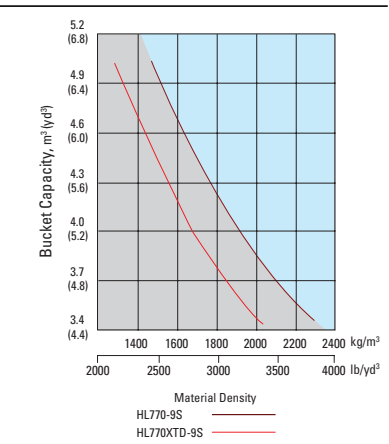


BUCKET SELECTION GUIDE



STANDARD EQUIPMENT

<b>Electrical system</b> Alternator, 70A Alarms, audible and visual - air filter clogging - transmission error - alternator voltage - brake oil pressure - engine oil pressure - parking brake - fuel level - hydraulic oil temperature - coolant temperature - service brake oil pressure Alarm, back-up Batteries, 1100 CCA, 12V, (2) Gauges - engine coolant temperature - fuel level - hydraulic oil temperature - speedometer - transmission oil temperature - voltmeter Horn, electric Indicator lights - clutch cut-off - high beam - turn signal LCD Display - clock and fault code - operating hour counter - engine rpm	- transmission gear range indicator - job time and distance - temperature(coolant, hydraulic oil, t/m oil) Lighting system - 1 LED dome light - 2 stop and tail lights - 4 turn signals - brake lights(counterweight) - 2 head lights on front tower - 2 working lights on front roof - 2 working lights on grill Switches - clutch cut-off - hazard - Ignition key, start/stop switch - main light (illumination and head light) - parking - rear wiper & washer - work light - battery master switch Starter, electric Starting and charging system(24-volt)  <b>Cab</b> ROPS(ISO 3471) / FOPS(ISO 3449) (sound suppressed and pressurized) with : - cigar lighter	- coat hook Automatic climate control - air conditioner & heater - defroster - intermittent wiper and washer, front and rear Personal storage space - console box - holder, can and cup Rear view mirrors (1 inside) Rear view mirrors (2 outside) 2" static seat belt & mechanical suspension seat with armrests Steering column, tilt Steering wheel with knob Roller type sunshade (front window) Tinted safety glass Two door cab Magazine pocket Pedals - one accelerator pedal - one brake pedal Radio/USB player Rubber floor mat Wrist rest  <b>Engine</b> Antifreeze Engine, HYUNDAI HE8.9 - Low Emission Diesel, Tier3	Engine enclosure, lockable Engine fuel priming pump(Electric) 3 operating mode (power / standard / econo) Fan guard Fuel/water separator Muffler, under hood with large exhaust stack Rain cap, engine air intake Radiator Starting aid (air intake heater) Water sensor on fuel filter  <b>Power Train</b> Brakes : Service, enclosed wet-disc Parking brake Torque converter Transmission, computer-controlled, electronic soft shift, auto-shift and kick-down features included Transmission oil cooler  <b>Hydraulics</b> Bucket positioner, automatic Diagnostic pressure taps Hydraulic oil cooler Hydraulic system, - 2 spool, single lever, pilot control for boom and bucket actuation Remote cooling fan, hydraulically-driven,	temperature sensing type  <b>Others</b> Articulation locking bar Bucket - 4.0m³ Cutting edge, bolt-on type Coolant level sight gauge Counterweight Door and cab locks, one key Doors, service access(locking) Drawbar with pin Engine oil level dipstick gauge Ergonomically located and slip resistant, left & right - handrails - ladders - platforms - steps Fenders (front / rear) Hydraulic oil level sight gauge Lift and tie-down hooks Loader linkage, sealed Z-Bar design Tires(26.5-25,20PR,L3) Transmission oil site level Vandalism protection caplocks
---	--	---	--	---

OPTIONAL EQUIPMENT

24-volt to 12-volt DC converter Additional, 4 working lights on front/rear roof Beacon light, rotating - 3.9m³ 1 piece tooth, bolt-on type - 3.9m³ 1 piece tooth, bolt-on type - 3.9m³ 1 piece tooth, bolt-on type - 5.0m³ 1 piece tooth, bolt-on type - 5.2m³ Cutting edge, bolt-on type - 2.7m³ Spade nose & segment, rock - 3.7m³ Spade nose & segment, rock - Pallet Fork, Pin on type Secondary steering system	Fire extinguisher Guard - Transmission - crankcase High lift arrangement with Optional counterweight, 1800kg (3,970lb) 3rd spool for auxiliary function Extrapipling for auxiliary function Mud guard Heated rear view mirrors (2 outside) Reversible cooling fan	Ride control system Seat - 2" static seat belt & adjustable mechanical suspension - 2" static seat belt & adjustable mechanical suspension - 3" retractable seat belt & adjustable air suspension (heated) Steering column, tilt and telescopic Roller type sunshade(rear window)	RCV control - Finger tip lever - 2 spool - Finger tip lever - 3 spool - 2 Lever(Joystick) - 3 spool Tires : - 26.5 - 25, 28PR, L3 - 26.5 - 25, 32PR, L3 - 26.5 - 25, 20PR, L3 - 26.5 - 25, 20PR, L5 - 26.5 R25, L3* - 26.5 R25 XHA* Tool kit Wheel chock	Pre-cleaner, engine air intake License plate & lamp Hi-Mate (Remote Management System) - Mobile / Satellite Rearview camera Limited slip differential Quick coupler piping Autogrease system Fuel Warmer
---	---	---	--	---

Standard and optional equipment may vary. Contact your Hyundai dealer for more information. The machine may vary according to International standards. All imperial measurements rounded off to the nearest pound or inch.

PLEASE CONTACT

 **HYUNDAI CONSTRUCTION EQUIPMENT**

Head Office (Sales office)  
First tower, 55, Bundang-ro, Bundang-gu, Seongnam-si, Gyeonggi-do, Korea



\*Photo may include optional equipment.



# Pride at Work

Hyundai Construction Equipment strives to build state-of-the art earthmoving equipment to give every operator maximum performance, more precision, versatile machine preferences, and proven quality. Take pride in your work with Hyundai!

## HL770-9s

### Machine Walk-Around

#### Reliable Main Components

##### Engine Technology

Well proven, reliable, fuel efficient, low noise HYUNDAI Tier-III HE8.9 engine.  
3 operating mode (Power / Standard / Econo).

##### Fully Automatic Transmission

4 step(Manual / Light / Normal / Heavy) shift mode by working condition  
Protective transmission at low temperature(Automatic warm-up system)  
Self-diagnostic & Memory of malfunction history  
Minimum travel shift shock by applying proportional controlling modulation valve / Self adjusting  
Clutch gap  
Kick-down

##### Axle

Self-adjusting & wheel speed wet disc brake

#### Improved Durability

Long-life cooling system, designed for additional durability, resistant to thermal shock, impulse and vibration.

#### Enhanced Operator Comfort

##### Improved Visibility

Larger operator's cab for additional comfort.  
Redesigned cab with rounded front glass and larger door glass for a larger field of view.

##### Improved Convenience

Increased cooling & heating capacity with fully automatic climate control system.  
Tilting & telescopic steering column.  
Adjustable wrist rest for reduced operating stress.  
Multiple storage compartments.  
AM/FM Radio with MP3 interface and USB input.  
Improved ladder with 20 Degree incline and large, deep tread, non-slip for safer access and exit from the cab.

##### Advanced 5.7" Color Monitor

Easy-to-read new color LCD display.  
Self diagnostic & monitoring system with active display of hydraulic system, transmission and electrical component information.  
Color, rear-view, back-up camera for improved safety and convenience.

#### Serviceability

Reversible, swing-out, cooling fan for easy service and improved cooler maintenance.  
Ground level access to critical service points, filters and sight gauges for easy maintenance.



\*Photo may include optional equipment.

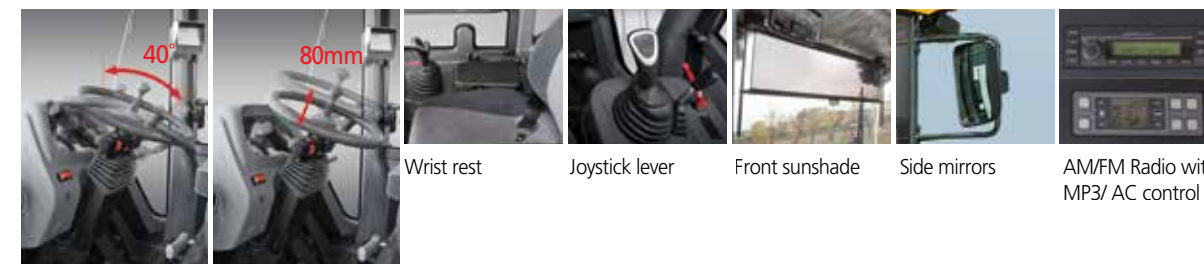


# Operator Comfort

Operating a 9S series wheel loader is unique to every operator. Operators can fully customize their work environment and operating preferences to fit their individual needs.

## Operator Comfort

In the 9S series cabin you can easily adjust the steering column and wrist rest to best suit your preferred comfort level. Pilot-operated joystick controls are easy and comfortable to operate. Roller type sunshades on the front window allow the operator to reduce glare and improve visibility. Heated side mirrors feature built-in hot wires for quick defrosting during cold weather conditions.



Tilting / telescopic steering column(OPT)

## Reduced Stress

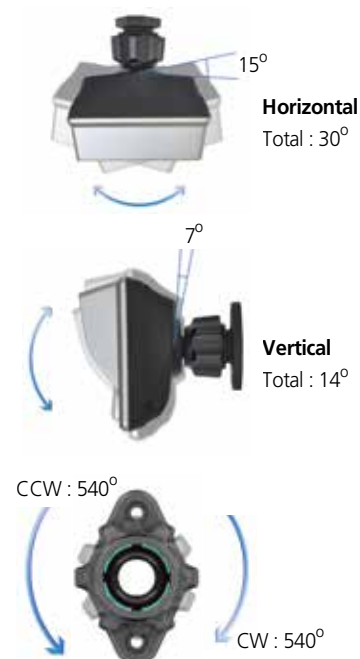
Work is stressful enough. Your work environment should be stress free. Hyundai's 9S series cabin offers lots of amenities, additional space and a comfortable seat to minimize stress to the operator. A powerful climate control system provides the operator with optimum air temperature. An advanced audio system with AM/FM stereo with MP3 interface and USB input, plus remotely located controls is perfect for listening to music favorites.

## Advanced Color Monitor



The advanced new monitor with 5.7 inch wide color LCD screen allows the operator to easily and efficiently control the machine. Self diagnostics, color rear-view camera maintenance check lists and start-up machine security, were integrated into the monitor to make the machine more versatile and the operator more productive. The new monitor display unit is mounted on an adjustable swivel mount to reduce glare and position according to operator preference.

### Monitor Tilt Range



\*Photo may include optional equipment.

### Wide and Convenient Cab

The newly designed cabin was conceived for more space, a wider field of view and operator comfort. The front glass is rounded and 17% wider than the previous 7A series. Special attention was given to a clean, open and convenient interior with plenty of visibility on the machine surroundings and the job at hand. This well balanced combination of cab ergonomics puts the operator in the perfect position to work safely and securely. The 9S series cab's fully automatic climate control system features 11 air vents and increased cooling and heating capacity for optimum temperature control. The defroster vents located on the front and rear windows and a PTC (electric pre-heater, Option) make working in cold weather more hospitable.





# Precision & Performance

Innovative hydraulic system technologies make the 9S series wheel loader fast, smooth and easy to control. 9S series wheel loaders are designed for maximum performance to keep the operator working productively.



\*Photo may include optional equipment.

## Improved Durability & Reliability



An enhanced axle improves driving over variable ground conditions. Self adjusting brakes that automatically regulate disc clearance, reduce service time and improve brake reliability and performance. Service and clean-out are easier on the 9S series, now equipped with a completely redesigned, parallel-mounted, cooler configuration and non louvered fins to prevent clogging. All coolers are designed with aluminum bar plate configuration and undergo strict factory tests for thermal shock, impulse and vibration to assure long term durability. Top mounted non-louvered aluminum air condenser and variable displacement A/C compressor are designed for maximum cooling capacity, energy savings and easy clean-out.

## Variable Operating Modes



9S series wheel loaders are designed to allow the operator to customize automatic transmission shift timing and clutch cut-off activation based on the job condition and personal operator preference. Convenient rotary type switches allow for easy adjustment of transmission power shift mode, and clutch cut-off mode. Additionally, if equipped with the optional ride control system, the operator has the option to turn the system on or off with an overhead switch. The ride control system has a shock absorbing accumulator that cushions the boom, improves operator comfort and reduces material loss. The versatility of the 9S series operating modes contributes to improved productivity, enhanced operator comfort and reduced fuel consumption.



**3 Mode Engine Power Selection**  
P(Power) Mode : Heavy duty work  
S(Standard) Mode : General work  
E(Economy) Mode : Light duty work

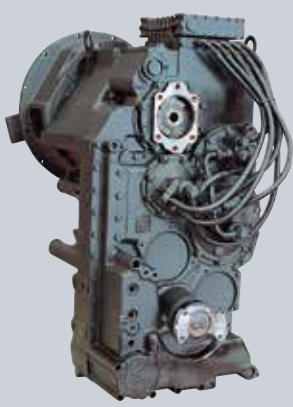
**4 Mode Transmission Power Shift System**  
M(Manual) Mode  
Auto L(Light) Mode : Light duty & long distance carry  
Auto N(Normal) Mode : General excavating & loading  
Auto H(Heavy) Mode : Heavy duty excavating & loading

**3 Mode Clutch Cut-Off System**  
L(Low) Mode : Short distance & faster loading  
M(Medium) Mode : General loading  
H(High) Mode : Slope ground



## Eco-friendly HCEC HE8.9 Engine

The HYUNDAI HE8.9 electronic control engine combines full authority electronic controls with the reliable performance. The combination of high pressure common rail system and advanced incylinder combustion technology results in increased power, improved transient response and reduced fuel consumption. And HYUNDAI HE8.9 uses advanced electronics controls to meet the emission standards (EPA Tier3, EU Stagelll-A)



## Fully Automatic Transmission

Fully automatic transmission designed for maximum durability, minimum power loss, improved travel speed and low noise. Improved clutch control and minimized shifting shock when traveling, contribute to a smoother ride. Error messages and transmission fault history are recorded and accessible through the monitor.



# Profitability

9S series is designed to maximize profitability through improved efficiencies, enhanced service features and longer life components.



\*Photo may include optional equipment.



## Hi-MATE (Remote Management System)

Hi-MATE, Hyundai's proprietary remote management system, provides operators and dealer service personnel access to vital service and diagnostic information on the machine from any computer with internet access. Users can pinpoint machine location using digital mapping and set machine work boundaries, reducing the need for multiple service calls. Hi-MATE saves time and money for the owner and dealer by promoting preventative maintenance and reducing machine downtime.



## Remote-mounted Cooling Fan

The remote mounted, hydraulically powered cooling fan regulates fan speed according to working temperatures for coolant, intake air, transmission oil and hydraulic oil. This new fan design contributes to reduced fuel consumption and machine noise. (Option: The fan is designed to auto reverse periodically or manually reverse to keep debris from accumulating on the coolers)



## Easy Access

The engine fan is integrated into the rear door which swings open to over 45 degrees for easy access and regular maintenance. Conveniently located coolant and transmission oil site gauges make checking fluid levels fast and efficient. Ground-line access to fuel and oil filters grease fittings, fuses, machine computer components and wide open compartments makes service more convenient on the 9S series.



## Full Fenders and Mud Guards (Option)

9S series wheel loaders can be equipped with optional full rear mudguards to reduce material splatter to the cab and machine frame.



Hydraulic Oil  
(5,000 hr)

## Extended Life Components

The 9S series is designed for longer lubrication intervals and extended component life. Hydraulic oil can last up to 5,000 hours before changing. Also, a new center pivot roller bearing design, now double tapered, requires less maintenance as well. Long life and extended wear components save the operator time and money.

Specifications & Dimensions

ENGINE

Maker/Model	HYUNDAI HE 8.9
Type	Watercooled, 4-cycle, turbocharged, charge aircooled direct injection, electronic controlled diesel engine
Gross power	280HP(209 kW) / 2,000rpm
Net power	266HP(198 kW) / 2,000rpm
Maximum torque	148kg.m(1,070 lb.ft) / 1,400rpm
No. of cylinders	6
Bore x Stroke	114 mm (4.5") x 145 mm (5.7")
Displacement	8.9ℓ (543 cu in)
Compression ratio	17.8 : 1
Air cleaner	Dry, two stage dual elements
Alternator	24V, 70 Amp
Battery	2 x 12V, 160 Ah.
Starting motor	24V, 7.8 kW

※No derating for continuous operating required up to 1,829m (6,000ft). This engine meets the EPA(Tier II) / EU(Stage II-A) Emission regulation.

TRANSMISSION

Torque converter type	3-elements, single-stage single-phase
Tire	26.5-25, L3, 20PR

※Full automatic power shift, countershaft type with soft-shift in range and direction. Properly matched torque converter to engine and transmission for excellent working ability

Travel speed		km/h (mph)
Forward	1st	6.9(4.3)
	2nd	12.1(7.5)
	3rd	25.8(16.0)
	4th	38.0(23.6)
Reverse	1st	6.9(4.3)
	2nd	12.1(7.5)
	3rd	25.8(16.0)

AXLES

Drive system	Four-wheel drive system
Mount	Rigid front axle and oscillating rear axle
Rear axle oscillation	± 11° (total 22°)
Hub reduction	Planetary reduction at wheel end
Differential	Conventional
Reduction ratio	23.334

HYDRAULIC SYSTEM

Type		Open-centered, tandem circuit system
Pump		Gear type, 388 liters/min (102.5 gal/min)@gal/min
Control valve		2 Spool (Bucket, Boom)
		3 Spool (Bucket, Boom, Aux)
		Pilot pressure controlled type
System pressure		210 kgf/cm² (2,990 psi)
Bucket Controls	Type	Pilot operated lift and tilt circuit, single-lever(joystick) control standard.
	Lift Circuit	The valve has four functions ; raise, hold, lower and float. Can adjust automatic kickout from horizontal to full lift.
	Tilt Circuit	The valve has three functions ; tilt back, hold and dump. Can adjust automatic bucket positioner to desired load angle.
Cylinder		Type : Double acting No. of cylinders-bore x stroke; 2-180 mm x 765 mm 1-200 mm x 570 mm
Cycle Time		Raise : 6.0 sec Dump : 1.4 sec Lower : 2.6 sec Total : 10.0 sec

AIR CONDITIONING SYSTEM

The air condition system for the machine contains the fluorinated greenhouse gas with global warming potential of R134a. (Global Warming Potential : 1430)  
The system hold 0.85kg refrigerant consisting of a CO2 equivalent 1.22kg metric tonne. For more information, Please refer to the manual.

BRAKES

Service Brakes	Hydraulically actuated, wet disc brakes actuate all 4 wheels independent axle-by-axle system. Self adjusting & wheel speed brake.
Parking Brake	Spring-applied, hydraulically released brake
Emergency Brake	When brake oil pressure drops, indicator light alerts operator and parking brake automatically applies.

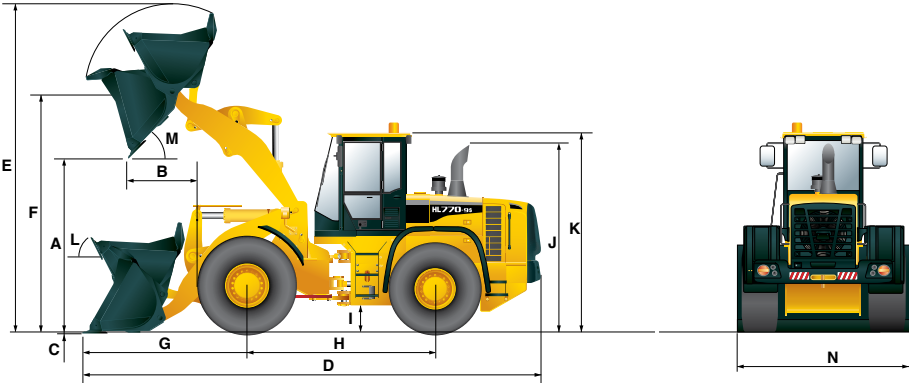
SERVICE REFILL CAPACITIES

Fuel tank	362 liters (95.6 USgal)
Cooling system	56 liters (14.8 USgal)
Crankcase	23 liters (6.1 USgal)
Transmission	43 liters (11.4 USgal)

OVERVIEW

Description		UNIT	HL770-9S	HL770XTD-9S
Operating weight		kg (lb)	22,500 (49,600)	23,250 (51,260)
Bucket capacity	Heaped	m³(yd³)	4.0 (5.2)	4.0 (5.2)
	Struck	m³(yd³)	3.45 (4.5)	3.45 (4.5)
Breakout force-bucket		kg (lb)	20,760 (45,770)	20,430 (45,040)
Tipping load	Straight	kg (lb)	17,400 (38,360)	15,660 (34,520)
	Full turn	kg (lb)	14,950 (32,960)	13,360 (29,450)

DIMENSIONS



Description		UNIT	HL770-9S	HL770XTD-9S
Bucket Type			General purpose bolt-on cutting edge	
A. Dumping clearance at max. height and 45° dump angle.		mm (ft-in)	3,117 (10' 3")	3,570 (11' 9")
B. Reach	Full lift	mm (ft-in)	1,254 (4' 1")	1,260 (4' 2")
	7ft height	mm (ft-in)	1,890 (6' 2")	2,250 (7' 5")
C. Digging depth		mm (in)	98 (3.9")	130 (5.1")
D. Overall length	on ground	mm (ft-in)	8,650 (28' 5")	9,135 (30' 0")
	at carry	mm (ft-in)	8,550 (28' 1")	9,050 (29' 8")
E. Overall height (fully raised)		mm (ft-in)	5,870 (19' 3")	6,320 (20' 9")
F. Bucket pivot max. height		mm (ft-in)	4,310 (14' 2")	4,760 (15' 7")

STEERING SYSTEM

Type		Full hydraulic power steering
Pump		Gear, 245 liters/min (64.7 gal/min)
Relief Valve Setting		210 kg/cm²(2,990 psi)
Cylinder	Type	Double acting
	Bore x Stroke	100mm(3.7") x 480mm(18.9")
Steering Angle		40°(each direction)

Features  
- Center-point frame articulation.  
- Tilt and telescopic steering column.  
- Load-sensing, flow amplified system.

Front axle	51 liters (13.5 USgal)
Rear axle	40 liters (10.6 USgal)
Hydraulic tank	185 liters (48.9 USgal)
Hydraulic system (including tank)	295 liters (77.9 USgal)

TIRES

Type	Tubeless, loader design tires
Standard	26.5-25, L3, 20PR
Options include	26.5 R25 XHA* 26.5-25, 28 PR, L3 26.5-25, 32 PR, L3 26.5-25, 20 PR, L3 26.5-25, 20 PR, L5 26.5 R25, L3*