

# SPECIFICATIONS

## HW140

Tier 4 Final Engine

### Net Power

SAE J1349 / 149 HP  
(111 kW) at 2,150 rpm

### Bucket Range

0.23 m<sup>3</sup> - 0.71 m<sup>3</sup>  
0.30 yd<sup>3</sup> - 0.93 yd<sup>3</sup>

### Standard Bucket

0.58 m<sup>3</sup> (0.76 yd<sup>3</sup>)

### Operating Weight

13,880 kg (30,600 lb)

## ENGINE

Maker / Model	Cummins QSB 6.7
Type	Water-cooled, 4-cycle diesel, 6-cylinder in-line, Direct injection, Turbocharged, Charge air cooled, Low emission
Rated flywheel horse power	SAE J1995 (gross) 157 HP (117 kW) at 2,150 rpm SAE J1349 (net) 149 HP (111 kW) at 2,150 rpm
Max. torque	68.5 kgf.m (496 lbf.ft) at 1,500 rpm
Bore x stroke	107 x 124 mm (4.21" x 4.88")
Piston displacement	6,700 cc (409 in <sup>3</sup> )
Batteries	2 x 12 V x 100 Ah
Starting motor	24 V - 4.8 kW
Alternator	24 V - 95 Amp

## HYDRAULIC SYSTEM

### MAIN PUMP

Type	Two variable displacement piston pumps
Max. flow	2 X 172 l/min (45.4 gpm)
Sub-pump for pilot circuit (Gear Pump)	32.31 l/min (8.5 gmp)

## CROSS-SENSING AND FUEL-SAVING PUMP SYSTEM

### HYDRAULIC MOTORS

Travel	Bent - axis pistons motor with brake valve and parking brake
Swing	Axial piston motor with automatic brake

### RELIEF VALVE SETTING

Implement circuits	400 kgf/cm <sup>2</sup> (5,690 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	285 kgf/cm <sup>2</sup> (4,050 psi)
Pilot circuit	40 kgf/cm <sup>2</sup> (570 psi)
Service valve	Installed

### HYDRAULIC CYLINDERS

No. of cylinder bore X stroke	Boom: 2-105 x 1075 mm (4.1" x 42.3")
	Arm: 1-115 x 1138 mm (4.5" x 46.8")
	Bucket: 1-100 x 850 mm (3.9" x 33.1")
	Blade: 2-100 x 236 mm (3.9" x 9.3")
	Outrigger: 2-110 x 446 mm (4.9" x 18.7")
	2-PCS boom: 2-105 x 975mm (4.1" x 38.4") Adjust (boom): 1-145 x 613mm (5.7" x 24.1")

## DRIVES & BRAKES

4-wheel hydrostatic drive. Constant mesh, helical gear transmission provides 2 forward and reverse travel speeds.

Max. drawbar pull	7,800 kgf (17,200 lbf)
Travel speed	1st 6.2 mph 2nd 24.2 mph
Gradeability	35° (70 %)

Service Brake :

- Independent dual brake, front and rear axle full hydraulic power brake.
- Spring released and hydraulic applied wet type multiple disc brake.

Parking Brake :

- Spring applied and hydraulic released wet disc brake type in transmission.

## 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 (ISO)
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## OPERATING WEIGHT (APPROXIMATE)

Operating weight, including 4,600 mm (15' 11") mono boom, 2,100 mm (6' 11") arm, SAE heaped 0.58 m<sup>3</sup> (0.76 yd<sup>3</sup>) backhoe bucket, lubricant, coolant, full fuel tank, hydraulic tank and the standard equipment.

### OPERATING WEIGHT

Rear dozer blade	13,880 (30,600)
Rear outrigger	14,280 (31,480)
Front outrigger and rear blade	14,880 (32,800)
Front blade and rear outrigger	14,880 (32,800)
Four outrigger	14,630 (32,250)

## SWING SYSTEM

Swing motor	Fixed displacement axial pistons motor
Swing reduction	Planetary gear reduction
Swing bearing lubrication	Grease-bathed
Swing brake (option)	Multi wet disc
Swing speed	11.6 rpm

## SERVICE REFILL CAPACITIES

	liter	US gal
Re-filling		
Fuel tank	270	71.3
Engine coolant	19.5	5.2
Engine oil	23.7	6.3
Swing device	3.5 (2.5)	0.92 (0.7)
Axle	front	13.8
	rear	16.1
Transmission	2.5	0.7
Hydraulic system (including tank)	210	55.5
Hydraulic tank	120	31.7
REFILL Adaptor tank	27	7.1

## UNDERCARRIAGE

Reinforced box-section frame is all-welded, low-stress.

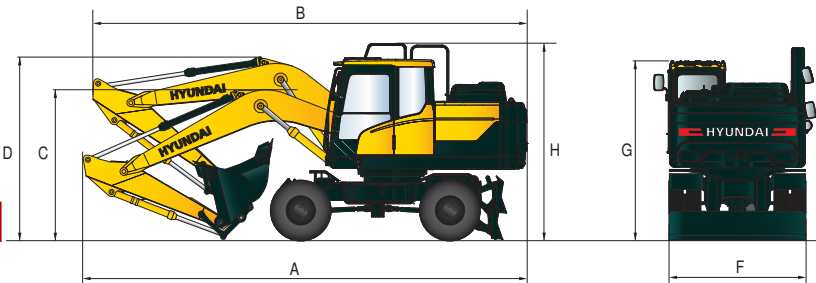
Dozer blade and outriggers are available. A pin-on design.

Dozer blade	A very useful addition for leveling and back filling or clean-up work.
Outrigger	Indicated for max. operation stability when digging and lifting. Can be mounted on the front/or the rear.

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### HW140 DIMENSIONS

Unit: mm (ft-in)

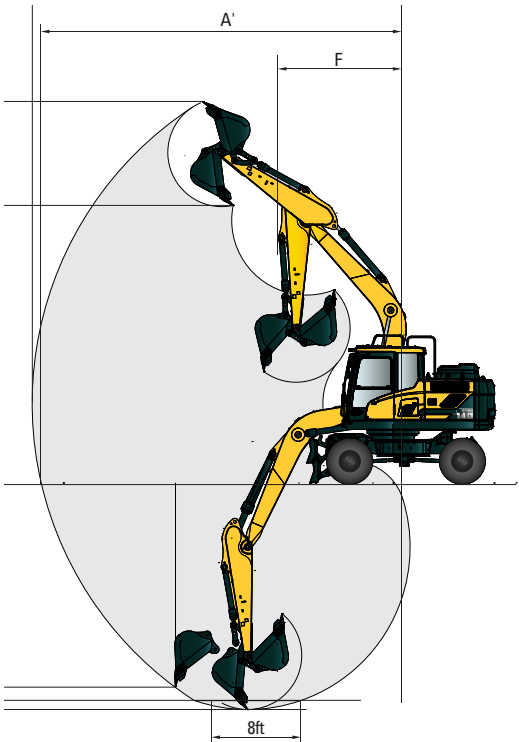
4.6 m (15' 1") mono boom, 1.9 m (6' 3"), 2.1 m (6' 11"), 2.5 m (8' 2"), 3.0 m (9' 10"), arm, front outrigger and rear dozer blade

Boom length	4,600 (15' 1") Mono			
Arm length	1,900 (6' 3")	2,100 (6' 11")	2,500 (8' 2")	3,000 (9' 10")
A Overall length of shipping position	7,760 (25' 6")	7,820 (25' 8")	7,770 (25' 6")	7,830 (25' 8")
B Overall length of traveling position	7,750 (25' 5")	7,760 (25' 6")	7,690 (25' 3")	7,710 (25' 4")
C Height of attachment (shipping position)	2,760 (9' 1")	2,860 (9' 5")	2,810 (9' 3")	3,100 (10' 2")
D Height of attachment (traveling position)	3,500 (11' 6")	3,500 (11' 6")	3,620 (11' 11")	3,600 (11' 10")
E Overall width	2,500 (8' 2")	2,500 (8' 2")	2,500 (8' 2")	2,500 (8' 2")
F Height of cabin	3,140 (10' 4")	3,140 (10' 4")	3,140 (10' 4")	3,140 (10' 4")
G Overall height of guardrail	3,390 (11' 1")	3,390 (11' 1")	3,390 (11' 1")	3,390 (11' 1")

### HW140 WORKING RANGE

Unit : mm (ft-in)

Boom length	4,600 (15' 1") Mono			
Arm length	1,900 (6' 3")	2,100 (6' 11")	2,500 (8' 2")	3,000 (9' 10")
A Max. digging reach	7,750 (25' 5")	7,920 (26' 0")	8,320 (27' 4")	8,780 (28' 10")
A' Max. digging reach on ground	7,530 (24' 8")	7,700 (25' 3")	8,120 (26' 8")	8,590 (28' 2")
B Max. digging depth	4,650 (15' 3")	4,850 (15' 11")	5,250 (17' 3")	5,750 (18' 10")
B' Max. digging depth (8' level)	4,390 (14' 5")	4,600 (15' 1")	5,040 (16' 6")	5,570 (18' 3")
C Max. vertical wall digging depth	4,350 (14' 3")	4,460 (14' 8")	5,030 (16' 6")	5,550 (18' 3")
D Max. digging height	8,400 (27' 7")	8,470 (27' 9")	8,790 (28' 10")	9,070 (29' 9")
E Max. dumping height	5,960 (19' 7")	6,040 (19' 10")	6,350 (20' 10")	6,620 (21' 9")
F Min. swing radius	2,620 (8' 7")	2,670 (8' 10")	2,650 (8' 8")	2,670 (8' 9")



### DIGGING FORCE

Arm	Length	mm (ft.in)	1,900 (6' 3")	2,100 (6' 11")	2,500 (8' 2")	3,000 (9' 10")	[Power Boost]
	Weight	kg (lb)	560 (1,230)	580 (1,280)	610 (1,340)	670 (1,480)	
Bucket digging force	SAE	kN	87.3 [94.8]	87.3 [94.8]	87.3 [94.8]	87.3 [94.8]	
		kgf	8,900 [9,660]	8,900 [9,660]	8,900 [9,660]	8,900 [9,660]	
		lbf	19,620 [21,300]	19,620 [21,300]	19,620 [21,300]	19,620 [21,300]	
	ISO	kN	102 [110.8]	102 [110.8]	102 [110.8]	102 [110.8]	
		kgf	10,400 [11,290]	10,400 [11,290]	10,400 [11,290]	10,400 [11,290]	
		lbf	22,930 [24,890]	22,930 [24,890]	22,930 [24,890]	22,930 [24,890]	
Arm crowd force	SAE	kN	76.5 [83.1]	73.6 [79.9]	62.8 [68.2]	55.9 [60.7]	
		kgf	7,800 [8,470]	7,500 [8,140]	6,400 [6,950]	5,700 [6,190]	
		lbf	17,200 [18,670]	16,530 [17,950]	14,110 [15,320]	12,570 [13,640]	
	ISO	kN	80.4 [87.3]	77.5 [84.1]	65.7 [71.4]	57.9 [62.8]	
		kgf	8,200 [8,900]	7,900 [8,580]	6,700 [7,270]	5,900 [6,410]	
		lbf	18,080 [19,630]	17,420 [18,910]	14,770 [16,040]	13,010 [14,120]	

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

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## BUCKETS

All buckets are welded with high-strength steel.



SAE heaped  
m<sup>3</sup> (yd<sup>3</sup>)

0.23 (0.30)



0.40 (0.52)  
0.46 (0.60)



0.52 (0.68)  
0.58 (0.76)



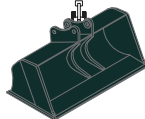
0.65 (0.85)



0.71 (0.93)



0.45 (0.59)



0.55 (0.72)

Capacity m³ (yd³)		Width mm (in)		Weight kg (lb)	Recommendation mm (ft. in)							
					4.6 (15' 1") Boom				4.9 (16' 1") 2-Piece Boom			
SAE heaped	CECE heaped	Without side cutters	With side cutters		1.9 (6' 3") Arm	2.1 (6' 11") Arm	2.5 (8' 2") Arm	3.0 (9' 10") Arm	1.9 (6' 3") Arm	2.1 (6' 11") Arm	2.5 (8' 2") Arm	
0.23 (0.30)	0.20 (0.26)	520 (20.5)	620 (24.4)	335 (740)	●	●	●	●	●	●	●	
0.40 (0.52)	0.35 (0.46)	750 (29.5)	850 (33.5)	410 (900)	●	●	●	●	●	●	●	
0.46 (0.60)	0.40 (0.52)	840 (33.1)	940 (37.0)	435 (960)	●	●	●	■	●	●	■	
0.52 (0.68)	0.45 (0.59)	915 (36.0)	1,015 (40.0)	460 (1,010)	●	●	■	▲	●	■	■	
0.58 (0.76)	0.50 (0.65)	1,000 (39.4)	1,100 (43.3)	480 (1,060)	●	■	■	▲	■	▲	▲	
0.65 (0.85)	0.55 (0.72)	1,105 (43.5)	1,205 (47.4)	500 (1,100)	■	▲	▲	-	▲	▲	-	
0.71 (0.93)	0.60 (0.78)	1,190 (46.9)	1,290 (50.8)	540 (1,190)	▲	▲	-	-	▲	-	-	
■ 0.45 (0.59)	0.40 (0.52)	1,520 (59.8)	-	410 (900)	●	●	■	-	■	■	▲	
● 0.55 (0.72)	0.45 (0.59)	1,800 (70.9)	-	585 (1,290)	■	▲	▲	-	■	▲	▲	

■ Digging bucket

● Slope finishing bucket

● : Applicable for materials with density of 2,000 kgf/m<sup>3</sup> (3,370 lbf/yd<sup>3</sup>) or less

■ : Applicable for materials with density of 1,600 kgf/m<sup>3</sup> (2,700 lbf/yd<sup>3</sup>) or less

▲ : Applicable for materials with density of 1,100 kgf/m<sup>3</sup> (1,850 lbf/yd<sup>3</sup>) or less

## Lifting Capacity

Boom: 4,600 mm (15')

Arm: 2,100 mm (6'8")

Bucket: 0.70 m<sup>3</sup> (0.92 yd<sup>3</sup>) SAE heaped

CWT 2,200 kg (4,850 lb)

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



Rating over front



Rating over side or 360 degree

Lift-point height m (ft)		Lift-point radius								At max. reach		
		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
												m (ft)
6.0 m	kg					*3,870	*3,870			*3,400	*3,400	5.17
(20 ft)	lb					*8,530	*8,530			*7,500	*7,500	(17.0)
4.5 m	kg					*4,230	*4,230	*3,740	3,710	*3,200	*3,200	6.10
(15 ft)	lb					*9,330	*9,330	*8,250	8,180	*7,050	*7,050	(20.0)
3.0 m	kg					*5,200	*5,200	*4,340	3,650	*3,240	3,170	6.57
(10 ft)	lb					*11,460	*11,460	*9,570	8,050	*7,140	6,990	(21.5)
1.5 m	kg					*6,220	5,480	*4,750	3,560	*3,480	3,050	6.66
(5 ft)	lb					*13,710	12,080	*10,470	7,850	*7,670	6,720	(21.8)
Ground Line	kg			*6,800	*6,800	*6,740	5,350	*4,970	3,500	*4,030	3,200	6.40
	lb			*14,990	*14,990	*14,860	11,790	*10,960	7,720	*8,880	7,050	(21.0)
-1.5 m	kg	*6,280	*6,280	*9,720	*9,720	*6,560	5,330			*4,860	3,740	5.74
(-5 ft)	lb	*13,850	*13,850	*21,430	*21,430	*14,460	11,750			*10,710	8,250	(18.8)
-3.0 m	kg			*7,820	*7,820	*5,030	*5,030			*5,020	*5,020	4.50
(-10 ft)	lb			*17,240	*17,240	*11,090	*11,090			*11,070	*11,070	(14.8)

### NOTES:

1. Lifting capacities are based on ISO 10567.

2. Lifting capacities for the HX series do 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.

# SPECIFICATIONS HW140

Tier 4 Final Engine

ENGINE	STD	OPT
Cummins QSB 6.7 engine	•	
HYDRAULIC SYSTEM	STD	OPT
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	STD	OPT
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 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 and Ashtray	•	
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	•	
Cabin lights		•
Cabin front window rain guard		•
Cabin roof-steel cover		•
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	•	
Lowercase gauges	•	
Fuel level gauge	•	
Hydraulic oil temperature gauge	•	
Fuel warmer	•	
Warnings	•	
Communication error	•	
Low battery	•	
Clock	•	

\* 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.

CAB & INTERIOR	STD	OPT
Seat		
Adjustable air suspension seat with heater	•	
Cabin FOPS/FOG		
FOPS (Falling Object Protective Structures) ISO 3449 Level 2		•
FOG (Falling Object Guard)		•
Cabin ROPS		
ROPS (Roll Over Protective Structures)	•	
SAFETY	STD	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		•
Four outside rearview mirror	•	
OTHER	STD	OPT
Booms		
4.6 m, 15' 1" Mono	•	
4.9 m, 16' 1" 2-Piece		•
4.1 m, 13' 5"		•
Arms		
1.9 m, 6' 3"		•
2.1 m, 6' 11"	•	
2.5 m, 8' 2"		•
3.0 m, 9' 11"		•
Removable clean-out dust net for cooler	•	
Removable reservoir tank	•	
Fuel pre-filter	•	
Fuel warmer	single dual	• •
Self-diagnostics system	•	
Hi-mate Remote Management System	Mobile Satellite	• •
Batteries (2 x 12V x 100 AH)		•
Fuel filler pump (35 l/min)		•
Single-acting piping kit (breaker, etc.)		•
Double-acting piping kit (clamshell, etc.)		•
Rotating piping kit		•
Quick coupler piping		•
Quick coupler		•
Accumulator for lowering work equipment	•	
Pattern change valve (2 patterns)		•
Fine swing control system		•
Tool kit		•
Auto cruiser system	•	
Travel pedal (2way)		•
UNDERCARRIAGE	STD	OPT
Rear-dozer blade	•	
Front outrigger and rear blade		•
Front and rear outrigger		•
Front blade and rear outrigger		•
Tires-dual (10.00-20-14PR tube)	•	
Tires-dual (10.00-20 solid)		•
Fenders (mudguards)		•

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

## PLEASE CONTACT

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