

SPECIFICATIONS HX220L

Tier 4 Final Engine

ENGINE	
Make / model	Cummins QSB6.7
Type	4-cycle turbocharged, charge air cooled, diesel engine
Rated flywheel horse-power	SAE 11995 (gross) 182.6 HP (136 kW) at 1,950 rpm J1349 (net) 173 HP (129 kW) at 1,950 rpm DIN 6271/1 (gross) 185 PS (136 kW) at 1,950 rpm 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 ³)
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 piston motor with brake motor with automatic brake
Swing	Axial piston motor with automatic brake

RELIEF VALVE SETTING

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

HYDRAULIC CYLINDERS

No. of cylinders bore X stroke	Boom: Ø4.7x50.7 in Arm: Ø5.5x59.4 in Bucket: Ø4.7x41.5 in
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Net Power SAE J1349 / 173 HP (129 kW) at 1,950 rpm

Bucket Range 0.68 yd³ - 1.75yd³ at 1,950 rpm

Operating Weight 23,060 kg / 50,840 lb

Standard Bucket 1.2 yd³

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 (3.41 mph) / 3.6 km/hr (2.23 mph)
Gradeability	35* (70%)
Parking brake	Multi wet disc brake

CONTROL

Pilot pressure operated joysticks provide very-low-effort operation.

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 5680 mm (18' 8") boom, 2920 mm (9' 7") arm, SAE heaped 0.92 m³ (1.20 yd³) bucket, lubricant, coolant, full fuel tank, full hydraulic tank, and all standard equipment.

OPERATING WEIGHT

Shoes	Width mm (in)	Operating weight kg (lb)	Ground pressure kgf/cm ² (psi)
Type	600 (24")	HX220 L 22,100 (48,720)	0.47 (6.68)
Triple grouser	700 (28")	HX220 L 22,380 (49,340)	0.41 (5.83)
	800 (32")	HX220 L 22,660 (49,960)	0.36 (5.12)
	900 (36")	HX220 L 22,940 (50,570)	0.33 (4.69)
Double grouser	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)

*If equipped with heavy counterweight, add 400 kg (880 lb) to the total weight.



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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	STD	OPT
Rise-up type windshield wiper	•	
Radio / USB player	•	
Bluetooth / hands-free mobile phone system with USB	•	
Mitracast	•	
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 and cool box	•	
Storage compartment and 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 and 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/ROPS	
FOPS (Falling Object Protective Structures) ISO 3449 Level 2	•
FOG (Falling Object Guard) Front & Top Guard	•
ISODIS 10262 Level 2 Top Guard	•
Cabin ROPS ROPS (Roll Over Protective Structures) ISO 12117-2	•
SAFETY	
Battery master switch	STD
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	•

PLEASE CONTACT

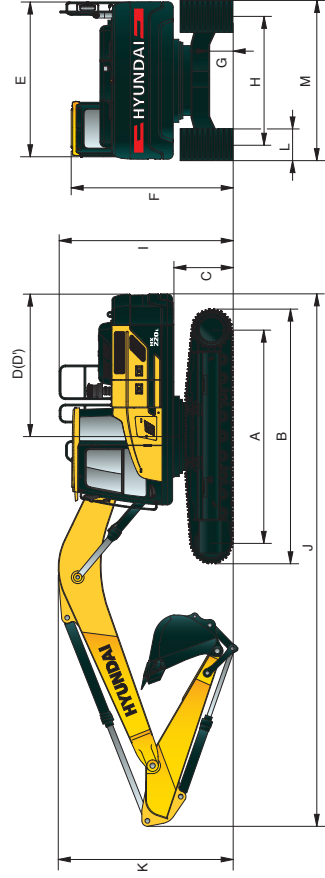
OTHER	STD	OPT
Booms	•	
5.68 m, 18' 8"	•	
8.2 m, 26' 11" Long reach	•	
Arms		
2.0 m, 6' 7"	•	
2.4 m, 7' 10"	•	
2.92 m, 9' 7"	•	
3.9 m, 12' 10"	•	
6.3 m, 20' 8" Long reach	•	
Removable clean-out dust net for cooler	•	
Removable reservoir tank	•	
Fuel pre-filter	•	
Fuel warmer	•	
Self-diagnostics system	•	
Hi-mate remote management system	•	
Batteries (2 x 12V x 100 AH)	•	
Fuel-filler pump (50 lpm /13 gpm)	•	
Single-acting piping kit (breaker, etc.)	•	
Double-acting piping kit (clamsheil, etc.)	•	
Rotating piping kit	•	
Quick coupler piping	•	
Quick coupler	•	
Boom float control	•	
One-pedal straight travel system	•	
Pilot accumulator	•	
Pattern change valve (SAE and ISO)	•	
Fine Swing Control System	•	
Tool kit	•	
UNDERCARRIAGE		
Lower frame under cover (additional)	•	
Lower frame under cover (nomal)	•	
Track shoes		
Triple grousers shoes (600 mm, 24")	•	
Triple grousers shoes (700 mm, 28")	•	
Triple grousers shoes (800 mm, 32")	•	
Triple grousers shoes (900 mm, 36")	•	
Double grousers shoes (600 mm, 24")	•	
Double grousers shoes (700 mm, 28")	•	
Track rail guard	•	
Full track rail guard	•	

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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")

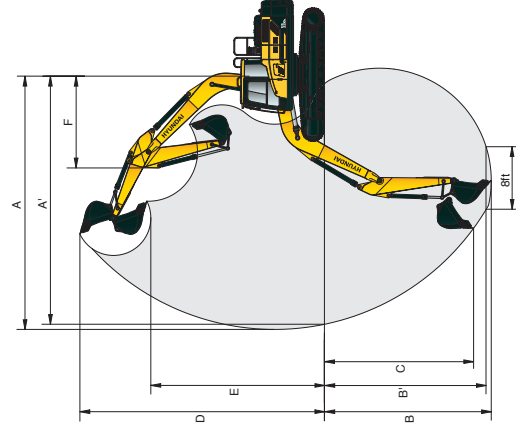
Boom length	5,680 (18' 8")
Arm length	2,000 (6' 7")
Overall length	9,570 (31' 5")
Overall height of boom	3,200 (10' 6")
Track shoe width	600 (24")
Overall width	3,090 (10' 2")

Unit: mm (ft-in)

HX220 L WORKING RANGE

Boom length	5,680 (18' 8")
Arm length	2,000 (6' 7")
Max. digging reach	9,140 (30' 0")
Max. digging reach on ground	8,960 (29' 5")
Max. digging depth	5,820 (19' 1")
Max. digging depth (8' level)	5,580 (18' 4")
Max. vertical wall digging depth	5,280 (17' 4")
Max. digging height	9,140 (30' 0")
Max. dumping height	6,330 (20' 9")
Min. swing radius	3,750 (12' 4")

Unit: mm (ft-in)



DIGGING FORCE

Boom	Length	mm (ft-in)	5,680 (18' 8")	8,200 (26' 11")
	Weight	kg (lb)	1,950 (4,300)	2,350 (5,180)
Arm	Length	mm (ft-in)	2,000 (6' 7")	3,900 (12' 10")
	Weight	kg (lb)	975 (2,150)	1,295 (2,850)
Bucket digging force	SAE	kN	133.4 [144.8]	133.4 [144.8]
	ISO	kgf	13600 [14770]	13600 [14770]
Arm crowd force	SAE	kN	144.2 [156.5]	102.0 [110.7]
	ISO	kgf	14700 [15960]	10400 [11290]
ISO	SAE	kN	151.0 [164.0]	106.9 [116.1]
	ISO	kgf	15400 [16720]	10900 [11830]
Remark	SAE	lb	33950 [36860]	28220 [30640]
	ISO	lb	24030 [26090]	19620 [21300]

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

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Lifting Capacity

Boom : 5.68 m (18'8")
Arm : 2.92 m (9'7")
Bucket : 0.92 m³ SAE heaped
Shoe 800 mm triple grouser, CWT 4500 kg

572980 C45
Rating over-front
Rating over-side or 360 degree

2015/09/11

Load point height m (ft)	Load radius						At max. reach	
	1.5 m (5 ft)	3.0 m (10 ft)	4.5 m (15 ft)	6.0 m (20 ft)	7.5 m (25 ft)	Capacity	Reach	
7.5 m (25 ft)						*3310 *7300	7.8 (25.5)	
6.0 m (20 ft)					*2300 *5070	2800 6170	8.74 (28.7)	
4.5 m (15 ft)				*3970 *8750	*3780 *8330	3600 7940	9.32 (30.6)	
3.0 m (10 ft)	*9720 *21430	*9720 *21430	*6100 *13450	*4790 *10560	*4180 *9220	3450 7610	9.59 (31.5)	
1.5 m (5 ft)	*8850 *19510	*8850 *19510	*7900 *17420	*5700 *12570	*4660 *10270	3300 7280	9.59 (31.5)	
Ground-line	*21140 *12650	*9590 *12650	*9100 *20060	*6440 *14200	*5060 *11160	3170 6990	9.31 (30.5)	
-1.5 m (-5 ft)	*8840 *19490	*8840 *19490	*9540 *21030	*6810 *15010	*5250 *11570	2530 6860	8.72 (28.6)	
-3.0 m (-10 ft)	*12230 *26960	*13910 *30050	*6790 *20410	*6690 *14750		3110 6860	7.75 (25.4)	
-4.5 m (-15 ft)		*11800 *26010	*8060 *17770			*4280 *9440	6.16 (20.2)	

- NOTES:
- Lifting capacities are based on SAE J1097 and ISO 10567.
 - Lifting capacity of the Robex series does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
 - The load point is a hook (standard equipment) located on the back of the bucket.
 - (*) indicates load limited by hydraulic capacity.

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