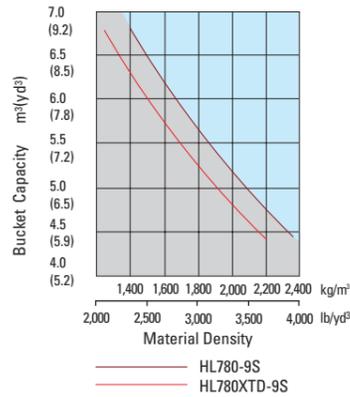


BUCKET SELECTION GUIDE



SUPPLEMENTAL SPECIFICATIONS

Description	Change in operating weight kg(lb)	Change in static tipping load-straight kg(lb)	Change in static tipping load-40° turn kg(lb)
26.5-25 32PR L3	-112 (-247)	-90 (-200)	-80 (-175)
29.5-25 28PR L3	+352 (+776)	+270 (+595)	+240 (+530)
29.5-25 28PR L5	+1,240 (+2,734)	+960 (+2,160)	+850 (+1,870)
29.5 R25 XHA*	+500 (+1,102)	+390 (+860)	+340 (+750)

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, 1,315 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 lights - 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) Cab Cab (sound suppressed and pressurized) with : - cigar lighter & ashtray - 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 and telescopic Steering wheel with knob Roller type sunshade (front / rear window) Tinted safety glass Two door cab Magazine pocket Pedals - one accelerator pedal - one brake pedal Radio/USB player Rubber floor mat Wrist rest Roller type sunshade (rear window) Engine Antifreeze Engine, Cummins QSM11 - Low Emission Diesel, Tier3 Engine enclosure, lockable	3 operating mode (power / standard / econo) Fan guard Fuel / water separator Fuel warmer Muffler, under hood with large exhaust stack Rain cap, engine air intake Radiator Starting aid (air intake heater) Power Train Brakes : Service, enclosed wet-disc Differentials Parking brake Torque converter Transmission, computer-controlled, electronic soft shift, auto-shift and kick-shift features included Transmission oil cooler Hydraulics Boom kickout, automatic Bucket positioner, automatic Diagnostic pressure taps Hydraulic oil cooler Hydraulic system, - 2 spool, single lever, pilot control for boom and bucket actuation Steering, load-sensing Remote cooling fan,	hydraulically-driven, temperature sensing type Others Articulation locking bar 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) Guard, bucket cylinder rod Hydraulic oil level sight gauge Lift and tie-down hooks Loader linkage, sealed Z-Bar design Steering stops, cushioned Tires(29.5-25, 22PR,L3) Transmission oil site level Vandalism protection caplocks
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OPTIONAL EQUIPMENT

24-volt to 12-volt DC converter 3 Spool Climate control - air conditioner only - heater only Beacon light, rotating Auxiliary, 2 working lights on front roof (Xenon working lights) Auxiliary, 2 working lights on rear roof Cutting edge, bolt-on type Dual brake pedal	Secondary steering system Fire extinguisher High lift arrangement with additional counterweight, 552kg (1,210lb) 3rd spool for auxiliary function Operator suit Mud guard Pallet forks Heated rear view mirrors (2 outside)	Reversible cooling fan Ride control system Seat - 2" retractable seat belt & adjustable mechanical suspension (vinyl) - 3" retractable seat belt & adjustable mechanical suspension - 2" retractable seat belt & adjustable air suspension (heated)	Cab, ROPS / FOPS Tires : - 29.5 - 25, 28PR L3 - 29.5 - 25, 28PR L5 - 26.5 - 25, 32PR L3 - 29.5 R25 XHA* Tool kit Tooth, 2 pieces, bolt-on type Wheel chock Pre-cleaner, engine air intake License plate & lamp	Hi-Mate (Remote Management System) Rearview camera Heavy duty axle (Front, Rear) Axle cooling system Hyd, lock differential (Front) 3rd fuel prefilter
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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

www.hyundai-ce.com

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We build a better future

HL780-9S

With Tier 3 Engine installed



*Photo may include optional equipment.

HYUNDAI
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Specifications & Dimensions

ENGINE

Maker/Model	CUMMINS QSM11
Type	Watercooled, 4-cycle, turbocharged, charge aircooled direct injection, electronic controlled diesel engine
Gross power	348HP (260 kW) / 2,000rpm
Net power	331HP (247 kW) / 2,000rpm
Maximum torque	171kg.m (1,235 lb.ft) / 1,400rpm
No. of cylinders	6

※No derating for continuous operating required up to 3,048m (10,000ft). This engine meets the EPA(Tier III) / EU(Stage III-A) Emission regulation.

Bore x Stroke	125 mm (4.9") x 147 mm (5.8")
Displacement	10.8ℓ (660 cu in)
Compression ratio	16.3 : 1
Air cleaner	Dry, Two stages dual elements
Alternator	24V, 70 Amp
Battery	2 x 12V, 220 Ah.
Starting motor	24V, 7.5 kW

TRANSMISSION

Torque converter type	3-elements, single-stage Double-phase
Tire	29.5-25, L3

※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	6.1(3.8)
	2nd	11.5 (7.1)
	3rd	18.0 (11.2)
	4th	36.5 (22.7)
Reverse	1st	6.1 (3.8)
	2nd	11.5 (7.1)
	3rd	25.0 (15.5)

AXLES

Drive system	Four-wheel drive system
Mount	Rigid front axle and oscillating rear axle
Rear axle oscillation	±13° (total 26°)

Hub reduction	Planetary reduction at wheel end
Differential	Conventional
Reduction ratio	27.0

HYDRAULIC SYSTEM

Type	Open centered tandem circuit system
Pump	Vane 471 rpm 124.4 gpm
Control valve	2 Spool (Bucket, Boom) 3 Spool (Bucket, Boom, Aux) Pilot pressure controled type
System pressure	210 kgf/cm ² (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 Lift, bore x stroke 2-200 mm (7.0") x 863 mm (34.0") Tilt, bore x stroke HL780-9S 2-160 mm (5.5") x 580 mm (22.6") HL780XTD-9S 2-160 mm (5.5") x 570 mm (25.4")	
	Cycle Time	Raise : 6.7 sec (with load) Dump : 1.4 sec Lower : 3.0 sec (empty) Total : 11.1 sec

BRAKES

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

STEERING SYSTEM

Type	Full hydraulic power steering	
Pump	Vane, 264 liters/min (69.7 gal/min)	
Relief Valve Setting	210 kg/cm ² (2,990 psi)	
Cylinder	Type Bore x Stroke	Double acting 110mm (4.1") x 480mm (18.9")
Steering Angle	40°(each direction)	

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

SERVICE REFILL CAPACITIES

Fuel tank	450 liters (118.8 USgal)
Cooling system	65 liters (17.2 USgal)
Crankcase	38 liters (10.0 USgal)
Transmission	43 liters (11.4 USgal)

Front axle	58 liters (15.3 USgal)
Rear axle	58 liters (15.3 USgal)
Hydraulic tank	203 liters (53.6 USgal)
Hydraulic system (including tank)	336 liters (88.8 USgal)

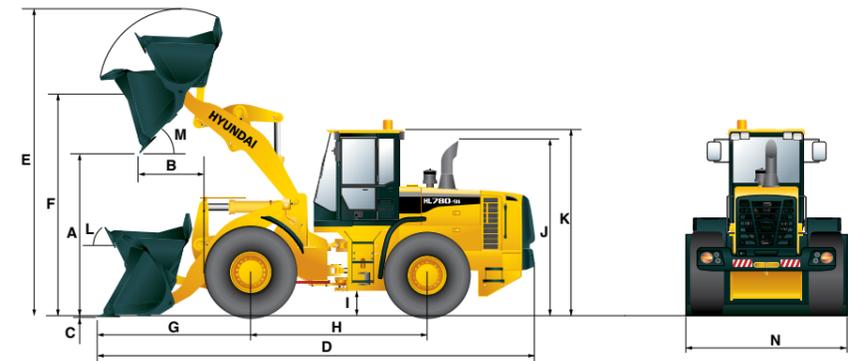
OVERVIEW

Description	UNIT	HL780-9S	HL780XTD-9S
Operating weight	kg (lb)	29,500 (65,040)	30,200 (66,580)
Bucket capacity	Heaped	m ³ (yd ³) 5.1 (6.7)	5.1 (6.7)
	Struck	m ³ (yd ³) 4.3 (5.6)	4.3 (5.6)
Breakout force-bucket	kg (lb)	24,820 (54,720)	23,880 (52,650)
Tipping load	Straight	kg (lb) 23,940 (52,780)	21,660 (47,750)
	Full turn	kg (lb) 20,770 (45,790)	18,660 (41,140)

TIRES

Type	Tubeless, loader design tires
Standard	29.5-25, 22 PR, L3
Options include	26.5-25, 32 PR, L3 29.5-25, 28 PR, L3 29.5-25, 28 PR, L5 29.5 R25 XHA*

DIMENSIONS



Description	UNIT	HL780-9S	HL780XTD-9S
Bucket Type	General purpose bolt-on cutting edge		
A. Dumping clearance at max. height and 45° dump angle.	mm (ft-in)	3,300 (10' 10")	3,720 (12' 2")
B. Reach	Full lift	mm (ft-in) 1,365 (4' 6")	1,430 (4' 8")
	7ft height	mm (ft-in) 2,070 (6' 9")	2,440 (8')
C. Digging depth	mm (in)	95 (3.7")	110 (4.3")
D. Overall length	on ground	mm (ft-in) 9,475 (31' 1")	9,970 (32' 9")
	at carry	mm (ft-in) 9,400 (30' 10")	9,920 (32' 7")
E. Overall height (fully raised)	mm (ft-in)	6,160 (20' 3")	6,590 (21' 7")
F. Bucket pivot max. height	mm (ft-in)	4,510 (14' 10")	4,930 (16' 2")

Description	UNIT	HL780-9S	HL780XTD-9S
G. Front overhang	mm (ft-in)	3,080 (10' 1")	3,510 (11' 6")
H. Wheelbase	mm (ft-in)	3,700 (12' 2")	3,700 (12' 2")
I. Ground clearance	mm (ft-in)	495 (1' 7")	495 (1' 7")
J. Height over exhaust	mm (ft-in)	3,720 (12' 2")	3,720 (12' 2")
K. Height over cab	mm (ft-in)	3,880 (12' 9")	3,880 (12' 9")
L. Roll-back angle (on ground/at carry)	deg	42 / 48	42 / 49
M. Dump angle	deg	47	47
Clearance circle	mm (ft-in)	15,170 (49' 9")	15,580 (51' 1")
N. Overall width	with bucket	mm (ft-in) 3,450 (11' 4")	3,450 (11' 4")
	without bucket	mm (ft-in) 3,220 (10' 7")	3,220 (10' 7")