# SPECIFICATIONS HX220AL

Net Power 170 HP (127 kW) at 2,200 rpm Standard Bucket 0.92 m³ (1.20 yd³)

HYUNDAI CONSTRUCTION EQUIPMENT

Operating Weight 22,800 (50,265) -24,728 (54,516)

Powered By Cummins Performance Series Engine

ENGINE	
Maker / Model Cummins B6.7	
Туре	Tier 4F/ Stage V Emission Certified, 6 cylinder diesel engine with No Manual Regeneration.
Gross power (SAE J1995)	173 HP (129 kW) at 2,200 rpm
Net power (SAE J1349)	170 HP (127 kW) at 2,200 rpm
Max. power	195 HP (145kW) at 2,000 rpm
Peak torque	650 lb·ft (881 N·m) at 1,300 rpm
Displacement	6,700 cc (408 cu in)

HYDR/	AULIC SYSTEM		
MAINP	UMP		
Туре		Variable Displacement Tandem Axis Piston Pumps	
Max. flo	Max. flow 2 x 58.4 gpm (2 221 l/min)		
Sub-pur	Sub-pump for pilot circuit Gear Pump		
AUXILIA	RY PRESSURE		
0.147	Flow (I/min)	26~116 gpm / (100~440 lpm)	

AUXILIARY PRESSURE		
2 Way	Flow (I/min) 26~116 gpm / (100~440 lpm)	
	Pressure (bar)	1,450~5,076 psi / (100~350 bar)
Rotating	Flow (I/min) 14 gpm / (52.7 lpm)	
	Pressure (bar)	2,321 psi / (160 bar)
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> (4,980 psi)		
Travel	350 kgf/cm <sup>2</sup> (4,980 psi)		
Power boost (Boom, Arm, Bucket)	380 kgf/cm <sup>2</sup> (5,400 psi)		
Swing circuit	265 kgf/cm <sup>2</sup> (3,770 psi)		
Pilot circuit	40 kgf/cm <sup>2</sup> (570psi)		
Service valve	Installed		

Swing circuit	265 kgf/cm <sup>2</sup> (3,770 psi)		
Pilot circuit 40 kgf/cm² (570psi)			
Service valve	ervice valve Installed		
HYDRAULIC CYLINDERS			
No. of Cylinder Bore X Stroke	Boom: Ø120 × 1,290 mm		
	Arm: Ø140 × 1,510 mm		
	Bucket: Ø120 × 1,055 mm		

DRIVES & BRAKES			
Drive method	Fully Hydrostatic Type		
Drive motor	Axial Piston Motor, In-Shoe Design		
Reduction system	Planetary Reduction Gear		
Max. Drawbar pull	20,800 kgf (45,860 lbf)		
Max. Travel speed (High / Low)	5.4 km/hr (3.4 mph) / 3.5 km/hr (2.2 mph)		
Gradeability	35° (70%)		
Parking brake	Multi Wet Disc		

#### **CONTROL**

Pilot pressure operated joysticks and pedals with detachable lever provide almost effortless and fatigueless operation.

Pilot control	Two Joysticks with One Safety Lever (LH): Swing and Arm, Boom and Bucket
Traveling And Steering	Two Levers With Pedals
Engine throttle	Electric, Dial Type

#### OPERATING WEIGHT (APPROXIMATE)

Operating weight, including 5,690 mm (18'8") boom, 2,920 mm (9'7") arm, SAE heaped  $0.92\,\mathrm{m}^3$  (1.20 yd³) bucket, Additional Cwt 700 kg (1,544lbs), lubricant, coolant, full fuel tank, full hydraulic tank, and all standard equipment.

#### **OPERATING WEIGHT**

Shoes		Operating Weight		Ground Pressure
Туре	Width mm (in)		kg (lb)	kgf/cm² (psi)
	600 (24")	HX220AL	22,800 (50,265)	0.47 (6.71)
Triple	700 (28")	HX220AL	23,080 (50,883)	0.41 (5.82)
grouser	800 (32")	HX220AL	24,430 (53,860)	0.36 (5.16)
	900 (36")	HX220AL	24,728 (54,516)	0.33 (4.64)

SWING SYSTEM		
Swing motor	Fixed Displacement Axial Piston Motor	
Swing reduction	Planetary Gear Reduction	
Swing bearing lubrication	Grease-Bathed	
Swing brake	Multi Wet Disc	
Swing speed	11.4 rpm	

COOLANT & LUBRICANT CAPACITY		
	LITER	US gal
Fuel tank	400	106
Engine coolant	40	10.6
Engine oil	23.1	6.1
Swing device	6.2	1.64
Final drive (Each)	4.5	1.2
Hydraulic system (Including tank)	275	72.6
Hydraulic tank	155	40.9
DEF/AdBlue®	48	12.6

#### 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	2EA

#### **CAB NOISE LEVEL**

Guaranteed noise level presented below can be differed depending on a range of factors such as operating condition, speed of a cooling fan, types of engine and so forth. Hearing protection may be necessary if an operator is working in the improperly aintained cabin or exposed to a noisy environment by leaving doors and/or windows open. With cooling fan speed at maximum value:

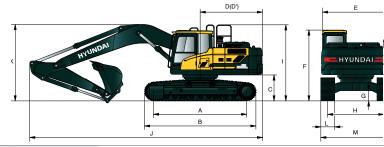
Operator sound pressure level (ISO 6396:2008)	70 dB(A)
Exterior sound power level (ISO 6395:2008)	98 dB(A)

<sup>\*</sup> Distance of 15 m (49.2 ft), moving forward in second gear ratio

## SPECIFICATIONS **HX220**<sub>A</sub> L

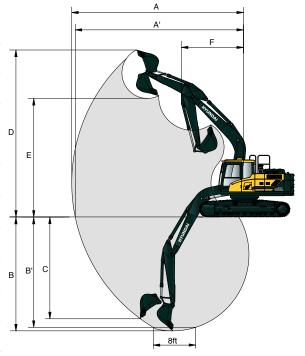
Powered By Cummins Performance Series Engine

H	(220AL DIMENSIONS	Unit: mm (ft∙in)		
Α	Tumbler Distance	3,650	(12' 0")	
В	Overall Length of Crawler	4,404	(14' 4")	
С	Ground Clearance of Counterweight	1,060	(3'6")	
D	Tail Swing Radius	2,890	(9' 5")	
D'	Rear-End Length	2,770	(9' 1")	
Ε	Overall Width of Upperstructure	2,740	(9'0")	
F	Overall Height of Cab	3,000	(9'8")	
G	Min. Ground Clearance	470	(1' 7")	
Н	Track Gauge	2,390	(7' 10")	
I	Overall Height of Guardrail	3,210	(10' 5")	



	V *			- 1	1 -		
	Boom length		5,690 (	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 9,570 (31'8") (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")		
М	Overall Width	2,990 (9'10")	3,090 (10' 2")	3,190 (10'6")	3,290 (10'10")		

HX220AL WORKING RANGE Unit:									
	Boom length	ength 5,690 (18' 8")							
	Arm length	2,000 (6' 7")	2,400 (7'10")	2,920 (9'7")	3,900 (12' 10")				
Α	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")				
В	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")				
С	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")				
Е	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")				

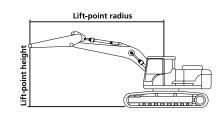


D	Length	mm (ft. in)		5,690	(18' 8")		5	8,200 (26'11")			
Boom	Weight	kg (lb)		1,950 (	4,300)		2,600 (5,730)			2,350 (5,180)	
	Length	mm (ft. in)	2,000 (6' 7")	2,400 (7'10")	2,920 (9' 7")	3,900 (12' 10")	2,000 (6' 7")	2,400 (7' 10")	2,920 (9' 7")	6,300 (20'8")	
Arm	Weight	kg (lb)	975 (2,150)	1,045 (2,300)	1,095 (2,410)	1,295 (2,850)	975 (2,150)	1,045 (2,300)	1,095 (2,410)	1,330 (2,930)	
	SAE	kN	133.4 [144.8]	133.4 [144.8]	133.4 [144.8]	133.4 [144.8]	133.4 [144.8]	133.4 [144.8]	133.4 [144.8]	72.6	
		kgf	13,600 [14,770]	13,600 [14,770]	13,600 [14,770]	13,600 [14,770]	13,600 [14,770]	13,600 [14,770]	13,600 [14,770]	7,400	
Bucket		lbf	29,980 [32,550]	29,980 [32,550]	29,980 [32,550]	29,980 [32,550]	29,980 [32,550]	29,980 [32,550]	29,980 [32,550]	16,310	[]: Power
Digging Force		kN	152.0 [165.0]	152.0 [165.0]	152.0 [165.0]	152.0 [165.0]	152.0 [165.0]	152.0 [165.0]	152.0 [165.0]	83.4	Boost
10100		kgf	15,500 [16,830]	15,500 [16,830]	15,500 [16,830]	15,500 [16,830]	15,500 [16,830]	15,500 [16,830]	15,500 [16,830]	8,500	
		lbf	34,170 [37,100]	34,170 [37,100]	34,170 [37,100]	34,170 [37,100]	34,170 [37,100]	34,170 [37,100]	34,170 [37,100]	18,740	
		kN	144.2 [156.5]	119.6 [129.9]	102.0 [110.7]	84.3 [91.6]	144.2 [156.5]	119.6 [129.9]	102.0 [110.7]	49.0	
	SAE	kgf	14,700 [15,960]	12,200 [13,250]	10,400 [11,290]	8,600 [9,340]	14,700 [15,960]	12,200 [13,250]	10,400 [11,290]	5,000	
Arm Crowd Force		lbf	32,410 [35,190]	26,900 [29,210]	22,930 [24,900]	18,960 [20,590]	32,410 [35,190]	26,900 [29,210]	22,930 [24,900]	11,020	
		kN	151.0 [164.0]	125.5 [136.3]	106.9 [116.1]	87.3 [94.8]	151.0 [164.0]	125.5 [136.3]	106.9 [116.1]	50.0	
	ISO	kgf	15,400 [16,720]	12,800 [13,900]	10,900 [11,830]	8,900 [9,660]	15,400 [16,720]	12,800 [13,900]	10,900 [11,830]	5,100	
		lbf	33,950 [36,860]	28,220 [30,640]	24,030 [26,090]	19,620 [21,300]	33,950 [36,860]	28,220 [30,640]	24,030 [26,090]	11,240	

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

### SPECIFICATIONS **HX220**<sub>A</sub> L

Powered By Cummins Performance Series Engine



### **Lifting Capacity**

Boom: 5,690 mm (18' 8")

Capacities based on North American Standard Configuration

in accordance with ISO condition 2 standard.

Arm: 2,921mm (9' 7")

Rating over front 🖞

Bucket:  $0.92\,\text{m}^3\,(1.20\,\text{yd}^3\,)\,\text{SAE}\,\text{heaped}$ 

Shoe 800 mm (32") triple grouser, CWT 4,500 kg (9,921 lb)

Rating over side or 360 degrees ♣

						Lift-poin	t radius					A	t max. reach	
Lift-point height m (ft)		1.5 m (4	1.9 ft)	3.0 m (	9.8 ft)	4.5 m (1	4.8 ft)	6.0 m (1	19.7 ft)	7.5 m (2	24.6 ft)	Capa	city	Reach
						ľ						ľ		m (ft)
7.5 m	kg	'		'		1		*4460	*4460	'		*3370	*3370	6.26
24.6 ft	lb							*9830	*9830			*7430	*7430	(20.5)
6.0 m	kg							*4460	*4460			*3100	*3100	7.38
19.7 ft	lb							*9830	*9830			*6830	*6830	(24.2)
4.5 m	kg							*4970	*4970	*4710	4230	*3020	*3020	8.07
14.8 ft	lb							*10960	*10960	*10380	9330	*6660	*6660	(26.5)
3.0 m	kg					*7410	*7410	*5800	5730	*5070	4120	*3070	*3070	8.43
9.8 ft	lb					*16340	*16340	*12790	12630	*11180	9080	*6770	*6770	(27.7)
1.5 m	kg					*9140	8200	*6680	5480	*5520	4000	*3250	*3250	8.51
4.9 ft	lb					*20150	18080	*14730	12080	*12170	8820	*7170	*7170	(27.9)
Ground	kg			*5930	*5930	*10140	7910	*7330	5290	*5860	3900	*3590	3390	8.32
Line	lb			*13070	*13070	*22350	17440	*16160	11660	*12920	8600	*7910	7470	(27.3)
-1.5 m	kg	*6500	*6500	*10400	*10400	*10350	7820	*7590	5210	*5920	3870	*4200	3660	7.84
-4.9 ft	lb	*14330	*14330	*22930	*22930	*22820	17240	*16730	11490	*13050	8530	*9260	8070	(25.7)
-3.0 m	kg	*11120	*11120	*14180	*14180	*9820	7870	*7250	5240			*5420	4290	7.00
-9.8 ft	lb	*24520	*24520	*31260	*31260	*21650	17350	*15980	11550			*11950	9460	(23.0)
-4.5 m	kg			*11610	*11610	*8190	8090				*6080	5890	5.65	
-14.8 ft	lb			*25600	*25600	*18060	17840				*13400	12990	(18.5)	

#### NOTES

- 1. Lifting capacities are based on ISO 10567.
- 2. Lifting capacity of the HX Series does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
- 3. The Lift-point is the bucket pivot mounting pin on the arm (without bucket mass).
- 4. (\*) indicates load limited by hydraulic capacity.



ENGINE Cummins B6.7	STD	OPT
	•	
HYDRAULIC SYSTEM		
Electric Positive Flow Control (EPFC)		
3-Power Mode, 2-Work Mode, User Mode	•	
Variable Power Control	•	
Pump Flow Control	•	
Attachment Mode Flow Control	•	
Engine Auto Chutelaura Control	•	
Engine Auto Shutdown Control  Electronic Fan Control	•	
Hyundai Bio Hydraulic oil (HBHO)		
CAB & INTERIOR		
SO Standard cabin	1	
Rise-Up Type Windshield Wiper	•	
Radio / USB Player	•	
Handsfree Mobile Phone System with USB	•	
12V Power Outlet (24V DC to 12V DC converter)	•	
Electric Horn	•	
All-Weather Steel Cab with 360° Visibility	•	
Safety glass - Tempered glass	•	
Safety glass - Tempered glass with front laminated glass		•
Sliding Fold-In Front Window	•	
Sliding Side Window (LH)	•	
Lockable Door	•	
Hot & Cool Box	•	
Storage Compartment	•	
Ashtray & Cigar Lighter		•
Transparent Cabin Roof-Cover	•	
Sun Visor	•	
Door And Cab Locks, One Key	•	
Mechanical Suspension Seat With Heater	•	
Pilot-Operated Slidable 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 warning with alarm		
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 FOG (ISO 10262) Level 2		
FOG (Falling Object Protective Structure)-ISO 10262 Level 2		•

SAEETV	STD	OPT
SAFETY	עונ	OPT
Battery Master Switch	•	
Rearview Camera	•	_
AAVM (Advanced Around View Monitoring)		•
Four Front Working Lights (2 Boom Mounted, 2 Front Frame Mounted)	•	
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	•	
Front Guard - Wire Net		•
OTHER		
Booms		
5.68 m, 18' 8" Mono	•	
5.65 m, 18' 6" 2-Piece		•
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 × 12 V × 100 AH)	•	
Fuel Filler Pump (50 \( \ell \)/min)		•
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 (600 mm, 24")		
Triple Grousers Shoes (600 mm, 24 )  Triple Grousers Shoe (700 mm, 28")		_
Triple Grousers Shoe (700 mm, 22")	•	
Triple Grousers Shoe (900 mm, 36")		•
Double Grousers Shoe (700 mm, 28")		•
Track Rail Guard	•	
Full Track Rail Guard		•

- \* Standard and optional equipment may vary. Contact your Hyundai dealer for more information. The machine may vary according to international standards.

  \* The photos may include attachments and optional equipment that are not available in your area.

- \* Materials and specifications are subject to change without advance notice.
  \* All imperial measurements rounded off to the nearest pound or inch.





