ft									*16.42	*16.42			*12.82	*12.82	@31.30
20 ft									*18.87	18.07			*13.24	*13.24	@33.58
15 ft							*22.59	*22.59	*20.26	17.55			*14.02	13.25	@34.99
10 ft			*44.26	*44.26	*31.82	*31.82	*25.59	22.93	*21.95	16.95	*18.28	12.93	*15.19	12.51	@35.64
5 ft	*14.67	*14.67	*52.19	49.62	*36.45	31.18	*28.34	21.96	23.32	16.37	18.10	12.62	*16.88	12.27	@35.57
0 ft	*23.01	*23.01	*54.84	48.02	*39.30	30.04	*30.26	21.22	22.84	15.92			18.04	12.53	@34.77
-5 ft	*33.63	*33.63	*55.05	47.50	*40.05	29.47	30.11	20.80	22.56	15.67			19.27	13.37	@33.21
-10 ft	*46.12	*46.12	*51.85	47.62	*38.61	29.37	*29.91	20.70	22.56	15.67			21.74	15.11	@30.74
-15 ft	*61.55	*61.55	*45.66	*45.66	*34.57	29.70	*26.44	20.96					*23.30	18.56	@27.13
-20 ft	*46.81	*46.81	*35.11	*35.11	*26.31	*26.31							*23.31	*23.31	@21.79

**Notes:**

1. Ratings are based on SAE J1097
2. Load point is the hook on the back of the bucket.

3. \*Rated loads are based on hydraulic capacity.
4. Rated loads do not exceed 87% of hyd. capacity or 75% of tipping capacity.

-  F = Rating over front
-  S = Rating over side or 360 degree of tipping capacity.
- 0 = Ground



For more information, product demonstration, or details on purchase, lease and rental plans, please contact your local TEREX Distributor.

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