

# SPECIFICATIONS

## HX220L

Tier 4 Final Engine

<b>Net Power</b> SAE J1349 / 173 HP (129 kW) at 1,950 rpm)	<b>Bucket Range</b> 0.68 yd <sup>3</sup> - 1.75yd <sup>3</sup>	<b>Operating Weight</b> 22,1600 kg / 48,720 lbs
	<b>Standard Bucket</b> 1.2 yd <sup>3</sup>	

### ENGINE

Maker / Model	Cummins QSB6.7	
Type	4-cycle turbocharged, charge air cooled, diesel engine	
Rated flywheel horse power	SAE J1995 (gross)	182.6 HP (136 kW) at 1,950 rpm
	SAE J1349 (net)	173 HP (129 kW) at 1,950 rpm
	DIN 6271/1 (gross)	185 PS (136 kW) at 1,950 rpm
	DIN 6271/1 (net)	175 PS (129 kW) at 1,950 rpm
Max. torque	85.7 kgf-m (620 lbf-ft) / 1500 rpm	
Bore x stroke	107 x 124 mm (4.2" x 4.9")	
Piston displacement	6700 cc (409in <sup>3</sup> )	
Batteries	2x12 Vx100 Ah	
Starting motor	Denso 24 V-4.8 kW	
Alternator	Denso 24 V-95 A	

### HYDRAULIC SYSTEM

#### MAIN PUMP

Type	Variable displacement tandem axis piston pumps
Max. flow	2x222 lpm (58.6 gpm)
Sub-pump for pilot circuit	Gear pump

Cross-sensing and fuel saving pump system

#### HYDRAULIC MOTORS

Travel	Two speed axial pistons motor with brake valve and parking brake
Swing	Axial piston motor with automatic brake

#### RELIEF VALVE SETTING

Implement circuits	350 kgf/cm <sup>2</sup> (4980psi)
Travel	350 kgf/cm <sup>2</sup> (4980psi)
Power boost (boom, arm, bucket)	380 kgf/cm <sup>2</sup> (5400psi)
Swing circuit	265 kgf/cm <sup>2</sup> (3770psi)
Pilot circuit	40 kgf/cm <sup>2</sup> (570psi)
Service valve	Installed

#### HYDRAULIC CYLINDERS

No. of cylinder bore X stroke	Boom: Ø4.7x50.7 in
	Arm: Ø5.5x59.4 in
	Bucket: Ø4.7x41.5 in

### DRIVES & BRAKES

Drive method	Fully hydrostatic type
Drive motor	Axial piston motor, in-shoe design
Reduction system	Planetary reduction gear
Max. drawbar pull	20,200 kgf (44,530 lbf)
Max. travel speed (high / low)	5.5 km/hr (3.41mph) / 3.6 km/hr (2.23mph)
Gradeability	35° (70%)
Parking brake	Multi wet disc brake

### CONTROL

Pilot pressure operated joysticks and pedals with detachable lever for minimal operator fatigue.

Pilot control	Two joysticks with one safety lever (LH): Swing and arm, (RH): Boom and bucket (ISO)
Traveling and steering	Two levers with pedals
Engine throttle	Electric, Dial type

### OPERATING WEIGHT (APPROXIMATE)

Operating weight, including 5,680mm (18' 8") boom, 2,920mm (9' 7") arm, SAE heaped 0.92m<sup>3</sup> (1.20 yd<sup>3</sup>) bucket, lubricant, coolant, full fuel tank, full hydraulic tank, and all standard equipment.

#### OPERATING WEIGHT

Shoes		Operating weight		Ground pressure
Type	Width mm (in)	kg (lb)		kgf/cm <sup>2</sup> (psi)
Triple grouser	600 (24")	HX220 L	22,100 (48,720)	0.47 (6.68)
	700 (28")	HX220 L	22,380 (49,340)	0.41 (5.83)
	800 (32")	HX220 L	22,660 (49,960)	0.36 (5.12)
Double grouser	900 (36")	HX220 L	22,940 (50,570)	0.33 (4.69)
	600 (24")	HX220 L HW	23,690 (52,230)	0.50 (7.11)
	700 (28")	HX220 L HW	24,040 (53,000)	0.43 (6.11)



### SWING SYSTEM

Swing motor	Fixed displacement axial piston motor
Swing reduction	Planetary gear reduction
Swing bearing lubrication	Grease-bathed
Swing brake	Multi wet disc brake
Swing speed	10.8 rpm

### SERVICE REFILL CAPACITIES

	liters	US gal
Re-filling		
Fuel tank	400	106
Engine coolant	40	10.6
Engine oil	23	6.1
Swing device	6.2	1.64
Final drive (each)	4.5	1.2
Hydraulic system (including tank)	275	72.6
Hydraulic tank	160	42.3
DEF/AdBlue®	27	7.1

### UNDERCARRIAGE

The X-leg type center frame is integrally welded with reinforced box-section track frames. The undercarriage includes lubricated rollers, idlers, track adjusters with shock absorbing springs and sprockets, and a track chain with double or triple grouser shoes.

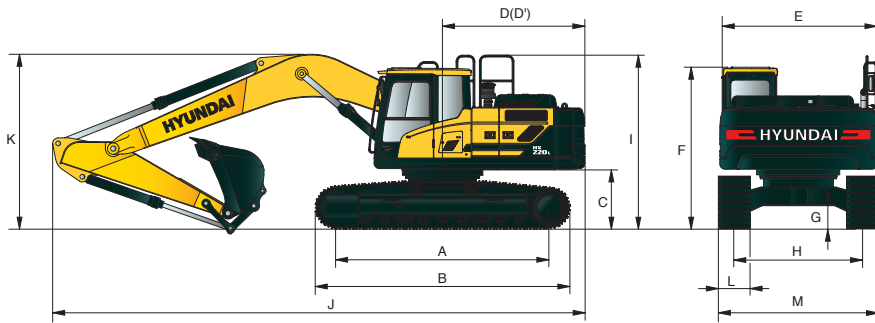
Center frame	X - leg type
Track frame	Pentagonal box type
No. of shoes on each side	49 EA
No. of carrier roller on each side	2 EA
No. of track roller on each side	9 EA
No. of rail guard on each side	2 EA

# SPECIFICATIONS HX220L

Tier 4 Final Engine

## HX220 L DIMENSIONS

5.68 m (18' 8") BOOM and 2.0 m (6' 7"), 2.4 m (7' 10"), 2.92 m (9' 7"), 3.9 m (12' 10") ARM



A	Tumbler distance	3,650 (12' 0")
B	Overall length of crawler	4,440 (14' 7")
C	Ground clearance of counterweight	1,060 (3' 6")
D	Tail swing radius	2,890 (9' 5")
D'	Rear-end length	2,770 (9' 1")
E	Overall width of upperstructure	2,740 (9' 0")
F	Overall height of cab	3,000 (9' 8")
G	Min. ground clearance	480 (1' 7")
H	Track gauge	2,390 (7' 10")
I	Overall height of guardrail	3,210 (10' 5")

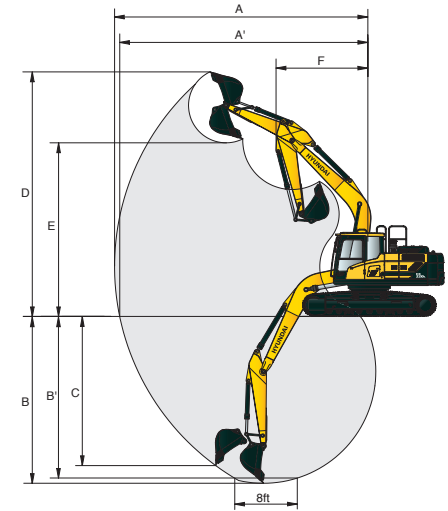
Unit: mm (ft-in)

Boom length	5,680 (18' 8")			
Arm length	2,000 (6' 7")	2,400 (7' 10")	2,920 (9' 7")	3,900 (12' 10")
J Overall length	9,650 (31' 8")	9,570 (31' 5")	9,530 (31' 3")	9,520 (31' 3")
K Overall height of boom	3,200 (10' 6")	3,110 (10' 2")	3,030 (9' 11")	3,480 (11' 5")
L Track shoe width	600 (24")	700 (28")	800 (32")	900 (36")
M Overall width	2,990 (9' 10")	3,090 (10' 2")	3,190 (10' 6")	3,290 (10' 10")

## HX220 L WORKING RANGE

Unit : mm (ft-in)

Boom length	5,680 (18' 8")			
Arm length	2,000 (6' 7")	2,400 (7' 10")	2,920 (9' 7")	3,900 (12' 10")
A Max. digging reach	9,140 (30' 0")	9,500 (31' 2")	9,980 (32' 9")	10,910 (35' 10")
A' Max. digging reach on ground	8,960 (29' 5")	9,330 (30' 7")	9,820 (32' 3")	10,770 (35' 4")
B Max. digging depth	5,820 (19' 1")	6,220 (20' 5")	6,730 (22' 1")	7,720 (25' 4")
B' Max. digging depth (8' level)	5,580 (18' 4")	6,010 (19' 9")	6,560 (21' 6")	7,580 (24' 10")
C Max. vertical wall digging depth	5,280 (17' 4")	5,720 (18' 9")	6,280 (20' 7")	7,240 (23' 9")
D Max. digging height	9,140 (30' 0")	9,340 (30' 8")	9,600 (31' 6")	10,110 (33' 2")
E Max. dumping height	6,330 (20' 9")	6,520 (21' 5")	6,780 (22' 3")	7,290 (23' 11")
F Min. swing radius	3,750 (12' 4")	3,740 (12' 3")	3,670 (12' 0")	3,700 (12' 2")



## DIGGING FORCE

Boom	Length	mm (ft-in)	5,680 (18' 8")				8,200 (26' 11")	Remark
	Weight	kg (lb)	1,950 (4,300)				2,350 (5,180)	
Arm	Length	mm (ft-in)	2,000 (6' 7")	2,400 (7' 10")	2,920 (9' 7")	3,900 (12' 10")	6,300 (20' 8")	Remark
	Weight	kg (lb)	975 (2,150)	1,045 (2,300)	1,095 (2,410)	1,295 (2,850)	1,330 (2,930)	
Bucket digging force	SAE	kN	133.4 [144.8]	133.4 [144.8]	133.4 [144.8]	133.4 [144.8]	72.6	[]: Power Boost
		kgf	13600 [14770]	13600 [14770]	13600 [14770]	13600 [14770]	7400	
	lbf	29980 [32550]	29980 [32550]	29980 [32550]	29980 [32550]	16310		
	ISO	kN	152.0 [165.0]	152.0 [165.0]	152.0 [165.0]	152.0 [165.0]	83.4	
Arm crowd force	SAE	kgf	15500 [16830]	15500 [16830]	15500 [16830]	15500 [16830]	8500	[]: Power Boost
		lbf	34170 [37100]	34170 [37100]	34170 [37100]	34170 [37100]	18740	
	kN	144.2 [156.5]	119.6 [129.9]	102.0 [110.7]	84.3 [91.6]	49.0		
	kgf	14700 [15960]	12200 [13250]	10400 [11290]	8600 [9340]	5000		
ISO	lbf	32410 [35190]	26900 [29210]	22930 [24900]	18960 [20590]	11020		
	kN	151.0 [164.0]	125.5 [136.3]	106.9 [116.1]	87.3 [94.8]	50.0		
	kgf	15400 [16720]	12800 [13900]	10900 [11830]	8900 [9660]	5100		
lbf	33950 [36860]	28220 [30640]	24030 [26090]	19620 [21300]	11240			

Note : Boom weight includes arm cylinder, piping, and pin  
Arm weight includes bucket cylinder, linkage, and pin



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Tier 4 Final Engine

ENGINE	STD	OPT
Cummins QSB 6.7 engine	●	
HYDRAULIC SYSTEM		
Intelligent Power Control (IPC)		
3-power mode, 2-work mode, user mode	●	
Variable Power Control	●	
Pump Flow Control	●	
Attachment Mode Flow Control	●	
Engine Auto Idle	●	
Engine Auto Shutdown Control		●
Electronic Fan Control	●	
CAB & INTERIOR		
ISO Standard cabin		
Rise-up type windshield wiper	●	
Radio / USB player	●	
Bluetooth / Handsfree mobile phone system with USB	●	
Miracast	●	
12 volt power outlet (24V DC to 12V DC converter)	●	
Electric horn	●	
All-weather steel cab with 360° visibility	●	
Safety glass windows	●	
Sliding fold-in front window	●	
Sliding side window (LH)	●	
Lockable door	●	
Hot & cool box	●	
Storage compartment & Ashtray	●	
Transparent cabin roof-cover	●	
Sun visor	●	
Door and cab locks, one key	●	
Mechanical suspension seat with heater	●	
Pilot-operated adjustable joystick	●	
Console box height adjust system	●	
Automatic climate control		
Air conditioner & heater	●	
Defroster	●	
Starting Aid (air grid heater) for cold weather	●	

Centralized monitoring		
8" LCD display	●	
Engine speed or Trip meter / Accel.	●	
Engine coolant temperature gauge	●	
Max power	●	
Low speed / High speed	●	
Auto idle	●	
Overload		●
Check Engine	●	
Air cleaner clogging	●	
Indicators	●	
ECO Gauges	●	
Fuel level gauge	●	
Hyd. oil temperature gauge	●	
Fuel warmer	●	
Warnings	●	
Communication error	●	
Low battery	●	
Clock	●	
Cabin lights	●	
Cabin front window rain guard		●
Cabin roof-steel cover		●
Seat		
Adjustable air suspension seat with heater	●	
Cabin FOPS/FOG		
FOPS (Falling Object Protective Structures) ISO 3449 Level 2		●
FOG (Falling Object Guard) Front & Top Guard		●
ISO/DIS 10262 Level 2 Top Guard		●
Cabin ROPS		
ROPS (Roll Over Protective Structures) ISO 12117-2	●	
SAFETY		
Battery master switch	●	
Rearview camera	●	
AAVM (All Around View Monitoring)		●
Four front working lights	●	
Dual boom working lights	●	
Travel alarm	●	
Rear work lamp		●
Beacon lamp		●
Automatic swing brake	●	
Boom holding system	●	
Arm holding system	●	
Safety lock valve for boom cylinder with overload warning device		●
Safety lock valve for arm cylinder		●
Swing Lock System		●
Three outside rearview mirrors	●	

OTHER	STD	OPT
Booms		
5.68 m, 18' 8"	●	
8.2 m, 26' 11" Long reach		●
Arms		
2.0 m, 6' 7"		●
2.4 m, 7' 10"		●
2.92 m, 9' 7"	●	
3.9 m, 12' 10"		●
6.3 m, 20' 8" Long reach		●
Removable clean-out dust net for cooler	●	
Removable reservoir tank	●	
Fuel pre-filter	●	
Fuel warmer		●
Self-diagnostics system	●	
Hi-mate (Remote Management System) Mobile	●	
Satellite		●
Batteries (2 x 12V x 100 AH)	●	
Fuel filler pump (50 lpm /13 gpm)		●
Single-acting piping kit (breaker, etc.)		●
Double-acting piping kit (clamshell, etc.)	●	
Rotating Piping Kit		●
Quick coupler piping		●
Quick coupler		●
Boom floating control		●
One Pedal Straight Travel System		●
Accumulator for lowering work equipment	●	
Pattern change valve (2 patterns)	●	
Fine Swing Control System		●
Tool kit		●
UNDERCARRIAGE		
Lower frame under cover (Additional)	●	
Lower frame under cover (Normal)	●	
Track shoes		
Triple grousers shoes (600mm, 24")		●
Triple grousers shoe (700 mm, 28")		●
Triple grousers shoe (800 mm, 32")	●	
Triple grousers shoe (900 mm, 36")		●
Double grousers shoe (600 mm, 24")		●
Double grousers shoe (700 mm, 28")		●
Track rail guard	●	
Full track rail guard		●

PLEASE CONTACT



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HCEA Rev 7/2015