

TXC 420LC-1

Hydraulic Excavator

 OPERATING WEIGHT
 92,815 lbs (42,100 kg)

 NET ENGINE POWER
 281 hp (210 kW) @ 2,000 rpm

 MAX DIG DEPTH
 25' 4" (7,725 mm)

 MAX REACH
 37' 10" (11,520 mm)



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	Ð			
Model		DAEWO0 DE12TIS		
Туре	Water-cooled, 4-cycle, direct injection, aspiration, turbocharged, air-to-air intercooled. USA EPA Tier 2 compliant.			
No. of	cylinders	6		
Rated 1	flywheel horsepower			
DIN 62	71, net	285 PS (210 kW) @ 2,000 rpm		
SAE J1	349, net	281 HP (210 kW) @ 2,000 rpm		
Piston	displacement	675 cu. in. (11,051 cc)		
Maxim	um torque	853 lbf. ft. (1203 Nm) @ 1,400 rpm		
Bore a	nd stroke	4.8" x 6.1" (123 mm x 155 mm)		
Starting	g system	24V electric motor		
Batteri	es	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.

Main pumps	2 variable displacement axial piston pumps.
Max. oil flow	2 x 83.2 gpm (2 x 315 L/min)
Pilot pump	Gear pump
Max. oil flow	6.3 gpm (24 L/min)
Swing motor	
Relief valve	3,780 psi (265 bar)
Main relief valves	
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.

Cylinders	Qty	Bore x Rod dia x Stroke
Boom	2	6.5" x 4.5" x 57.5" (165 x 115 x 1,460 mm)
Stick	1	7.1" x 4.7" x 71.7" (180 x 120 x 1,820 mm)
Bucket	1	6.3" x 4.3" x 51.2" (160 x 110 x 1,300 mm)

Superstructure Revolving Frame

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

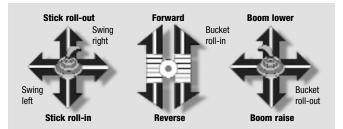
Operator's Cab

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)	
LwA External noise	
Guaranteed Sound Power Level	108 dB(A) (2,000/14/EC)
Measured Sound Power Level	107 dB(A) (2,000/14/EC)
LpA Operator Noise	73 dB(A) (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 inductionhardened 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 9.5 rpm
Rear swing radius	12' (3,660 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)	3.4/2.1 mph (5.5/3.3 km/h)
Maximum traction force	73,634 lbf (328 kN)
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 stressrelieved structure. The highest grade materials are used for toughness. Side frames are welded, securely and rigidly, to the track frame. Lifetimelubricated 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 c Upper rollers	contact area 2
(Standard Shoe) Lower rollers	9
Track shoes	50
Overall track length	17' 1" (5,215 mm)

Weight

Equipped with 22' (6.7 m) boom, 10' 8" (3.25 m) stick, and 2.49 yd^s; PCSA heaped (1.9 m^s) bucket.

Shoe	Shoe	Operating	Ground
type	width	weight	pressure
Triple	24" (600 mm)	90,830 lb.	10.4 psi
grouser		(41,200 kg)	(73 kpa)
Triple	30" (750 mm)	92,374 lb.	8.4 psi
grouser		(41,900 kg)	(58 kpa)
Triple	32" (800 mm)	92,815 lb.	8.0 psi
grouser		(42,100 kg)	(55 kpa)
Triple	36" (900 mm)	93,917 lb.	7.1 psi
grouser		(42,600 kg)	(49 kpa)

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

Service Refill Capacities

Service nemi capacities					
	U.S. gal	Liters			
Fuel tank	145	550			
Cooling system	14.8	56			
Lubrication	U.S. gal	Liters			
Engine oil	7.3	28			
Swing drive (each)	1.6	6			
Final drive (each)	2.9	11			
Hydraulic system	108.3	410			
Hydraulic tank	70	265			

Buckets

Capacity PCSA heaped	Width without side cutters	Width with side cutters	Weight	Stick Recor 10' 8" (3.25 m)	nmendation 13' 1" (4.0 m)
1.88 yd³ (1.44 m³)	46" (1,172 mm)	50" (1,266 mm)	3,417 lb. (1,550 kg)	A	A
2.20 yd ³ (1.68 m ³)	52" (1,328 mm)	56" (1,442 mm)	3,539 lb. (1,605 kg)	A	В
2.49 yd ³ (1.9 m ³)	58'' (1,466 mm)	61" (1,540 mm)	3,539 lb. (1,650 kg)	В	В
2.85 yd ³ (2.18 m ³)	64" (1,634 mm)	68" (1,746 mm)	3,792 lb. (1,720 kg)	В	C

A. Suitable for materials with density of 3,370 lb./cu.yd. (2,000 kg/m³) or less B. Suitable for materials with density of 2,700 lb./cu.yd. (1,600 kg/m³) or less C. Suitable for materials with density of 1,850 lb./cu.yd. (1,100 kg/m³) or less

Other

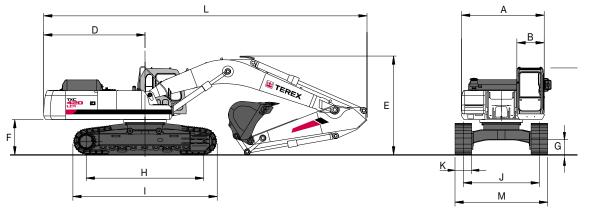
Large handrails and steps • Punched grid-type metal anti-slip upperstructure plates • Seat belt • Sun roof (hatch) • Hydraulic safety lock lever • Safety glass • Manual hammer mounted in cab for emergency use • Right and left rearview mirrors • Travel alarm • Heavyduty fan guard • Dual element air cleaner • 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

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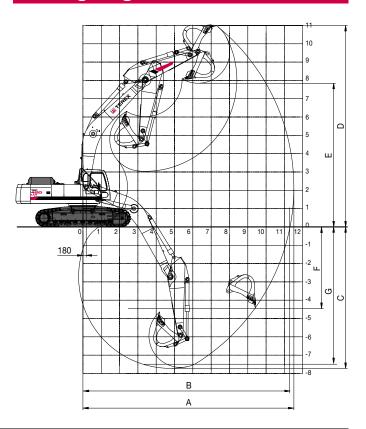
Dimensions: 22' 0" (6.7 m) Boom, 10' 8" (3.25 m) Stick, 24" (600 mm) Shoe



Dimensions	
A Overall width of upperstructure	9' 10" (2,990 mm)
B Overall width of cab	3' 2" (960 mm)
C Overall height of cab	10' 4" (3,150 mm)
D Tail swing radius	12' 0" (3,660 mm)
E Overall height	11' 9" (3,575 mm)
F Clearance under counterweight	4' 2" (1,277 mm)
G Ground clearance	21" (540 mm)
H Idler to sprocket distance	13' 11" (4,250 mm)
I Track length	17' 1" (5,215 mm)
J Track gauge	9' 0" (2,750 mm)
K Track shoe width	24" (600 mm)
L Overall length	38' 4" (11,690 mm)
M Overall track width with 24" (600 mm) shoe	11' 0" (3,350 mm)

Digging Forces (Maximum radial tooth forces)				
Stick	10' 8" (3.25 m)	13' 1" (4.0 m)		
Bucket digging force*	53,100 lbf (236 kN)	53,100 lbf (236 kN)		
Stick digging force*	42,500 lbf (189 kN)	36,800 lbf (164 kN)		
*At power boost				

Working Ranges



Boom Length: 22' 4" (6.7 m)		
Stick length	10' 8" (3.25 m)	13' 1" (4.0 m)
A. Max. digging reach	37' 10" (11,520 mm)	40' 3" (12,260 mm)
B. Max. digging reach at ground level	37' 1" (11,310 mm)	39' 7" (12,070 mm)
C. Max. digging depth	25' 4" (7,725 mm)	27' 9" (8,470 mm)
D. Max. digging height	36' 1" (11,000 mm)	37' 9" (11,495 mm)
E. Max. dumping height	25' 8" (7,845 mm)	27' 3" (8,330 mm)
F. Max. vertical wall digging depth	14' 4" (4,400 mm)	16' 6" (5,065 mm)
G. Max. digging depth (8' level)	24' 10" (7,570 mm)	27' 5" (8,360 mm)

Lifting Capacities

Boom: 2	2' 0"	Stick: 10' 8"	Buck	et: PCSA	2.49 yd³	Shoe:	32" \	Veight: 92	2,665 lbs				
						I	Reach					ι	ınit: 1000 lb.
Height	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							*16.66	*16.66			*15.57	*15.57	@27.12
20 ft							*17.48	*17.48			*15.91	13.25	@29.89
15 ft					*22.14	*22.14	*19.31	17.66	*17.69	12.92	*16.74	11.74	@31.63
10 ft			*36.20	*36.20	*26.42	24.03	*21.59	16.95	*18.82	12.57	17.49	10.93	@32.50
5 ft			*43.00	35.18	*30.23	22.81	*23.75	16.27	19.58	12.20	17.16	10.65	@32.57
0 ft	*18.70	*18.70	*45.76	34.04	*32.58	22.00	*25.24	15.77	19.29	11.93	17.57	10.86	@31.86
-5 ft	*30.62	*30.62	*45.28	33.76	*33.09	21.63	25.33	15.51	19.17	11.82	18.89	11.65	@30.30
-10 ft	*44.60	*44.60	*42.28	33.98	*31.58	21.65	*24.31	15.54			*20.97	13.37	@27.74
-15 ft	*49.84	*49.84	*36.42	34.64	*27.42	22.06					*21.68	17.02	@23.87
-20 ft	*34.30	*34.30	*25.76	*25.76							*21.34	*21.34	@17.82

Boom: 22' 0" Stick: 10' 8" Bucket: PCSA 2.49 yd³

Shoe: 36"	Weight: 93,767 lbs.

						I	Reach					u	nit: 1000 lb.
Height	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							*16.66	*16.66			*15.57	*15.57	@27.12
20 ft							*17.48	*17.48			*15.91	13.41	@29.89
15 ft					*22.14	*22.14	*19.31	17.86	*17.69	13.08	*16.74	11.89	@31.63
10 ft			*36.20	*36.20	*26.42	24.30	*21.59	17.15	*18.82	12.73	17.71	11.08	@32.50
5 ft			*43.00	35.57	*30.23	23.07	*23.75	16.47	19.83	12.36	17.38	10.80	@32.57
0 ft	*18.70	*18.70	*45.76	34.44	*32.58	22.26	*25.24	15.97	19.53	12.09	17.80	11.01	@31.86
-5 ft	*30.62	*30.62	*45.28	34.15	*33.09	21.90	*25.59	15.71	19.41	11.98	19.13	11.81	@30.30
-10 ft	*44.60	*44.60	*42.28	34.38	*31.58	21.92	*24.31	15.74			*20.97	13.54	@27.74
-15 ft	*49.84	*49.84	*36.42	35.03	*27.42	22.32					*21.68	17.23	@23.87
-20 ft	*34.30	*34.30	*25.76	*25.76							*21.34	*21.34	@17.82

Notes:

1. Ratings are based on SAE J1097

2. Load point is the hook on the back of the bucket.

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

 $\stackrel{\text{B}}{\sqcup}$ F = Rating over front

⇔ S = Rating over side or 360 degree 0 = Ground

Hydraulic Excavator **TXC 420LC-1**

Lifting Capacities

Boom: 2	22' 0" S	tick: 13' 1"	Buck	et: PCSA	1.88 yd³	Shoe:	32" \	Veight: 92	2, 738 lbs				
	Reach unit: 1000 lb.										ınit: 1000 lb.		
Height	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)
30 ft											*12.81	*12.81	@26.16
25 ft											*12.48	*12.48	@29.89
20 ft							*15.44	*15.44	*15.23	13.26	*12.61	11.42	@32.43
15 ft							*17.42	*17.42	*16.19	12.94	*13.10	10.23	@34.03
10 ft	*49.19	*49.19	*31.99	*31.99	*24.01	*24.01	*19.94	17.00	*17.56	12.53	*13.94	9.58	@34.84
5 ft	*15.54	*15.54	*40.18	35.92	*28.41	23.02	*22.46	16.28	*18.97	12.12	15.20	9.33	@34.91
0 ft	*18.71	*18.71	*44.77	34.41	*31.55	22.08	*24.41	15.70	19.12	11.78	15.50	9.47	@34.25
-5 ft	*26.96	*26.96	*45.83	33.81	*32.92	21.56	25.15	15.35	18.90	11.58	16.47	10.07	@32.80
-10 ft	*37.93	*37.93	*44.09	33.77	*32.34	21.41	*24.88	15.24	18.90	11.57	18.47	11.32	@30.46
-15 ft	*52.52	*52.52	*39.59	34.16	*29.46	21.61	*22.27	15.42			*19.64	13.79	@27.00
-20 ft	*43.33	*43.33	*31.27	*31.27	*22.87	22.24					*19.97	19.50	@21.85

Boom: 22' 0" Stick: 13' 1" Bucket: PCSA 1.88 yd³ Shoe: 36" Weight: 93,840 lbs. unit: 1000 lb. Reach 10ft F 20ft S 25ft F 25ft S 30ft F 30ft S Height 10ft S 15ft F 15ft S 20ft F Max. F Max. S Reach (ft) 30 ft *12.81 *12.81 @26.16 25 ft *12.48 *12.48 @29.89 *15.44 20 ft *15.44 *15.23 13.42 *12.61 11.57 @32.43 *17.42 *17.42 *16.19 13.10 @34.03 15 ft *13.10 10.37 12.69 10 ft *49.19 *49.19 *31.99 *31.99 *24.01 *24.01 *19.94 17.20 *17.56 *13.94 9.71 @34.84 5 ft *15.54 *15.54 *40.18 36.32 *28.41 23.29 *22.46 *18.97 12.28 *15.23 @34.91 16.48 9.47 0 ft *18.71 *18.71 *44.77 34.81 *31.55 22.34 *24.41 15.90 19.37 11.94 15.70 9.61 @34.25 *26.96 *45.83 34.20 *32.92 *25.35 11.73 @32.80 -5 ft *26.96 21.82 15.55 19.15 16.69 10.21 *44.09 -10 ft *37.93 *37.93 34.16 *32.34 21.68 *24.88 15.44 19.15 11.73 18.71 11.47 @30.46 -15 ft *52.52 *52.52 *39.59 34.55 *29.46 21.88 *22.27 15.62 *19.64 13.97 @27.00 -20 ft *43.33 *43.33 *31.27 *31.27 *22.87 22.50 *19.97 19.73 @21.85

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.

TEREX

0 = Ground

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

F = Rating over front

□ S = Rating over side or 360 degree

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