# SPECIFICATIONS HX160AL

**Net Power** 152 HP (113 kW) / 2 200 rpm Standard Bucket .73 m<sup>3</sup> / .95 yd<sup>3</sup>

HYUNDAI CONSTRUCTION EQUIPMENT

Operating Weight 39,010 LBS (17,695 kg)

Powered By Cummins Performance Series Engine

ENGINE					
Maker / Mode	I	Cummins B4.5			
Туре		Tier 4F/ Stage V Emission Certified, 4 cylinder diesel engine with No Manual Regeneration.			
Rated flywheel	J1995 (gross)	115 kW (155 HP) at 2,200 rpm			
horse power	J1349 (net)	113 kW (152 HP) at 2,200 rpm			
Max. torque		115 kW (155 hp) at 2,000 rpm			
Peak torque		712 N·m (525 lb·ft) at 1,200 rpm			
Displacement		4.5 ℓ(275 cu in)			

			(,
	HYDRAULIC S	SYSTEM	
ľ	MAIN PUMP		
ĺ	Туре		Variable displacement tandem axis piston pumps
ĺ	Max. flow		2 × 160 lpm (42.3 U.S. gpm)
	AUXILIARY PR	ESSURE	
	2 Way	Flow (I/min)	13~85 gpm / (50~320 lpm)
	2 way	Pressure (bar)	1,450~5,076 psi / (100~350 bar)
	Rotating	Flow (I/min)	11 gpm / (39.9 lpm)
ı	Rotating	Pressure (bar)	2,321 psi / (160 bar)
ĺ	PILOT PUMP		
	Туре		Fixed displacement gear pump single stage
ı	Max. flow		29 ℓ/min (7.7 U.S. gpm)
ĺ	HYDRAULIC MO	OTORS	
	Travel		Variable displacement axial piston motor
ı	Swing		Fixed displacement axial piston motor
ĺ	RELIEF VALVE	SETTING	
	Implement circ	cuits	350 kgf/cm <sup>2</sup> (4,980 psi)
Travel			350 kgf/cm <sup>2</sup> (4,980 psi)
	Power boost (Boom, Arm, B	Bucket)	380 kgf/cm² (5,410 psi)
ĺ	Swing circuit		285 kgf/cm <sup>2</sup> (4,060 psi)
	Pilot circuit		40 kgf/cm <sup>2</sup> (569 psi)
ı	Service valve		Installed
ĺ	HYDRAULIC CY	LINDERS	
No. of Cylinder Bore X Stroke			Boom : 2-Ø115 × 1,090 mm
			Arm :1-Ø120 × 1,355 mm
			Bucket : 1-Ø110 × 995 mm
			Blade : 2-Ø110 × 320 mm

<sup>\*</sup> Hyundai Bio Hydraulic Oil (HBHO) available.

DRIVES & BRAKES	
Drive method	Fully hydrostatic type
Drive motor	Axial piston motor, in-shoe design
Reduction system	Planetary reduction gear
Max. Drawbar pull	16,700 kgf (36,820 lbf)
Max. Travel speed (High / Low)	3.1 km/hr (1.9 mph) / 5.4 km/hr (3.4 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, (RH): Boom and bucket		
Traveling and Steering	Two levers with pedals		
Engine throttle	Electric, dial type		

### **OPERATING WEIGHT (APPROXIMATE)**

Operating weight, including 5.1 m (16' 9") boom, 2.6 m (8' 6") arm, SAE heaped  $0.73\,\mathrm{m}^3(0.95\,\mathrm{yd}^3)$  bucket, lubricant, coolant, full fuel tank, full hydraulic tank, and all standard equipment.

### **OPERATING WEIGHT**

Shoes		Operating We	Ground Pressure	
Type Width mm (in)		kg (lb)	kgf / cm2 (psi)	
	500 (20") 600 (24") 700	HX160A L	17,455 (38,480)	0.51 (7.24)
		HX160A L Dozer	18,540 (40,870)	0.54 (7.69)
Triple		HX160A L	17,695 (39,010)	0.43 (6.12)
grouser		HX160A L Dozer	18,775 (41,390)	0.46 (6.49)
		HX160A L	17,945 (39,560)	0.37 (5.32)
		HX160A L Dozer	19,050 (42,000)	0.40 (5.64)

SWING SYSTEM			
Swing motor	Fixed displacement axial piston motor		
Swing reduction	2 - stage planetary		
Swing bearing lubrication	Grease-bathed		
Swing brake	Multi wet disc		
Swing speed	10.3 rpm		

COOLANT & LUBRICANT CAPACITY					
US gal liter					
Fueltank	76.6	290			
Engine coolant	6.1	23			
Engine oil	2.9	11			
Swing device	1.6	6.2			
Final drive (Each)	1.6	6			
Hydraulic system (Including tank)	59.4	225			
Hydraulic tank	33.0	125			
Def/Adblue®	9.2	35			

### 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
No. of Carrier roller	2 x 2
No. of Track roller	2×7
No. of Rail guard	2 x 1

### **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)	71 dB(A)
Exterior sound power level (ISO 6395:2008)	99 dB(A)

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

# SPECIFICATIONS **HX160**<sub>A</sub> L

Powered By Cummins Performance Series Engines

#### HX160A DIMENSIONS Unit: ft·in (mm)

### 5.10 m (16' 9") BOOM and 2.20 m (7' 3"), 2.60 m (8' 6"), 3.10 m (10' 2") ARM

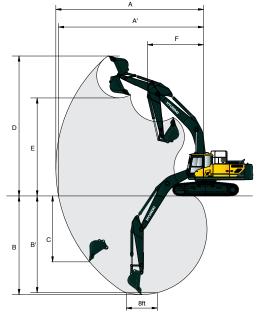
A Tumbler Distance	10' 5"	(3,170)
B Overall Length of Crawler	12' 10"	(3,910)
*C Ground Clearance of Counter Weight	3'6"	(1,060)
D Tail Swing Radius	8' 2"	(2,490)
D' Rear-End Length	8' 2"	(2,490)
E Overall Width of Upper Structure	8' 1"	(2,475)
*F Overall Height of Cab	9' 9"	(2,980)
*G Min. Ground Clearance	1' 6"	(460)
H Track gauge	6' 6"	(1,990)
*I Overall Height of Guardrail	10'8"	(3,250)

<sup>\*</sup> This figure includes the size of grousers.
\*\*With dozer blade option

Industrial A	P N C	E HYUNDAI
B B	· ·	M

	Boom Length	5,100 (16' 9")						
	Arm Length	2,200		2,600		3,100		
	, ii iii Lorigeii	(7' 3")		(8'	(8'6")		(10' 2")	
J	Overall Length	,		,	8,650		8,670	
		(28'5")	(28' 5")		(28'5")		(28' 5")	
*K	Overall Height of Boom	3,040 3,03		30 3,1		3,195		
- 1	- Overall Height of Booth	(10' 0")		(9' 1	11")		(10'6")	
L	Track Shoe	500 (20")	60	0 (24")	700 (28	3")	800 (32")	
М	Overall Width	2,490 (8' 2")		2,590 2,690 8'6") (8'10'			-	
**N	Ground clearance of blade up	615 (2' 0")						
**0	Depth of blade down	670 (2' 2")						
**P	Height of blade	640 (2' 1")						

H	(160A WORKING RANGE			Unit: ft·in (mm)
	Boom Length		5,100 (16' 9")	
	Arm Length	2,200 (7' 3")	2,600 (8' 6")	3,100 (10' 2")
Α	Max. Digging Reach	8,690 (28' 6")	9,020 (29' 7")	9,450 (31' 0")
A'	Max. Digging Reach on Ground	8,530 (28' 0")	8,860 (29'1")	9,300 (30' 6")
В	Max. Digging Depth	5,630 (18' 6")	6,030 (19' 9")	6,530 (21' 5")
B'	Max. Digging Depth (8' Level)	5,410 (17' 9")	5,825 (19' 1")	6,340 (20' 10")
С	Max. Vertical Wall Digging Depth*	3,410 (11' 2")	3,600 (11' 10")	3,845 (12' 7")
D	Max. Digging Height	8,670 (28' 5")	8,750 (28' 8")	8,880 (29' 2")
E	Max. Dumping Height	6,140 (20' 2")	6,250 (20'6")	6,410 (21' 0")
F	Min. Swing Radius	3,180 (10' 5")	3,170 (10' 5")	3,160 (10' 4")

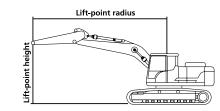


D	Length	mm (ft·in)	5,100 (16' 9") Mono Boom						
Boom	Weight	kg (lb)	1,277 (2,810)						
A	Length	mm (ft·in)	mm (ft·in) 2,200 (7' 3") 2,600		3,100 (10' 2")	Remark			
Arm	Weight	kg (lb)	807 (1,780)	860 (1,900)	888 (1,960)				
		kN	108.0 [117.0]	108.0 [117.0]	108.0 [117.0]				
	SAE	kgf	10,987 [11,930]	10,004 [11,950]	11,006 [11,950]				
D. al al D'a a' a Estad		lbf	24,222 [26,301]	24,259 [26,345]	24,264 [26,345]				
Bucket Digging Force		kN	126.0 [137.0]	126.0 [137.0]	126.0 [137.0]				
	ISO	kgf	12,872 [13,980]	12,892 [14,000]	12,894 [14,000]	[]:			
		lbf	28,379 [30,821]	28,421[30,865]	28,427 [30,865]				
		kN	87.0 [95.0]	77.0 [84.0]	69.0 [75.0]	Power Boost			
	SAE	kgf	8,889 [9,650]	7,879 [8,550]	7,035 [7,640]				
A C		lbf	19,596 [21,275]	17,370 [18,850]	15,510 [16,843]				
Arm Crowd Force		kN	92.0 [99.0]	81.0 [88.0]	72.0 [78.0]				
	ISO	kgf	9,339 [10,140]	8,237 [8,940]	7,314 [7,940]				
		lbf	20,590 [22,355]	18,158 [19,709]	16,124 [17,505]				

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



Powered By Cummins Performance Series Engines



### **Lifting Capacity** (Without Dozer)

Boom: 5.1 m (16' 9") Arm: 2.60 m (8' 6") Capacities based on North American Standard Configuration in accordance with ISO condition 2 standard.

Shoe 600 mm (24") triple grouser

Rating over front

CWT 3,250 kg (7,170 lb)

Rating over side or 360 degrees

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						Lift-po	int radius						At max. reach	ı
Lift-po heigh		1.5 m (4.9 ft)		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		7.5 m (24.6 ft)		Capacity		Reach
m (ft)		ľ		Ū		ľ		ľ		ľ		Ū		m (ft)
6.0 m	kg							*3040	*3040			*2120	*2120	6.44
19.7 ft	lb							*6700	*6700			*4670	*4670	(21.1)
4.5 m	kg							*3730	*3730			*2080	*2080	7.25
14.8 ft	lb							*8220	*8220			*4590	*4590	(23.8)
3.0 m	kg			*7920	*7920	*5290	*5290	*4260	3610	*2820	2450	*2170	*2170	7.68
9.8 ft	lb			*17460	*17460	*11660	*11660	*9390	7960	*6220	5400	*4780	*4780	(25.2)
1.5 m	kg			*6710	*6710	*6610	5330	*4880	3420	*3640	2370	*2380	2220	7.79
4.9 ft	lb			*14790	*14790	*14570	11750	*10760	7540	*8020	5220	*5250	4890	(25.6)
Ground	kg			*6560	*6560	*7430	5060	5240	3270	*3430	2310	*2800	2260	7.61
Line	lb			*14460	*14460	*16380	11160	11550	7210	*7560	5090	*6170	4980	(25.0)
-1.5 m	kg	*5310	*5310	*9390	*9390	*7540	4960	5160	3210			*3580	2490	7.10
-4.9 ft	lb	*11710	*11710	*20700	*20700	*16620	10930	11380	7080			*7890	5490	(23.3)
-3.0 m	kg	*8650	*8650	*10160	9820	*6880	5000	*4800	3240			*4560	3110	6.19
-9.8 ft	lb	*19070	*19070		21650	*15170	11020	*10580	7140			*10050	6860	(20.3)
-4.5 m	kg			*7340	*7340	*4850	*4850					*4640	*4640	4.63
-14.8 ft	lb			*16180	*16180	*10690	*10690					*10230	*10230	(15.2)

## Lifting Capacity (Dozer Down)

Boom: 5.1 m (16' 9") Arm: 2.60 m (8' 6") Capacities based on North American Standard Configuration in accordance with ISO condition 2 standard.

Shoe 600 mm (24") triple grouser

Rating over front 🏻 🖣

CWT 3,250 kg (7,170 lb)

Rating over side or 360 degrees

						Lift-po	oint radius						At max. reach	1
Lift-po heigh		1.5 m	(4.9 ft)	3.0 m	(9.8 ft)	4.5 m	(14.8 ft)	6.0 m	(19.7 ft)	7.5 m (	(24.6 ft)	Cap	pacity	Reach
m (ft		<b>I</b>		U				J		Ī		P		m (ft)
6.0 m	kg							*3040	*3040			*2120	*2120	6.44
19.7 ft	lb							*6700	*6700			*4670	*4670	(21.1)
4.5 m	kg							*3730	*3730			*2080	*2080	7.25
14.8 ft	lb							*8220	*8220			*4590	*4590	(23.8)
3.0 m	kg			*7920	*7920	*5290	*5290	*4260	3810	*2820	2610	*2170	*2170	7.68
9.8 ft	lb			*17460	*17460	*11660	*11660	*9390	8400	*6220	5750	*4780	*4780	(25.2)
1.5 m	kg			*6710	*6710	*6610	5640	*4880	3630	*3640	2530	*2380	2370	7.79
4.9 ft	lb			*14790	*14790	*14570	12430	*10760	8000	*8020	5580	*5250	5220	(25.6)
Ground	kg			*6560	*6560	*7430	5360	*5330	3480	*3430	2470	*2800	2420	7.61
Line	lb			*14460	*14460	*16380	11820	*11750	7670	*7560	5450	*6170	5340	(25.0)
-1.5 m	kg	*5310	*5310	*9390	*9390	*7540	5260	*5410	3420			*3580	2670	7.10
-4.9 ft	lb	*11710	*11710	*20700	*20700	*16620	11600	*11930	7540			*7890	5890	(23.3)
-3.0 m	kg	*8650	*8650	*10160	*10160	*6880	5300	*4800	3450			*4560	3310	6.19
-9.8 ft	lb	*19070	*19070	*22400	*22400	*15170	11680	*10580	7610			*10050	7300	(20.3)
-4.5 m	kg			*7340	*7340	*4850	*4850					*4640	*4640	4.63
-14.8 ft	lb			*16180	*16180	*10690	*10690					*10230	*10230	(15.2)

### 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	STD	OPT
Cummins B4.5		
Engine Auto Idle	•	
Engine Auto Shutdown Control	•	
Emergency Engine Stop Switch	•	
HYDRAULIC SYSTEM		
INTELLIGENT POWER CONTROL (IPC) UPGRADE		
3-Power Mode, 2-Work Mode, User Mode	•	
Variable Power Control	•	
Pump Flow Control	•	
Attachment Mode Flow Control	•	
Hyundai Bio Hydraulic oil (HBHO)		•
CAB & INTERIOR STD OPT		
ISO STANDARD CABIN		
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 Transparent Cabin Roof Cover	•	
Transparent Cabin Roof-Cover Sun Visor	•	•
Door And Cab Locks, One Key	•	
Pilot-Operated Slidable Joystick	•	
Adjustable L & R Consoles	•	
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	•	
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		•
CABIN ROPS		
PORC (Pall Over Protective Structures) ISO 12117-2		

Lifting Mode	STD	OPT
	•	
Auto Safety Lock	•	
Seatbelt Warning Alarm	•	
Battery Master Switch	•	
Rear View 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 Mirror	•	
ATTACHMENT	STD	ОРТ
Booms		_
5.10 m, 16' 9" Mono	•	
5.10 m, 16' 9" 2-Piece		•
Arms		
2.2 m, 7' 3"		•
2.6 m, 8' 6"	•	
3.1 m, 10' 2"		•
OTHER	STD	OPT
Fuel Pre-Filter	•	
Fuel Warmer	•	
Pre-Cleaner	•	
Self-Diagnostics System	•	
Hi MATE (Remote Management System)		•
Batteries (2 × 12 V × 100 AH)	•	
Fuel Filler Pump (35 lpm)		•
2-Way auxiliary w Proportional control	•	
Rotating Piping Kit		•
Air Compressor		•
Quick Coupler Piping	•	
Quick Coupler	•	
		•
One Pedal Straight Travel System	•	
One Pedal Straight Travel System Accumulator For Lowering Work Equipment		
	•	_
Accumulator For Lowering Work Equipment	•	•
Accumulator For Lowering Work Equipment Pattern Change Valve (2 Patterns)	•	•
Accumulator For Lowering Work Equipment Pattern Change Valve (2 Patterns) Fine (Cushion/Free) Swing Control	STD	• OPT
Accumulator For Lowering Work Equipment Pattern Change Valve (2 Patterns) Fine (Cushion/Free) Swing Control Tool Kit UNDERCARRIAGE Lower Frame Under Cover	STD	OPT
Accumulator For Lowering Work Equipment Pattern Change Valve (2 Patterns) Fine (Cushion/Free) Swing Control Tool Kit UNDERCARRIAGE Lower Frame Under Cover Track Shoes	STD	OPT
Accumulator For Lowering Work Equipment Pattern Change Valve (2 Patterns) Fine (Cushion/Free) Swing Control Tool Kit UNDERCARRIAGE Lower Frame Under Cover Track Shoes Triple Grousers Shoes (500 mm, 20")	STD	OPT
Accumulator For Lowering Work Equipment Pattern Change Valve (2 Patterns) Fine (Cushion/Free) Swing Control Tool Kit UNDERCARRIAGE Lower Frame Under Cover Track Shoes	STD	OPT

- $\hbox{$^*$ 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.
- $^{\star}\,\mbox{All}$  imperial measurements rounded off to the nearest pound or inch.







ROPS (Roll Over Protective Structures) ISO 12117-2