# SPECIFICATIONS HW160A

**Net Power** 170 HP (127 kW) / 2,200 rpm Standard Bucket .85 m<sup>3</sup>/1.11 yd<sup>3</sup> Operating Weight 38,910 LBS (17,650 kg)



Powered By Cummins Performance Series Engine

ENGINE				
Maker / Model		CUMMINS / B4.5		
Туре		Stage 5 compliant, 4 cylinder, turbocharged charge air cooled, direct injection, electronic controlled diesel engine.		
Rated flywheel SAE	J1995 (gross)	129 kW (173 hp) at 2,200 rpm		
horse power	J1349 (net)	127 kW (170 hp) at 2,200 rpm		
Max. torque		129 kW (173 hp) at 2,200 rpm		
Peak Torque		780 N·m (575 lb.ft) at 1,500 rpm		
Displacement Batteries		4.5 ℓ (275 cu in)		
		2 × 12 V × 100 Ah		
Starting motor		24 V - 4.8 kW		
Alternator		24 V - 95 Amp		

HYDRAULIC SYSTEM				
MAIN PUMP				
Туре		Variable Displacement Piston pumps		
Max. Flow		2 x 255 ℓ/pm (67.4 gmp) @ 1,800 rpm		
AUXILIARY PR	RESSURE			
2 Way	Flow (I/min)	13~66 gpm / (50~250 lpm)		
2 vvay	Pressure (bar)	1,450~4,641 psi / (100~280 bar)		
Rotating	Flow (I/min)	16 gpm / (60 lpm)		
Rotating	Pressure (bar)	3,046 psi / (210 bar)		
PILOT PUMP				
Туре		Fixed displacement gear pump single stage		
Max. Flow		33 ℓ /min (8.7 U.S. gpm)		
HYDRAULIC MOTORS				
Travel		Variable Displacement Bent Axis Piston Motor		
Swing		Fixed Displacement Radial Piston Motor		
RELIEF VALVE	SETTING			
Implement Cir	rcuits	350 kgf/cm <sup>2</sup> (4,970 psi)		
Travel		380 kgf/cm <sup>2</sup> (5,400 psi)		
Power Boost ( Boom, Arm, Bucket )		380 kgf/cm <sup>2</sup> (5,400 psi)		
Swing Circuit		270 kgf/cm <sup>2</sup> (3,840 psi)		
Pilot Circuit		40 kgf/cm² (570 psi)		
Service Valve		Installed		

DRIVES & BRAKES				
4-wheel hydrostatic drive. Constant mesh, helical gear transmission provides 2 forward and reverse travel speeds.				
Reduction System	Planetary reduction gear			
Max. Drawbar Pull	10,720 kgf (23,636 lbf)			
Max. Travel Speed (High / Low)	9.5 km/hr (5.9 mph) / 37 km/hr (24.2 mph)			
Gradeability	35° (70%)			
Parking Brake	Spring applied and hydraulic released wet disc brake type in transmission.			

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

Operating weight, including 5,000mm (16' 5") Mono boom, 2,591 mm (8' 6") arm, SAE heaped  $0.85 \, \text{m}^3$  (1.11 yd³) backhoe bucket, lubricant, coolant, full fuel tank, hydraulic tank and the standard equipment.

OPERATING WEIGHT					
Rear outrigger	17,580 kg (38,760 lb)				
Front outrigger and rear blade	17,850 kg (39,350 lb)				
Front blade and rear outrigger	18,800 kg (41,450 lb)				
Four outrigger	18,800 kg (41,450 lb)				
Front blade and rear blade	19,070 kg (42,040 lb)				

SWING SYSTEM				
Swing motor	Fixed displacement axial pistons motor			
Swing bearing lubrication	Grease-bathed			
Swing brake	Multi wet disc			
Swing speed	9.3 rpm			

COOLANT & LUBRICANT CAPACITY				
	US gal	liter		
Fuel Tank	66.0	250		
Engine Coolant	5.2	19.5		
Engine Oil	2.9	11		
Swing Device	0.32	1.2		
Hydraulic System (Including Tank)	53.9	204		
Hydraulic Tank	32.2	122		
Def/Adblue®	7.1	27		

#### UNDERCARRIAGE

Reinforced box-section frame is all-welded, low-stress. Dozer blade and outrigger options are available. Easily replaceable through bolt-on design.

Dozer blade	Parallelogram-mounted dozer blade to support machine when working, also for leveling and back filling.		
Outriggers	Indicated for max. operation stability when digging and lifting. Can be mounted on front/or rear.		

#### **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 shall 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)		
* Distance of 15 m (49.2 ft), moving forward in second gear ratio			

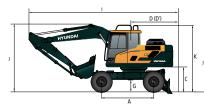
#### CONTROL

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		
FNR switch on RH joystick / Ram lock switch on LH joystick			
Attachment Control 3 modes available: Push / Proportional / Perm			
Engine Throttle	Electric, Dial type		
Operation Mode	3 modes available: P-Parking W-Working T-Travel		

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EU Stage V Engine Installed







#### HW160A MONO BOOM DIMENSIONS

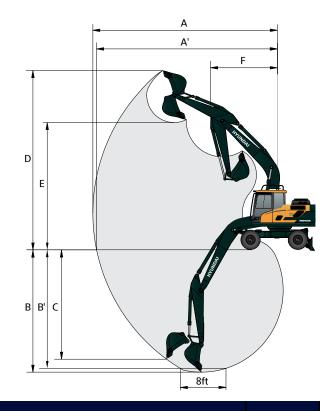
nit: ft·in (mm)

5.0~m~(16'~5")~Mono~boom,~2.0~m~(6'~7"),~2.45~m~(8'~0"),~2.6~m~(8'~6"),~3.1~m~(10'~2")~Arm,~Rear~dozer

Α	Wheel base	2,600 (8' 6")
В	Overall width (STD / Wide axle)	2,530 (8' 4")
C	Ground clearance of counterweight	1,265 (4' 2")
D	Rear-end distance	2,240 (7' 4")
D'	Rear-end swing radius	2,250 (7' 5")
Е	Upperstructure width	2,485 (8' 2")
F	Overall height of cab	3,230 (10' 7")
G	Min. ground clearance	370 (1' 3")
Н	Tread	1,944 (6' 5")
Κ	Overall height of guardrail	3,450 (11' 4")

	Arm length	2,000 (6' 7")	2,450 (8' 0")	2,600 (8' 6")	3,100 (10' 2")
I	Overall length (Traveling position)	8,230 (27')	8,180 (26' 10")	7,960 (26' 6")	7,990 (26' 5")
ľ	Overall length (Shipping position)	8,190 (26' 10")	8,140 (26' 8")	8,240 (27' 0")	8,210 (26' 11")
J'	Overall height of boom (Shipping position)	3,090 (10' 2")	2,965 (9' 9")	3,250 (10' 8")	3,530 (11' 7")

Н۱	W160A MONO BOOM WO	RKING RANGE	•		Unit: ft∙in (mm)
	Boom length	5,000 (16' 5")			
	Arm length	2,000 (6' 7")	2,450 (8' 0")	2,600 (8' 6")	3,100 (10' 2")
Α	Max. digging reach	8,360 (27' 5")	8,820 (28' 11")	8,865 (29' 1")	9,285 (30' 6")
A'	Max. digging reach on ground	8,140 (26' 8")	8,610 (28' 3")	8,660 (28' 5")	9,090 (29' 10")
В	Max. digging depth	5,160 (16' 11")	5,610 (18' 5")	5,760 (18' 11")	6,260 (20' 6")
B'	Max. digging depth (8' level)	4,910 (16' 1")	5,410 (17' 9")	5,530 (18' 2")	6,045 (19' 10")
C	Max. vertical wall digging depth	4,430 (14' 6")	5,060 (16' 7")	4,870 (16' 0")	5,220 (17' 2")
D	Max. digging height	8,640 (28' 4")	9,010 (29' 7")	8,810 (28' 11")	8,920 (29' 3")
Е	Max. dumping height	6,030 (19' 9")	6,360 (20' 10")	6,210 (20' 4")	6,350 (20' 10")
F	Min. swing radius	3,480 (11' 5")	3,170 (10' 5")	3,450 (11' 4")	3,500 (11' 6")



#### ATTACHMENT

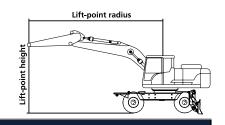
Booms and arms are welded with a low-stress, full-box section design. 2.0 m (6' 7"), 2.45 m (8' 0"), 2.6 m (8' 6"), 3.1 m (10' 2") arms are available.

IGGING FORC	E								
Boom			5,000 (16' 9") Mono						
Arm			2,000 (6' 7")	2,450 (8' 0")	2,600 (8' 6")	3,100 (10' 2")	Remark		
		kN	98 [107]	98 [107]	98 [107]	98 [107]			
	SAE	kgf	10,008 [10,920]	9,992 [10,900]	10,026 [10,940]	10,029 [10,940]	[]:		
Bucket		lbf	22,060 [24,070]	22,030 [24,030]	22,110 [24,120]	22,110 [24,120]			
digging force		kN	115 [125]	115 [125]	115 [126]	115 [126]			
Torce	ISO	kgf	11,726 [12,790]	11,706 [12,770]	11,746 [12,810]	11,750 [12,820]			
		lbf	25,850 [28,200]	25,810 [28,150]	25,900 [28,240]	25,900 [28,260]			
		kN	92 [101]	73 [80]	73 [79]	65 [70]	Power Boost		
	SAE	kgf	9,417 [10,270]	7,468 [8,150]	7,401 [8,070]	6,572 [7,170]	Boost		
Arm crowd force		lbf	20,760 [22,640]	16,460 [17,970]	16,320 [17,790]	14,490 [15,810]			
		kN	97 [106]	77 [84]	76 [82]	67 [73]	1		
	ISO	kgf	9,928 [10,830]	7,816 [8,530]	7,737 [8,440]	6,833 [7,450]			
		lbf	21,890 [23,880]	17,230 [18,810]	17,060 [18,610]	15,060 [16,420]			

Note: Arm weight includes bucket cylinder, linkage, and pin



EU Stage V Engine Installed



### Lifting Capacity (Without Dozer)

Boom: 5.0 m (16' 5") Arm: 2.45 m (8' 0") Wheel 500 mm (20") Capacities based on North American Standard Configuration in accordance with ISO condition 2 standard.

Rating over front 🖞

CWT 2,9	910 kg	g (6,415 lb)								Rating ove	er side or 360	degree 🖶	
		Lift-point radius									At max. reach		
Lift-point height m (ft)		1.5 m (4.9 ft)		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		Capacity		Reach	
		P		ľ		<b>P</b>		Ū				m (ft)	
7.5 m	kg						<u>'</u>		<u>'</u>	*3180	*3180	4.77	
24.6 ft	lb									*7010	*7010	(15.7)	
6.0 m	kg							*3550	2670	*2750	2540	6.16	
19.7 ft	lb							*7830	5890	*6060	5600	(20,2)	
4.5 m	kg					*4,730	4120	*4240	2630	*2630	2050	6.96	
14.8 ft	lb					*10,430	9080	*9350	5800	*5800	4520	(22.8)	
3.0 m	kg					*5,890	3820	4350	2510	*2660	1820	7.36	
9.8 ft	lb					*12,990	8420	9590	5530	*5860	4010	(24.2)	
1.5 m	kg					6,470	3550	4200	2390	*2830	1740	7.44	
4.9 ft	lb					14,260	7830	9260	5270	*6240	3840	(24.4)	
Ground	kg			*5870	*5870	6,290	3390	4110	2300	3170	1790	7.21	
Line	lb			*12940	*12940	13,870	7470	9060	5070	6990	3950	(23,61	
-1.5 m	kg	*5,810	*5,810	*10160	6100	6,250	3360	4090	2280	3570	2020	6.62	
-4.9 ft	lb	*12,810	*12,810	*22400	13450	13,780	7410	9020	5030	7870	4450	(21.7)	
-3.0 m	kg	*10,280	*10,280	*8790	6250	*6,160	3430			*4540	2600	5.57	
-9.8 ft	lb	*22,660	*22,660	*19380	13780	*13,580	7560			*10010	5730	(18.3)	

### **Lifting Capacity (Dozer Down)**

Boom: 5.0 m (16' 5") Arm: 2.45 m (8' 0") Wheel 500 mm (20")

CWT 3,250 kg (7,170 lb)

Capacities based on North American Standard Configuration in accordance with ISO condition 2 standard.

Rating over front

Rating over side or 360 degree

				At max. reach								
Lift-po		1.5 m (4.9 ft)		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		Capacity		Reach
heigh m (ft								ľ				m (ft)
7.5 m	kg									*3180	*3180	4.77
24.6 ft	lb									*7010	*7010	(15.7)
6.0 m	kg							*3550	2940	*2750	*2750	6.16
19.7 ft	lb							*7830	6480	*6060	*6060	(20.2)
4.5 m	kg					*4730	4540	*4240	2900	*2630	2260	6.96
14.8 ft	lb					*10430	10010	*9350	6390	*5800	4980	(22.8)
3.0 m	kg					*5890	4240	4350	2780	*2660	2020	7.36
9.8 ft	lb					*12990	9350	9590	6130	*5860	4450	(24.2)
1.5 m	kg					6470	3960	4200	2650	*2830	1940	744
4.9 ft	lb					14260	8730	9260	5840	*6240	4280	(24.4)
Ground	kg			*5870	*5870	6290	3800	4110	2570	3170	2000	7.21
Line	lb			*12940	*12940	13870	8380	9060	5670	6990	4410	(23.6)
-1.5 m	kg	*5810	*5810	*10160	6950	6250	3770	4090	2550	3570	2250	6.62
-4.9 ft	lb	*12810	*12810	*22400	15320	13780	8310	9020	5620	7870	4960	(21.7)
-3.0 m	kg	*10280	*10280	*8790	7110	*6160	3840			*4540	2900	5.57
-9.8 ft	lb	*22660	*22660	*19380	15670	*13580	8470			*10010	6390	(18.3)

- 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 bucket pivot mounting pin on the arm (without bucket mass).
- 4. (\*) indicates load limited by hydraulic capacity.

ENGINE	STD	OPT
Cummins B 4.5 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	•	
20 km/h speed limit		•
Hyundai Bio Hydraulic Oil (HBHO)		•
CAB & INTERIOR		
ISO Standard cabin		
Rise-up type windshield wiper	•	
Radio / USB player	•	
Handsfree mobile phone system with USB	•	
12 volt power outlet (24V DC to 12V DC converter)	•	
Electric hom  All-weather steel cab with 360° visibility	-	
Safety glass - Tempered glass with front laminated glass	•	
Safety glass - Tempered glass with front laminated glass Safety glass windows	•	
Sliding fold-in front window	•	
Sliding side window(LH)	•	
Lockable door	•	
Hot & cool box	•	
Storage compartment	•	
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	•	
Warnings	•	
Communication error  Low battery	-	
Clock		
Cabin lights	•	•
Cabin front window rain guard		•
Seat		
Adjustable Air Suspension with Heater	•	
Cabin FOP (ISO 10,262) Level 2		
FOPS (Falling Object Structures)  Front & Tops Guard		•
- 1 lop Guard		•
Cabin ROPS (ISO 12,117-2) ROPS (Roll Over Protective Structures)	•	
TOT S (TOTAL OVER 1 TOTAL CETTAL STEERING STEERI		<u> </u>

SAFETY	STD	OPT
Ride control & Boom floating		•
Radar with 2nd monitor		•
Battery master switch	•	
Rear view camera	•	
Rear & Mirror 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		•
Four outside rearview mirror	•	
ATTACHMENT		
Booms		
5.0 m, 16' 5" Mono	•	
Arms	, , , , , , , , , , , , , , , , , , ,	
2.00 m, 6' 7"		•
2.45 m, 8' 0"	•	
2.60 m, 8' 6"		•
3.10 m, 10' 2"		•
OTHER		
Heavy CWT	•	
Fuel pre-filter		
Self-diagnostics system		
Hi MATE (Remote Management System)	•	
Batteries (2 x 12V x 100 AH)	•	
Double-acting piping kit with fingertip control		•
Rotating Piping Kit		•
Quick coupler piping	•	
Quick coupler	•	
Accumulator for lowering work equipment	•	
Pattern change valve (2 patterns)		•
Fine Swing Control System		•
Automatic braking		•
Joystick Steering		•
Auto cruiser system	•	
LED lights on boom (2)		•
Lower Frame Toolbox - LH	•	
Lower Frame Toolbox - LH, RH		•
UNDERCARRIAGE		
Front dozer blade		•
Rear dozer blade		•
Rear outrigger		•
Front outrigger and rear blade		•
Front and rear outrigger		•
Front blade and rear outrigger		•
Front grapple rest and rear blade		•
Front and rear dozer blade		•
Trailer hitch for rear dozer blade		•
Front grappler rest and rear outrigger		•
Front bucket rest and rear blade Front bucket rest and rear outrigger		_
Tires-dual (10.00-20-14PR tube)	•	•
Tires-dual (10.00-20-14PR tube)		•
111C3 GGG (10.00 20 1011\ \tabe)		
Tires-dual (10.00-20 solid)		
Tires-dual (10.00-20 solid) Fenders (Mudguards)		•

- \* 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.



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