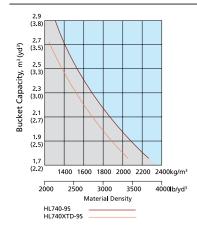
### **BUCKET SELECTION GUIDE**



### **STANDARD EQUIPMENT**

Electrical system 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, 820 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

(sound suppressed and transmission gear range pressurized) with indicator - iob time and distance - cigar lighter & ashtray temperature(coolant) - coat hook hydraulic oil, T/M oil) Automatic climate control - air conditioner & heater Liahtina system - LED dome lights - defroster - 2 stop and tail lights - intermittent wiper and - 4 turn signals washer, front and rear - brake lights(counterweight) personal storage space: - 2 head lights on front tower holder, can and cup - 2 working lights on front roof - Rear view mirrors (1 inside) - 2 working lights on rear roof - Rear view mirrors (2 outside) - 2" static seat belt & - work load adjustable mechanical clutch cut-off suspension - hazard - tilt / telescopic steering - Ignition key, start/stop switch column - main light(illumination and - steering wheel with knob head light) - roller type sunshade - parking rear wiper & washer - work light - battery mater switch Pedals - pilot cut-off Starter, electric Starting and charging system (24-volt) Wrist rest

Switches

Cab

3rd spool for auxiliary function

Heated rear view mirrors (2 outside)

Mud guard

Seat

Ride control system

**OPTIONAL EQUIPMENT** 

24-volt to 12-volt DC converter

- 2.1m<sup>3</sup> Bolt-on Cutting Edge Q/C

- 2.0m<sup>3</sup> 1 Piece Tooth & Segment

- 2.0m<sup>3</sup> 2 Piece Tooth & Segment

Additional, 4 working lights

Secondary steering system

Beacon light, rotating

Type Bucket

Type Bucket

Type Bucket

on front/rear roof

Bucket

- engine rpm

(front / rear window) - tinted safety glass Magazine pocket - one accelerator pedal - one brake pedal Rubber floor mat Radio/USB player ROPS(ISO 3471)/FOPS(ISO 3449) Engine Fire extinguisher - 2" static seat belt & Finger tip lever - 2 spool adjustable mechanical Finger tip lever - 3 spool suspension 2 Lever(Joystick) - 3 spool - 2" static seat belt & High lift arrangement with adjustable mechanical optinal counterweight, suspension 820 kg (1,980 lb)r - 3" retractable seat belt &

Axle

SUPPLEMENTAL SPECIFICATIONS

weight kg(lb)

-308 (-679)

-248 (-547)

-64 (-141)

-160 (-353)

+507 (+1,118)

Description

17.5-25 12PR L2

17.5-25 12PR L3

20.5-25 16PR L2

17.5 R25 XHA\*

20.5 R25 XHA\*

Antifreeze Engine, Cummins 6BTA5.9 - low Emission Diesel, Tier-1 Engine enclosure, lockable Engine fuel priming pump Fan guard Fuel/water separator Muffler, under hood with large exhaust stack Rain cap, engine air intake Radiator (deaeration type)

Change in operating Change in static tipping Change in static tipping

load-straight kg(lb)

-220 (-480)

-170 (-375)

-45 (-100)

-110 (-240)

+360 (+790)

### Power Train

Brakes : Service, enclosed wet-disc Parking brake Torque converte Transmission, computer-controlled, electronic soft shift, auto-shift and quick-shift features included Transmission oil cooler

Tires

Tool kit

Guards

Front - Open Differential Rear - Open Differential

## Hydraulics

Bucket positioner, automatic Diagnostic pressure taps Hydraulic system, - 2 spool, single lever, pilot control for boom and

- 20.5 - 25, 16PR, L3

- 20.5 R25.XHA\*

20.5 R25.L3

- crankcase

Wheel chock

Hi MATE

- transmission

- Mobile / Satellite

(Remote Management System)

bucket actuation Steering, load-sensing Remote cooling fan, hydraulically-driven, temperature sensing type

load-40° turn kg(lb)

-190 (-420)

-150 (-330)

-40 (-90)

-100 (-220)

+310 (+680)

Articulation locking bar Bucket - 2.1 m³ Cutting edge, bolt-on type

Others

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 License plate bracket Lift and tie-down hooks Steering stops, cushioned Tires(20.5-25, 16PR,L3) Transmission oil gauge level Vandalism protection caplocks

Rear view camera

License plate & lamp

Reversible cooling fan

Pre-cleaner engine air intake

Roller type sunshade(rear window)

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.

adjustable air suspension (heated)

Front - Limited Slip Differential

Rear - Limited Slip Differential

PI F4	1SF	CON	TACT

### HYUNDAI CONSTRUCTION EQUIPMENT

Head Office (Sales office)

First tower, 55, Bundang-ro, Bundang-gu, Seongnam-si, Gyeonggi-do, Korea



www.hyundai-ce.com

2020. 09 Rev.7



# **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!



### **Reliable Main Components**

Engine Technology

**Fully Automatic Transmission** Self-diagnostic & Memory of malfunction history Clutch gap Kick-down button

Axle Self-adjusting & wet disc brake

## Improved Durability

vibration.

## **Enhanced Operator Comfort**

Improved Visibility Larger operator's cab for additional comfort.

### Improved Convenience

Tilting & telescopic steering column. Adjustable wrist rest for reduced operating stress. Multiple storage compartments. the cab.

### Advanced 5.7" Color Monitor

Easy-to-read new color LCD display. efficiency and overload prevention. electrical component information. customer service and support.(Option)

### Serviceability

Reversible, (Option) 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.

# HL740-9s

## **Machine Walk-Around**

- Well proven, reliable, fuel efficient, low noise Cummins 6BTA5.9 engine. Robust Bosch in-line mechanical fuel injection pump.
- -The most durable fuel system in the most harshest working environments.

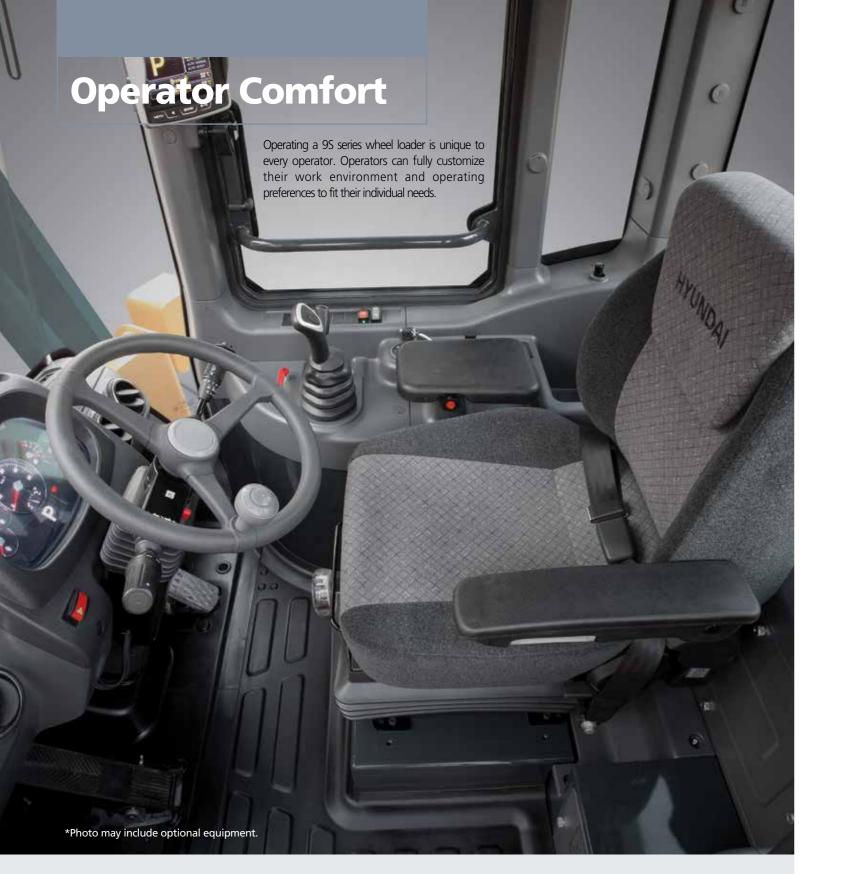
- 4 step(Manual / Light / Normal / Heavy) shift mode by working condition
- Protective transmission at low temperature(Automatic warm-up system)
- Minimum travel shift shock by applying proportional controlling modulation valve / Self adjusting

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

- Redesigned cab with rounded front glass and larger door glass for a larger field of view.

- Increased cooling & heating capacity with fully automatic climate control system.
- AM/FM Radio with MP3 interface and USB input.
- Improved ladder with 20 Degree incline and large, deep tread, steps for safer access and exit from

- Auto boom kick out and bucket positioner viewable through the monitor, for improved work
- Self diagnostic & monitoring system with active display of hydraulic system, transmission and
- Color, rear-view, back-up camera for improved safety and convenience.(Option)
- RMS(Remote Management System) works through GPS/satellite technology to provide better





### 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.

## 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 & rear 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.



Joystick lever

Tilting / telescopic steering column

# **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 with Blue-tooth hands-free and USB input, plus Blue-tooth hands-free controls.

# **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.









Front sunshade







AM/FM Radio with MP3/Blue-tooth/ AC control

# **Precision & Performance**

Innovative hydraulic system technologies make the 9S series wheel loader fast, smooth and easy to control. 95 series wheel loaders are designed for maximum performance to keep the operator working productively.

# **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.

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



# Powerful Cummins 6BTA5.9 Engine

Cummins 6BTA5.9 engine meets Tier1 emission standard. Cummins 6BTA5.9 engines have been proven durable and reliable in some of the most remote locations and harshest working environments in the world. A robust in-line fuel pump delivers more power at high injection pressure for cleaner combustion and lower emission.

Holset HX35 turbocharger optimizes response across the torque curve.



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



# **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.





# 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.)



# **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.

Hydraulic Oil (5,000 hr)

\*Photo may include optional equipment.



# Easy Access

The cooling 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 front, rear fenders and optional mud guards to reduce material splatter to the cab and machine frame.

# **Specifications & Dimensions**

### ENGINE

Maker/Model	Cummins 6BTA5.9	
Туре	Watercooled, 4-cycle, turbocharged,	
	direct injection,	
	mechanical controlled diesel engine	
Gross power	150 HP(112 kW) / 2,200rpm	
Net power	143 HP(107 kW) / 2,200rpm	
Max. power	160 HP(119 kW) / 2,000rpm	
Maximum torque	68 kg.m(493 lb.ft) / 1,400rpm	
No. of cylinders	6	
* No derating for continuous operating required up to 2,255m (7,400ft).		
Bore x Stroke	102 mm (4.02") x 120 mm (4.72")	
Displacement	5.9ℓ (359 cu in)	
Compression ratio	17.6 : 1	
Air cleaner	Dry, Two stages dual elements	
Alternator	24V, 90 Amp	

### HYDRAULIC SYSTEM

Туре		Open center system
Pump		178 liters/min (47 gal/min)
Control valv	/e	2spool (Bucket, Boom) 3spool (Bucket, Boom, Aux) Pilot pressure controlled type System pressure : 210 kgf/cm <sup>2</sup> (2986PSI)
Bucket Controls	Туре	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.
Cylinders		Type : Double acting
Lift HL740-95/740XTD-95 Tilt HL740-95/740XTD-95		No. of cylinders-bore x stroke; 2-ø120 mm x 738 mm(4.3" x 29.5") ø140 mm x 505 mm(4.9" x 19.9")
Cycle Time		HL740-95 / HL740XTD-95
Raise(with load) Dump Lower(empty) Total		5.8 sec 1.3 sec 3.1 sec 10.2 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 CO $_2$  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 & in board brake
Parking Brake	Spring-applied, hydraulically released brake in Front Axle
Emergency Brake	When brake oil pressure drops, indicator light alerts operator and parking brake automatically applies.

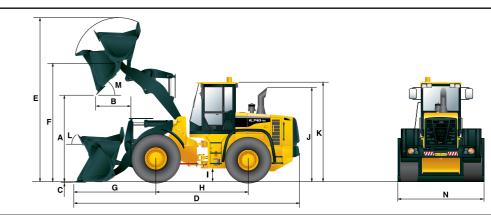
### SERVICE REFILL CAPACITIES

Fuel tank	230 liters (60.8 USgal)
Cooling system	34 liters (9.0 USgal)
Crankcase	15 liters (4.0 USgal)
Transmission	25 liters (6.6 USgal)

### OVERVIEW

Description		UNIT	HL740-9S	HL740XTD-9S
Operating weight		kg (lb)	11,550 (25,460)	11,850 (26,120)
Bucket capacity	Heaped	m³(yd³)	2.1 (2.7)	2.1 (2.7)
	Struck	m³(yd³)	1.78 (2.3)	1.78 (2.3)
Breakout force-bucket		kg (lb)	11,880 (26,190)	11,730 (25,860)
Tipping load	Straight	kg (lb)	9,120 (20,110)	8,320 (18,340)
	Full turn	kg (lb)	7,890 (17,390)	7,130 (15,720)

### DIMENSIONS



		UNIT	HL740-9S	HL740XTD-9S
Bucket Type		General purpose bolt-on cutting edge		
A. Dumping clearance at max. height and 45° dump angle.		mm (ft-in)	2,850 (9' 4")	3,270 (10' 9")
D. Daash	Full lift	mm (ft-in)	970 (3′ 2″)	965 (3' 2")
B. Reach	7ft height	mm (ft-in)	1,500 (4' 11")	1,860 (6' 1")
C. Digging depth		mm (in)	93 (3.7")	130 (5.1")
D. Querrell largesth	on ground	mm (ft-in)	7,260 (23' 10")	7,710 (25' 4")
D. Overall length	at carry	mm (ft-in)	7,210 (23' 8")	7,685 (25' 3")
E. Overall height (fully raised)		mm (ft-in)	5,070 (16' 8")	5,480 (18')
F. Bucket pivot max. height		mm (ft-in)	3,830 (12' 7")	4,250 (13' 11")

### TRANSMISSION

Starting motor

Battery

Torque converter type	3-elements, single-stage single-phase
Tire	20.5-25, L3

2 x 12V, 115 Ah. 24V, 4.5 kW

\*\*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	12.5(7.8)
	3rd	24.1(15.0)
	4th	40.0(24.9)
Reverse	1st	7.2(4.5)
	2nd	13.2(8.2)
	3rd	25.3(15.7)

### AXLES

Drive system	Four-wheel drive system
Mount	Rigid front axle and oscillating rear axle
Rear axle oscillation	±12° (total 24°)
Hub reduction	Planetary reduction at wheel end
Differential	Conventional
Reduction ratio	22.0

## STEERING SYSTEM

Туре		Load-sensing hydrostatic articulated steering
Pump		Gear type, 89ℓ /min (23.5 gal/min)@governed rpm
Relief Valve Setting		210 kg/cm <sup>2</sup> (2,986 psi)
Cylinder	Type Bore x Stroke	Double acting 65mm x 429mm(2.6" x 16.9")
Steering Angle		40°(each direction)

Features

**Options include** 

- Center-point frame articulation. - Tilt and telescopic steering column.

Front axle	21.8 liters (5.8 USgal)
Rear axle	21.8 liters (5.8 USgal)
Hydraulic tank	106 liters (28 USgal)
Hydraulic system (including tank)	154 liters (40.7 USgal)
TIRES	
Туре	Tubeless, loader design tires
Standard	20.5-25, 16 PR, L3

20.5 - 25,	16PR,	L3
20.5 R2	25 XH	Α*
20.5	R25,	L3

_									
Description			UNIT	HL740-9S	HL740XTD-9S				
G.	G. Front overhang		mm (ft-in)	2,400 (7' 10")	2,810 (9' 3")				
Η.	H. Wheelbase		mm (ft-in)	2,900 (9' 6")	2,900 (9' 6")				
١.	. Ground clearance		mm (ft-in)	417 (1' 4")	417 (1' 4")				
J.	Height over exhaust		mm (ft-in)	3,170 (10' 5")	3,170 (10' 5")				
Κ.	Height over cab		mm (ft-in)	3,310 (10' 10")	3,310 (10' 10")				
L.	Roll-back angle	on ground	deg	42	42				
		at carry	deg	47	49				
M.	Dump angle		deg	48	47				
	Clearance circle		mm (ft-in)	11,540 (37' 10")	11,880 (39')				
N.	Overall width		mm (ft-in)	2,550 (8' 4")	2,550 (8' 4")				