

We build a better future

**Robex**

# 520LC-9

Equipped with Tier 3 Engine



\*Photo may include optional equipment.



# Pleasure works

An operator, who takes pleasure in his work, does a better job. That is why we at Hyundai Heavy Industries do everything we can to make that happen. We merged operator preference, fast precision and lasting performance into a quality product. Hyundai 9 series earthmoving equipment simply makes time fly, makes pleasure work!



\*Photo with optional equipment.

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## Machine Walk-Around

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### Robust Undercarriage

Track chain with urethane seals / Track rail guard / Comfortable bolt-on steps / Large upper roller cut-outs / Grease-type track adjusters.

### Engine Technology

Powerful and reliable, fuel efficient Cummins Tier III QSM11 engine.  
Electronical controlled, clean and efficient combustion.  
Low noise / Auto engine overheat prevention / Anti-restart function.

### Hydraulic System Improvements

New patented hydraulic system for maximum controllability / Improved main control valve for higher efficiency and smoother operation / Auto boom vs. swing priority system for maximum speed / Auto power boost for extra power / Improved arm & boom regeneration for higher speed and better efficiency.

### Pump Compartment

Powerful and reliable axial piston pumps, designed by Kawasaki.  
Compact solenoid block to control: 2 speed travel, power boost, boom priority, arm regeneration and safety lock.

### Enhanced Operators' Cabin

#### Improved Visibility

Enlarged cabin with improved visibility / See-through sunroof for visibility and ventilation.  
Large right-side window, for better visibility on foot of boom.  
All windows consist of Safety glass.  
Roll-up type sun visor for operators' convenience / Reduced front window seam for improved operator view.

#### Rigid Cabin Construction

New steel tube construction for increased operator safety, higher protection and better durability.  
New front window mechanism designed with spring assist.

#### Improved Seat & Console

Ergonomic joysticks equipped with auxiliary buttons for attachment use.  
Standard mechanic suspension with heater or optional air suspension.  
New joystick consoles - adjustable in height.  
Adjustable arm rests - for optimum comfort.

#### Advanced 7" Color Cluster

New Color LCD Display with digital gauges for hydraulic oil temperature, coolant temperature and fuel level.  
Toggle switch makes it easier to tune your machine and to check diagnostics. A new developed rear-view camera is integrated into the cluster.  
3 power modes : Power / Standard / Economy, 3 work modes : Digging / Breaker / Crusher, User mode for saving operators' preferences.  
Enhanced self-diagnostic features with remote access through the Hi-Mate system.  
One pump flow or two pump flow summation for optional attachment, selectable through the cluster /  
Anti-theft system with password entry.  
Boom speed and arm regeneration can be adjusted through the cluster.  
Auto power boost in Power-mode - activated through the cluster.  
Air conditioning and heater with automatic climate control.  
Hi-Mate (Remote Management System) enables machine owners to follow-up machine performance, to verify machine location and to access diagnostic information on a distance through any internet connection.



# Preference

An operator, who sets his machine to his needs, takes pleasure in his work. 9 Series respects operator preference with regards to comfort, ease-of-use and controllability. The dashboard cluster with 7 inch screen and toggle switch is the preference nerve centre.



\*Photo may include optional equipment.



## Spacious Cabin with Excellent Visibility

The spacious cabin is ergonomically designed with low noise levels and high visibility. Special attention was paid to create a clear, open and convenient interior with excellent visibility in all directions. This well balanced operators' environment put the operator in the perfect position to work safely and securely.

## Operator Comfort

In a 9 series cabin you can adjust the seat, console and armrests to suit your preferred comfort level. Seat and console can be adjusted in position and height together and independent from each other. A fully automatic, high capacity air conditioning system maintains a constant temperature.



## Stressless

Work is stressful enough; your working environment should be stressless. Hyundai's 9 series provides improved cabin interior, additional space and a comfortable seat to minimize the stress of the operator. A powerful climate control system provides the operator with his preferred air temperature. An advanced audio system with CD player, AM/FM stereo and MP3 capabilities, plus remote controls is installed to listen to your preferred music favorites. Operators can even call while operating with the hands-free mobile phone feature.



## Easy to Use Cluster

The advanced cluster with 7 inch wide color LCD screen and toggle switch allows the operator to select his personal machine preferences. Power and work mode selection, self diagnostics, optional rear-view camera, maintenance check lists, start-up machine security and video functions are integrated into the cluster to make the machine more versatile and the operator more productive.





# Precision

An operator, who feels his machine respond smoothly, takes pleasure in his work. 9 Series delivers fast precision by combining smoother hydraulics with wider view and less stress. The innovative negative hydraulic system combines straightforward technology with superior response.



\*Photo may include optional equipment.

## Computer Aided Power

The advanced CAPO (Computer Aided Power Optimization) system tunes engine and pump power to optimum levels. Multiple mode selections are implemented for specific applications, maintaining high performance while reducing fuel consumption. Additional features include auto deceleration and power boost. The LCD-display monitors engine speed, coolant and hydraulic oil temperature and through the self-diagnostic capability, it displays current error codes. Operators can set their own preferences for boom or swing priority, power mode selection and optional work tools at the touch of a button.

### Power Mode

Three unique power modes provide the operator with custom engine power, attachment speed and fuel economy. Power-mode maximizes machine speed and power for maximum productivity. Standard-mode provides a reduced, fixed rpm for optimum performance and improved fuel economy. Economy-mode provides precise flow and engine power based on load conditions, for maximum fuel efficiency and controllability.

### Work Mode

Through the different work modes, the operator can select general digging, single-acting attachments like a hydraulic breaker or double-acting attachments like a crusher. Flow settings can be preset through the cluster.

### User Mode

Some jobs require more precise machine settings; some operators prefer different machine settings. Using the User-mode, the operator can customize engine speed, pump output, idle speed and other machine settings according to personal preferences.

## Hydraulic System Improvements



To achieve optimum precision, Hyundai redesigned the hydraulic system to provide the operator with super fine touch and top level controllability. Spool valves in the control valve are engineered to provide more precise flow to each function with less effort. Improved hydraulic valves, variable volume piston pumps, fine-touch pilot controls and enhanced travel functions make any operator look like a smooth operator. Newly improved features include arm and boom regeneration, enhanced control valve technology and innovative auto boom and swing priority for best performances in any application.



### Auto Boom vs. Swing Priority

This smart function adapts the ideal hydraulic flow balance for the boom and swing operation for your application. The advanced CAPO system monitors the hydraulic operations and adjusts the balance to maximize performance and productivity.

# Performance

An operator, who can rely on his machine, takes pleasure in his work. 9 Series stands for lasting performance in strength, speed and reliability. The Auto boom-swing priority results into faster movements and shorter cycle times.



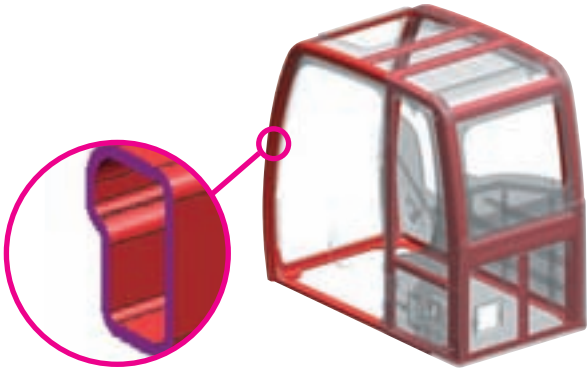
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## Track Rail Guard & Adjusters

Durable track rail guards keep tracks in place. Track adjustment is made easy with standard grease cylinder track adjusters and shock absorbing springs.



## Structural Strength

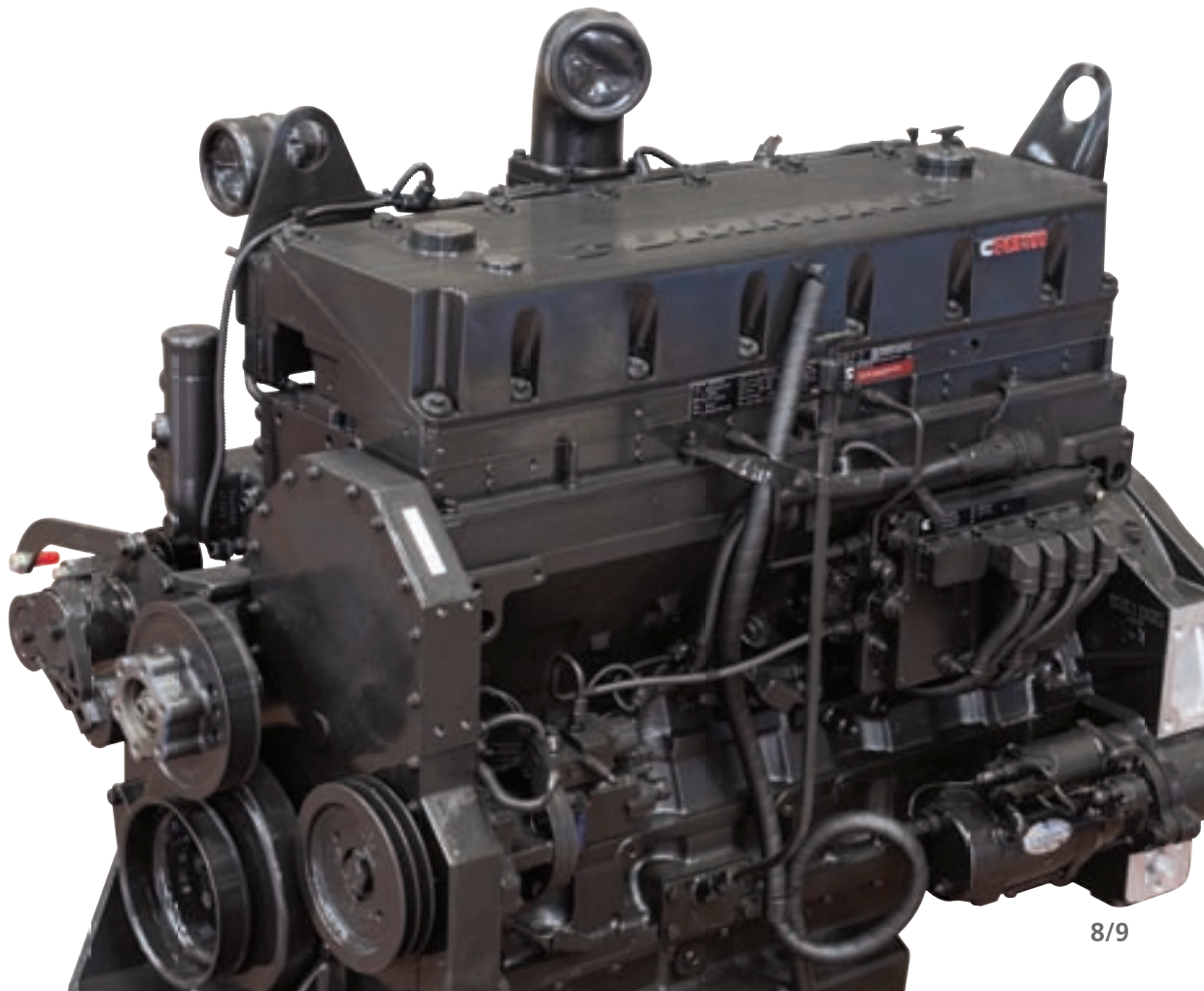
The 9 series cabin structure is designed with slimmer but stronger tubing for more safety and better visibility. Low-stress and high-strength steel is welded to form a strong and stable lower frame. Structural durability is analyzed and tested by FEM-analysis (Finite Elements Method) and long-term durability tests.

## CUMMINS QSM11 Engine

The Tier III compliant, six cylinder, turbo-charged, 4 cycle, water cooled, Cummins QSM11 diesel engine is built for power, reliability, efficiency and reduced emissions.

## Heavy-duty strength

The QSM11 from Cummins. With advanced electronics. Higher torque. Better throttle response. Shorter service times. Longer maintenance intervals. Increased fuel economy. Decreased noise. Diagnostics. Prognostics. Engine protection, and more. All wrapped up in something we call the Quantum system. The QSM11 is built to withstand the toughest circumstances. Bearings have more surface area to handle higher loads with greater durability. The exhaust manifold compensates heat expansion and contraction, eliminating metal stress. Reduced friction in the power cylinder means longer life and increased power output. From the reinforced block to the stiffened gear housing, the QSM11 is built stronger to last longer.



# Profitable

An owner, who knows his machine saves money, takes pleasure in owning it. 9 Series excavators contribute to your business as a time, fuel, spare-part and cost saving earthmoving solution. The Remote Management System allows machine owners to track, monitor and manage at a distance.



\*Photo may include optional equipment.





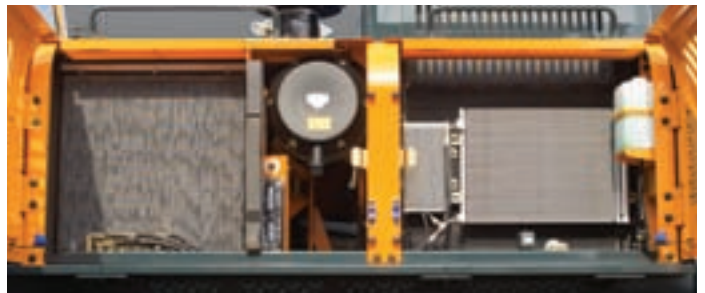
## Hi-mate (Remote Management System)

Hi-mate, Hyundai's newly developed remote management system, using GPS-satellite technology, provides our customers with the highest level of service and product support. Hi-mate enables machine owners to follow-up machine performance, to verify machine location and to access diagnostic information on a distance through any internet connection.



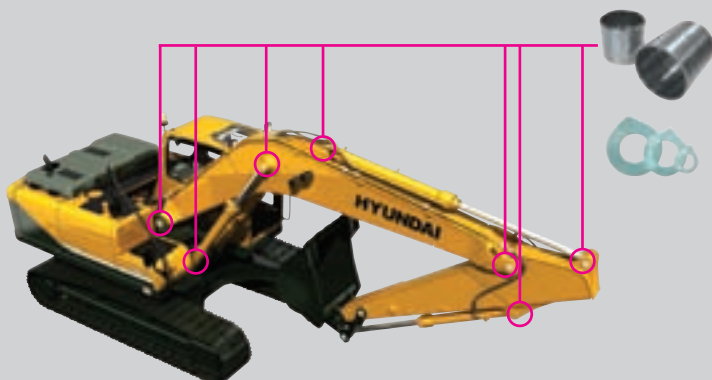
## Fuel Economy

9 series excavators are developed to do more work with less fuel. Implemented innovations like the variable speed hydraulic driven fan, three-stage auto decel system and the new economy mode, are helping to save fuel and reduce the impact on the environment.



## Easy Access

Access from ground to filters, lube fittings, fuses, drains and machine computer components, combined with wide open compartments makes servicing the 9-series a pleasure for your mechanics.



## Extended Life of Components

New long-life bushings are designed for extended lube intervals. Wear-resistant polymer shims reduce noise and reduce wear of bushings. Extended-life hydraulic filters last up to 1,000 hrs and new long-life hydraulic oil need only be changed every 5,000 hrs.

# Specifications

## ENGINE

MODEL	CUMMINS QSM11		
Type	Water cooled, 4 cycle Diesel, 6-Cylinders in line, direct injection, turbocharged, charged air cooled and low emission		
Rated flywheel horse power	SAE	J1995 (gross)	357 HP (266 kW) / 1,900 rpm
		J1349 (net)	342 HP (255 kW) / 1,900 rpm
	DIN	6271/1 (gross)	362 HP (266 kW) / 1,900 rpm
		6271/1 (net)	347 HP (255 kW) / 1,900 rpm
Max. torque	170.8 kgf.m (1,235 lbf.ft) / 1,400 rpm		
Bore x stroke	125 mm x 147 mm (4.92" x 5.79")		
Piston displacement	10,800 cc (659 in <sup>3</sup> )		
Batteries	2 x 12V x 200AH		
Starting motor	24 V; 7.2 kW		
Alternator	24 V; 70 Amp		

## HYDRAULIC SYSTEM

MAIN PUMP	
Type	Two variable displacement piston pumps
Max. flow	2 X 360 L/min (95.1 US gpm / 79.2 UK gpm)
Sub-pump for pilot circuit	Gear pump
Cross-sensing and fuel saving pump system	

### HYDRAULIC MOTORS

Travel	Two speed axial piston motor with brake valve and parking brake
Swing	Axial piston motor with automatic brake

### RELIEF VALVE SETTING

Implement circuits	330 kgf/cm <sup>2</sup> (4,690 psi)
Travel	345 kgf/cm <sup>2</sup> (4,910 psi)
Power boost (boom, arm, bucket)	360 kgf/cm <sup>2</sup> (5,120 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 - 170 x 1,570 mm (6.7" x 61.8")
	Arm : 1 - 190 x 1,820 mm (7.5" x 71.7")
	Bucket : 1 - 170 x 1,370 mm (6.7" x 53.9")

## DRIVES & BRAKES

Drive method	Fully hydrostatic type
Drive motor	Axial piston motor, in-shoe design
Reduction system	Planetary reduction gear
Max. drawbar pull	38,500 kgf (84,800 lbf)
Max. travel speed (high) / (low)	5.0 km/hr (3.3 mph) / 3.2 km/hr (2.0 mph)
Gradeability	35° (70 %)
Parking brake	Multi wet disc

## 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)
Traveling and steering	Two levers with pedals
Engine throttle	Electric, Dial type
Lights	Four lights mounted on the boom, one light mounted under the battery box one light mounted under the cabin one light mounted on the counterweight

## SWING SYSTEM

Swing motor	Axial piston motor
Swing reduction	Planetary gear reduction
Swing bearing lubrication	Grease-bathed
Swing brake	Multi wet disc
Swing speed	9.0 rpm

## COOLANT & LUBRICANT CAPACITY

Refilling	liter	US gal	UK gal
Fuel tank	621	164	136.6
Engine coolant	50.0	13.2	11.0
Engine oil	37.9	10.0	8.3
Swing device - gear oil	5.0	1.3	1.1
Final drive (each) - gear oil	5.0	1.3	1.1
Hydraulic system (including tank)	380	100.4	83.6
Hydraulic tank	262	69.2	57.6

## UNDERCARRIAGE

The X-leg type center frame is integrally welded with reinforced box-section track frames. The undercarriage includes lubricated rollers, idlers, track adjusters with shock absorbing springs and sprockets, and a track chain with double or triple grouser shoes.

Center frame	X - leg type
Track frame	Pentagonal box type
No. of shoes on each side	53
No. of carrier rollers on each side	3
No. of track rollers on each side	9
No. of rail guards on each side	2

## OPERATING WEIGHT (APPROXIMATE)

Operating weight, including 7,060 mm (23' 2") boom; 3,380 mm (11' 1") arm, SAE heaped 2.15 m<sup>3</sup> (2.81 yd<sup>3</sup>) bucket, lubricant, coolant, full fuel tank, full hydraulic tank, and all standard equipments.

### MAJOR COMPONENT WEIGHT

Upperstructure	11,210kg (24,710lb)
Counterweight	10,200kg (22,490lb)
Boom (with arm cylinder)	4,140kg (9,130lb)

### OPERATING WEIGHT

Shoes	Type	Width mm (in)	Operating weight	Ground pressure
			kg (lb)	kgf/cm <sup>2</sup> (psi)
Triple grouser		600 mm (24")	51,000 (112,430)	0.88 (12.51)
		700 mm (28")	51,540 (113,630)	0.76 (10.81)
		750 mm (30")	51,810 (114,220)	0.72 (10.24)
		800 mm (32")	52,080 (114,820)	0.67 (9.53)
Double grouser		600 mm (24")	51,000 (112,430)	0.88 (12.51)
		700 mm (28")	51,540 (113,630)	0.76 (10.81)

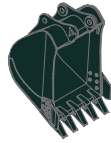


## BUCKETS

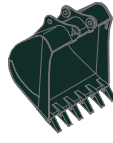
All buckets are welded with high-strength steel.



1.00 (1.31)  
1.38 (1.80)



1.65 (2.16)  
2.15 (2.81)  
2.79 (3.65)



3.03 (3.96)



● 1.80 (2.35)  
● 3.20 (4.19)



■ 2.20 (2.88)

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

Capacity m <sup>3</sup> (yd <sup>3</sup> )		Width mm (in)		Weight kg (lb)	Recommendation m (ft.in)					
SAE heaped	CECE heaped	Without sidecutters	With sidecutters		7.06 (23' 2") Boom				6.55 (21' 6") Boom	9.00 (29' 6") Boom
					2.40 (7' 10") Arm	2.90 (9' 6") Arm	3.38 (11' 1") Arm	4.00 (13' 1") Arm	2.40 (7' 10") Arm	5.85 (19' 2") Arm
1.00 (1.31)	0.9 (1.17)	915 (36.0)	1,065 (41.9)	1,220 (2,690)	–	–	–	–	–	●
1.38 (1.80)	1.25 (1.63)	1,100 (43.3)	1,250 (49.2)	1,420 (3,130)	–	–	–	–	–	■
1.65 (2.16)	1.48 (1.94)	1,140 (44.9)	1,290 (50.8)	1,520 (3,350)	●	●	●	■	●	–
2.15 (2.81)	1.92 (2.51)	1,415 (55.7)	1,565 (61.6)	1,740 (3,840)	●	●	■	▲	●	–
2.79 (3.65)	2.47 (3.23)	1,760 (69.3)	1,910 (75.2)	1,960 (4,320)	■	■	▲	–	●	–
3.03 (3.96)	2.67 (3.49)	1,890 (74.4)	2,040 (80.3)	2,090 (4,610)	▲	▲	–	–	■	–
■ 2.20 (2.88)	1.80 (2.35)	1,840 (72.4)	–	2,170 (4,780)	●	●	■	–	●	–
● 1.80 (2.35)	1.50 (1.96)	1,560 (61.4)	–	2,110 (4,650)	●	●	■	–	●	–
● 3.20 (4.19)	2.80 (3.66)	2,095 (82.5)	–	2,900 (6,390)	–	–	–	–	■	–

■ Heavy-duty bucket

● Heavy duty Rock-bucket

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

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

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

## ATTACHMENT

Booms and arms are welded, a low-stress, full-box section design. 6,550 mm (21' 6"); 7,060 mm (23' 2") and 9,000 mm (29' 6") boom and 2,400 mm (7' 10"); 2,900 mm (9' 6"); 3,380 mm (11' 1"); 4,000 mm (13' 1") and 5,850 mm (19' 2") arms are available.

## DIGGING FORCE

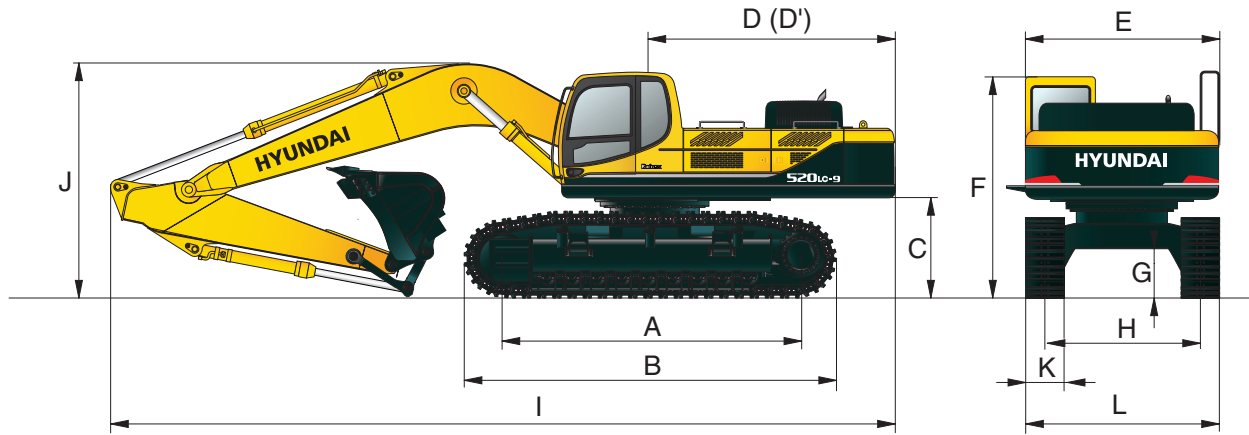
Boom	Length	mm (ft.in)	7,060 (23' 2")				Remarks
	Weight	kg (lb)	3,260 (7,180)				
Arm	Length	mm (ft.in)	2,400 (7' 10")	2,900 (9' 6")	3,380 (11' 1")	4,000 (13' 1")	[ ]: Power Boost
	Weight	kg (lb)	2,370 (5,220)	2,540 (5,600)	2,380 (5,250)	2,670 (5,890)	
Bucket digging force	SAE	kN	247.1 [269.6]	251.1 [273.9]	253.0 [276.0]	253.0 [276.0]	
		kgf	25,200 [27,490]	25,600 [27,930]	25,800 [28,150]	25,800 [28,150]	
		lbf	55,560 [60,610]	56,440 [61,570]	56,880 [62,050]	56,880 [62,050]	
	ISO	kN	286.4 [312.4]	290.3 [316.7]	292.2 [318.8]	292.2 [318.8]	
		kgf	29,200 [31,850]	29,600 [32,290]	29,800 [32,510]	29,800 [32,510]	
		lbf	64,370 [70,220]	65,260 [71,190]	65,700 [71,670]	65,700 [71,670]	
Arm crowd force	SAE	kN	278.5 [303.8]	225.6 [246.1]	192.2 [209.7]	171.6 [187.2]	
		kgf	28,400 [30,980]	23,000 [25,090]	19,600 [21,380]	17,500 [19,090]	
		lbf	62,610 [68,300]	50,710 [55,320]	43,210 [47,140]	38,580 [42,090]	
	ISO	kN	291.3 [317.7]	235.4 [256.8]	200.1 [218.2]	177.5 [193.6]	
		kgf	29,700 [32,400]	24,000 [26,180]	20,400 [22,250]	18,100 [19,750]	
		lbf	65,480 [71,430]	52,910 [57,720]	44,970 [49,060]	39,900 [43,530]	

Note: Boom weight includes arm cylinder, piping, and pin

Arm weight includes bucket cylinder, linkage, and pin

# Dimensions & Working Ranges

## DIMENSIONS R520LC-9



mm (ft · in)

mm (ft · in)

A Tumbler distance	4,470 (14' 8")	Boom length	7,060 (23' 2")				6,550 (21' 6")	9,000 (29' 6")
B Overall length of crawler	5,460 (17' 11")	Arm length	2,400 (7' 10")	2,900 (9' 6")	3,380 (11' 1")	4,000 (13' 1")	2,400 (7' 10")	5,850 (19' 2")
C Ground clearance of counterweight	1,500 (4' 11")	I Overall length	12,280 (40' 3")	12,180 (40' 0")	12,060 (39' 7")	12,050 (39' 6")	11,780 (38' 5")	13,800 (45' 3")
D Tail swing radius	3,750 (12' 4")	J Overall height of boom	3,970 (13' 0")	3,880 (12' 9")	3,850 (12' 8")	4,100 (13' 5")	4,100 (13' 5")	5,190 (17' 0")
D' Rear-end length	3,695 (12' 1")	K Track shoe width	600 (24")	700 (28")	750 (30")	800 (32")		
E Overall width of upperstructure	2,980 (9' 9")	L Overall width	Extended	3,540 (11' 7")	3,640 (11' 11")	3,690 (12' 1")	3,740 (12' 3")	
F Overall height of cab	3,400 (11' 2")			Retracted	2,990 (9' 9")	3,080 (10' 1")	3,130 (10' 3")	3,180 (10' 5")
G Min. ground clearance	770 (2' 6")							
H Track gauge (Extended / Retracted)	2,940 (9' 8") / 2,380 (7' 10")							

## WORKING RANGES R520LC-9

mm (ft · in)

	Boom length	7,060 (23' 2")				6,550 (21' 6")	9,000 (29' 6")
	Arm length	2,400 (7' 10")	2,900 (9' 6")	3,380 (11' 1")	4,000 (13' 1")	2,400 (7' 10")	5,850 (19' 2")
	A Max. digging reach	11,140 (36' 7")	11,530 (37' 10")	12,080 (39' 8")	12,640 (41' 6")	10,590 (34' 9")	16,280 (53' 5")
	A' Max. digging reach on ground	10,890 (35' 9")	11,290 (37' 0")	11,840 (38' 10")	12,420 (40' 9")	10,320 (33' 10")	16,100 (52' 10")
	B Max. digging depth	6,610 (21' 8")	7,110 (23' 4")	7,590 (24' 11")	8,210 (26' 11")	6,130 (20' 1")	11,380 (37' 4")
	B' Max. digging depth (8° level)	6,430 (21' 1")	6,940 (22' 9")	7,440 (24' 5")	8,080 (26' 6")	5,950 (19' 6")	11,280 (37' 0")
	C Max. vertical wall digging depth	4,880 (16' 0")	4,780 (15' 8")	5,470 (17' 11")	5,980 (19' 7")	4,390 (14' 5")	10,070 (33' 0")
	D Max. digging height	10,640 (34' 11")	10,610 (34' 10")	11,080 (36' 4")	11,290 (37' 0")	10,260 (33' 8")	13,930 (45' 8")
	E Max. dumping height	7,290 (23' 11")	7,350 (24' 1")	7,760 (25' 6")	7,980 (26' 2")	6,920 (22' 8")	10,530 (34' 7")
	F Min. swing radius	5,110 (16' 9")	4,910 (16' 1")	4,830 (15' 10")	4,910 (16' 1")	4,650 (15' 3")	5,940 (19' 6")













# Lifting Capacities











## R520LC-9

 Rating over-front  Rating over-side or 360 degrees

Boom : 6.55 m (21' 6") / Arm : 2.4 m (7' 10") / Bucket : 2.15 m<sup>3</sup> (2.81 yd<sup>3</sup>) SAE heaped / Shoe : 600 mm (24") triple grouser with 10,200 kg (22,490 lb) counterweight

Load point height m (ft)		Load radius								At max. reach		
		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		Capacity		Reach
												m (ft)
7.5 m	kg									*9680	9450	8.27
(25.0 ft)	lb									*21340	20830	(27.1)
6.0 m	kg					*12520	*12520	*10940	10930	*9510	7850	9.07
(20.0 ft)	lb					*27600	*27600	*24120	24100	*20970	17310	(29.8)
4.5 m	kg			*18820	*18820	*14060	*14060	*11610	10610	*9480	7010	9.53
(15.0 ft)	lb			*41490	*41490	*31000	*31000	*25600	23390	*20900	15450	(31.3)
3.0 m	kg					*15650	14440	*12390	10200	*9510	6620	9.71
(10.0 ft)	lb					*34500	31830	*27320	22490	*20970	14590	(31.9)
1.5 m	kg					*16660	13790	*12920	9840	*9540	6600	9.62
(5.0 ft)	lb					*36730	30400	*28480	21690	*21030	14550	(31.6)
Ground Line	kg			*22490	21060	*16730	13430	*12920	9610	*9500	6960	9.26
	lb			*49580	46430	*36880	29610	*28480	21190	*20940	15340	(30.4)
-1.5 m	kg	*25000	*25000	*20550	*20550	*15740	13350	*12050	9550	*9220	7870	8.59
(-5.0 ft)	lb	*55120	*55120	*45300	*45300	*34700	29430	*26570	21050	*20330	17350	(28.2)
-3.0 m	kg	*20980	*20980	*17260	*17260	*13380	*13380			*8260	*8260	7.49
(-10.0 ft)	lb	*46250	*46250	*38050	*38050	*29500	*29500			*18210	*18210	(24.6)
-4.5 m	kg			*11720	*11720							
(-15.0 ft)	lb			*25840	*25840							

Boom : 7.06 m (23' 2") / Arm : 2.4 m (7' 10") / Bucket : 2.15 m<sup>3</sup> (2.81 yd<sup>3</sup>) SAE heaped / Shoe : 600 mm (24") triple grouser with 10,200 kg (22,490 lb) counterweight

Load point height m (ft)		Load radius								At max. reach				
		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		9.0 m (30.0 ft)		Capacity	Reach	
												m (ft)		
7.5 m	kg							*9860	*9860			*8740	8150	8.92
(25.0 ft)	lb							*21740	*21740			*19270	17970	(29.3)
6.0 m	kg					*12070	*12070	*10320	*10320			*8630	6890	9.66
(20.0 ft)	lb					*26610	*26610	*22750	*22750			*19030	15190	(31.7)
4.5 m	kg			*13750	*13750	*11130	10410			*9620	7600	*8620	6210	10.10
(15.0 ft)	lb			*30310	*30310	*24540	22950			*21210	16760	*19000	13690	(33.1)
3.0 m	kg			*15370	13980	*11980	9950	*9980	7390			*8670	5890	10.26
(10.0 ft)	lb			*33890	30820	*26410	21940	*22000	16290			*19110	12990	(33.7)
1.5 m	kg			*16320	13350	*12570	9570	*10220	7200			*8720	5870	10.18
(5.0 ft)	lb			*35980	29430	*27710	21100	*22530	15870			*19220	12940	(33.4)
Ground Line	kg					*16370	13040	*12680	9340			*8720	6160	9.84
	lb					*36090	28750	*27950	20590			*19220	13580	(32.3)
-1.5 m	kg			*19880	*19880	*15530	13000	*12110	9280			*8550	6880	9.22
(-5.0 ft)	lb			*43830	*43830	*34240	28660	*26700	20460			*18850	15170	(30.2)
-3.0 m	kg	*20120	*20120	*17240	*17240	*13690	13170	*10450	9420			*7940	*7940	8.22
(-10.0 ft)	lb	*44360	*44360	*38010	*38010	*30180	29030	*23040	20770			*17500	*17500	(27.0)
-4.5 m	kg			*12990	*12990	*10140	*10140							
(-15.0 ft)	lb			*28640	*28640	*22350	*22350							

- Lifting capacity is based on SAE J1097, ISO 10567.
- Lifting capacity of the Robex Series does not exceed 75% of the tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
- The load point is a hook located on the back of the bucket.
- (\*) indicates the load limited by hydraulic capacity.

# Lifting Capacities

## R520LC-9



Rating over-front



Rating over-side or 360 degrees

Boom : 7.06 m (23' 2") / Arm : 2.9 m (9' 6") / Bucket : 2.15 m<sup>3</sup> (2.81 yd<sup>3</sup>) SAE heaped / Shoe : 600 mm (24") triple grouser with 10,200 kg (22,490 lb) counterweight

Load point height m (ft)		Load radius										At max. reach		
		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		9.0 m (30.0 ft)		Capacity	Reach	
														m (ft)
7.5 m	kg							*9130	*9130			*8030	7490	9.38
(25.0 ft)	lb							*20130	*20130			*17700	16510	(30.8)
6.0 m	kg							*9680	*9680			*7980	6390	10.08
(20.0 ft)	lb							*21340	*21340			*17590	14090	(33.1)
4.5 m	kg			*17520	*17520	*12920	*12920	*10560	10490	*9150	7650	*8020	5780	10.50
(15.0 ft)	lb			*38620	*38620	*28480	*28480	*23280	23130	*20170	16870	*17680	12740	(34.4)
3.0 m	kg			*21080	*21080	*14680	14130	*11500	9990	*9620	7390	*8110	5480	10.66
(10.0 ft)	lb			*46470	*46470	*32360	31150	*25350	22020	*21210	16290	*17880	12080	(35.0)
1.5 m	kg			*22550	20650	*15900	13380	*12240	9560	*9990	7150	*8210	5440	10.58
(5.0 ft)	lb			*49710	45530	*35050	29500	*26980	21080	*22020	15760	*18100	11990	(34.7)
Ground Line	kg			*22180	20340	*16280	12970	*12550	9260	*10050	6980	*8290	5670	10.26
	lb			*48900	44840	*35890	28590	*27670	20410	*22160	15390	*18280	12500	(33.7)
-1.5 m	kg	*21080	*21080	*20820	20390	*15780	12830	*12240	9140			*8260	6270	9.66
(-5.0 ft)	lb	*46470	*46470	*45900	44950	*34790	28290	*26980	20150			*18210	13820	(31.7)
-3.0 m	kg	*23440	*23440	*18490	*18490	*14330	12930	*11060	9200			*7950	7480	8.72
(-10.0 ft)	lb	*51680	*51680	*40760	*40760	*31590	28510	*24380	20280			*17530	16490	(28.6)
-4.5 m	kg	*18200	*18200	*14780	*14780	*11520	*11520					*6800	*6800	7.30
(-15.0 ft)	lb	*40120	*40120	*32580	*32580	*25400	*25400					*14990	*14990	(24.0)

Boom : 7.06 m (23' 2") / Arm : 3.38 m (11' 1") / Bucket : 2.15 m<sup>3</sup> (2.81 yd<sup>3</sup>) SAE heaped / Shoe : 600 mm (24") triple grouser with 10,200 kg (22,490 lb) counterweight

Load point height m (ft)		Load radius										At max. reach		
		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		9.0 m (30.0 ft)		Capacity	Reach	
														m (ft)
7.5 m	kg											*7510	6700	10.00
(25.0 ft)	lb											*16560	14770	(32.8)
6.0 m	kg							*9190	*9190	*8380	7980	*7470	5810	10.66
(20.0 ft)	lb							*20260	*20260	*18470	17590	*16470	12810	(35.0)
4.5 m	kg			*16290	*16290	*12260	*12260	*10120	*10120	*8830	7750	*7510	5290	11.05
(15.0 ft)	lb			*35910	*35910	*27030	*27030	*22310	*22310	*19470	17090	*16560	11660	(36.3)
3.0 m	kg			*20110	*20110	*14150	*14150	*11160	10110	*9380	7470	*7590	5040	11.20
(10.0 ft)	lb			*44330	*44330	*31200	*31200	*24600	22290	*20680	16470	*16730	11110	(36.7)
1.5 m	kg			*22300	21040	*15600	13560	*12020	9640	*9840	7200	*7680	5000	11.13
(5.0 ft)	lb			*49160	46390	*34390	29890	*26500	21250	*21690	15870	*16930	11020	(36.5)
Ground Line	kg			*22570	20490	*16260	13060	*12490	9310	*10050	7000	*7750	5190	10.82
	lb			*49760	45170	*35850	28790	*27540	20530	*22160	15430	*17090	11440	(35.5)
-1.5 m	kg	*19050	*19050	*21590	20400	*16040	12850	*12390	9130	*9790	6900	*7740	5670	10.26
(-5.0 ft)	lb	*42000	*42000	*47600	44970	*35360	28330	*27320	20130	*21580	15210	*17060	12500	(33.7)
-3.0 m	kg	*25420	*25420	*19580	*19580	*14900	12870	*11510	9130			*7520	6620	9.40
(-10.0 ft)	lb	*56040	*56040	*43170	*43170	*32850	28370	*25380	20130			*16580	14590	(30.8)
-4.5 m	kg	*21120	*21120	*16290	*16290	*12560	*12560	*9330	*9330			*6750	*6750	8.11
(-15.0 ft)	lb	*46560	*46560	*35910	*35910	*27690	*27690	*20570	*20570			*14880	*14880	(26.6)
-6.0 m				*10870	*10870									
(-20.0 ft)				*23960	*23960									















- Lifting capacity is based on SAE J1097, ISO 10567.
- Lifting capacity of the Robex Series does not exceed 75% of the tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
- The load point is a hook located on the back of the bucket.
- (\*) indicates the load limited by hydraulic capacity.

# Lifting Capacities















## R520LC-9

 Rating over-front  Rating over-side or 360 degrees

Boom : 7.06 m (23' 2") / Arm : 4.0 m (13' 1") / Bucket : 2.15 m<sup>3</sup> (2.81 yd<sup>3</sup>) SAE heaped / Shoe : 600 mm (24") triple grouser with 10,200 kg (22,490 lb) counterweight

Load point height m (ft)		Load radius										At max. reach				
		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		9.0 m (30.0 ft)		10.5 m (35.0 ft)		Capacity		Reach
																m (ft)
7.5 m (25.0 ft)	kg									*6160	*6160			*6770	5950	10.64
	lb									*13580	*13580			*14930	13120	(34.9)
6.0 m (20.0 ft)	kg									*7670	*7670			*6770	5200	11.26
	lb									*16910	*16910			*14930	11460	(36.9)
4.5 m (15.0 ft)	kg							*9320	*9320	*8200	7790	*5180	*5180	*6830	4750	11.62
	lb							*20550	*20550	*18080	17170	*11420	*11420	*15060	10470	(38.1)
3.0 m (10.0 ft)	kg			*18340	*18340	*13130	*13130	*10450	10170	*8830	7470	*6760	5620	*6920	4520	11.77
	lb			*40430	*40430	*28950	*28950	*23040	22420	*19470	16470	*14900	12390	*15260	9960	(38.6)
1.5 m (5.0 ft)	kg			*21260	*21260	*14840	13650	*11460	9640	*9410	7150	*7540	5450	*7030	4480	11.70
	lb			*46870	*46870	*32720	30090	*25260	21250	*20750	15760	*16620	12020	*15500	9880	(38.4)
Ground Line	kg	*13810	*13810	*22360	20460	*15850	13020	*12130	9240	*9780	6900	*6850	5310	*7130	4620	11.41
	lb	*30450	*30450	*49300	45110	*34940	28700	*26740	20370	*21560	15210	*15100	11710	*15720	10190	(37.4)
-1.5 m (-5.0 ft)	kg	*18040	*18040	*22000	20150	*16010	12700	*12290	8990	*9780	6750			*7190	5000	10.88
	lb	*39770	*39770	*48500	44420	*35300	28000	*27090	19820	*21560	14880			*15850	11020	(35.7)
-3.0 m (-10.0 ft)	kg	*23040	*23040	*20520	20190	*15290	12620	*11780	8920	*9150	6730			*7110	5740	10.08
	lb	*50790	*50790	*45240	44510	*33710	27820	*25970	19670	*20170	14840			*15670	12650	(33.1)
-4.5 m (-15.0 ft)	kg	*24400	*24400	*17830	*17830	*13520	12770	*10290	9030					*6710	*6710	8.91
	lb	*53790	*53790	*39310	*39310	*29810	28150	*22690	19910					*14790	*14790	(29.2)
-6.0 m (-20.0 ft)	kg	*17570	*17570	*13410	*13410	*10090	*10090									
	lb	*38740	*38740	*29560	*29560	*22240	*22240									

Boom : 9.0 m (29' 6") / Arm : 5.85 m (19' 2") / Bucket : 1.38 m<sup>3</sup> (1.80 yd<sup>3</sup>) SAE heaped / Shoe : 600 mm (24") triple grouser with 10,700 kg (23,590 lb) counterweight

Load point height m (ft)		Load radius										At max. reach				
		3.0 m (10.0 ft)		5.0 m (15.0 ft)		7.0 m (25.0 ft)		9.0 m (30.0 ft)		11.0 m (35.0 ft)		13.0 m (45.0 ft)		Capacity		Reach
																m (ft)
10.0 m (35.0 ft)	kg													*4210	3970	13.66
	lb													*9280	8750	(44.8)
8.0 m (25.0 ft)	kg									*4750	*4750	*2800	*2800	*4140	3270	14.63
	lb									*10470	*10470	*6170	*6170	*9130	7210	(48.0)
6.0 m (20.0 ft)	kg									*5130	*5130	*4310	4110	*4130	2840	15.25
	lb									*11310	*11310	*9500	9060	*9110	6260	(50.0)
4.0 m (15.0 ft)	kg					*8700	*8700	*6790	*6790	*5650	5520	*4910	3900	*4170	2580	15.57
	lb					*19180	*19180	*14970	*14970	*12460	12170	*10820	8600	*9190	5690	(51.1)
2.0 m (5.0 ft)	kg			*16120	*16120	*10440	*10440	*7740	7260	*6190	5110	*5190	3670	*4230	2470	15.60
	lb			*35540	*35540	*23020	*23020	*17060	16010	*13650	11270	*11440	8090	*9330	5450	(51.2)
Ground Line	kg			*16710	16170	*11660	9800	*8490	6670	*6630	4760	*5400	3460	*4290	2490	15.35
	lb			*36840	35650	*25710	21610	*18720	14700	*14620	10490	*11900	7630	*9460	5490	(50.4)
-2.0 m (-5.0 ft)	kg	*11290	*11290	*17600	15570	*12130	9250	*8870	6270	*6840	4500	*5410	3320	*4340	2660	14.80
	lb	*24890	*24890	*38800	34330	*26740	20390	*19550	13820	*15080	9920	*11930	7320	*9570	5860	(48.6)
-4.0 m (-15.0 ft)	kg	*14480	*14480	*16990	15500	*11860	9040	*8750	6090	*6680	4380	*4170	3290	*4330	3030	13.91
	lb	*31920	*31920	*37460	34170	*26150	19930	*19290	13430	*14730	9660	*9190	7250	*9550	6680	(45.6)
-6.0 m (-20.0 ft)	kg	*18200	*18200	*15010	*15010	*10780	9100	*8000	6110	*5900	4430			*4180	3740	12.60
	lb	*40120	*40120	*33090	*33090	*23770	20060	*17640	13470	*13010	9770			*9220	8250	(41.3)
-8.0 m (-25.0 ft)	kg	*16860	*16860	*11770	*11770	*8630	*8630	*6210	*6210					*3610	*3610	10.71
	lb	*37170	*37170	*25950	*25950	*19030	*19030	*13690	*13690					*7960	*7960	(35.1)

- Lifting capacity is based on SAE J1097, ISO 10567.
- Lifting capacity of the Robex Series does not exceed 75% of the tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
- The load point is a hook located on the back of the bucket.
- (\*) indicates the load limited by hydraulic capacity.







## STANDARD EQUIPMENT

### ISO Standard cabin

All-weather steel cab with 360° visibility  
Safety glass windows  
Rise-up type windshield wiper  
Sliding fold-in front window  
Sliding side window  
One key fits all lockable doors  
Hot & cool box  
Storage compartment & Ashtray  
Transparent cabin roof-cover  
CD/MP3 Player  
Handsfree mobile phone system with USB-charging device  
Sun visor

### Computer aided power optimization (New CAPO) system

3-power modes, 3-work modes, User mode  
Auto & one-touch deceleration system  
Auto warm-up system  
Overheat prevention system

### Automatic temperature control

Full automatic temperature control  
Defroster

### Self-diagnostics system

### Starting Aid (air grid heater) for cold weather

### Centralized monitoring

### LCD display

Engine speed or Trip meter  
Clock  
Gauges  
- Fuel level gauge  
- Engine coolant temperature gauge  
- Hyd. oil temperature gauge  
Warning lamps  
- Engine warning  
- Overload  
- Communication error  
- Low battery  
- Air filter clogging  
Indicators  
- Max power  
- Low speed/High speed  
- Fuel warmer  
- Auto deceleration

### Three outside rearview mirrors

### Fully adjustable suspension seat with seat belt

### Adjustable joysticks

### Console box tilting system (LH.)

### Four front working lights, one rear light

### Electric horn

### Batteries (2 x 12V x 200 AH)

### Battery master switch

### Removable clean-out dust net for cooler

### Automatic swing brake

### Automatic fuel line deaeration

### Fuel pre-filter with fuel warmer

### Boom holding system

### Arm holding system

### Counterweight (10,200 kg; 22,490 lb)

### Track shoes (600 mm; 24")

### Track rail guard

### Accumulator for lowering work equipment

### Lower frame under cover

### Viscous fan clutch

### Travel alarm

## OPTIONAL EQUIPMENT

### Fuel filler pump (50 L/min)

### Beacon lamp

### Safety lock valve for boom cylinder with overload warning device

### Safety lock valve for arm cylinder

### Single-acting piping kit (breaker, etc.)

### Double-acting piping kit (clamshell, etc.)

### Quick coupler

### 12 volt power outlet (24V DC to 12V DC converter)

### Boom

Heavy duty boom (7.06 m; 23' 2")

Short boom (6.55 m; 21' 6")

Long boom (9.0 m; 29' 6")

### Arm

Heavy duty arm (3.38 m; 11' 1")

Super short arm (2.4 m; 7' 10")

Short arm (2.9 m; 9' 6")

Long arm (5.85 m; 19' 2")

### Temperature control

Air conditioner only

Heater only

Air conditioner & heater manually

### Cabin FOPS/FOG (ISO/DIS 10262)

FOPS (Falling Object Protective Structure)

FOG (Falling Object Guard)

### Cabin roof-steel cover

### Rain guard - front window

### Cabin lights

### Track shoes

Triple grousers shoe (700 mm; 28")

Triple grousers shoe (750 mm; 30")

Triple grousers shoe (800 mm; 32")

Double grousers shoe (600 mm; 24")

Double grousers shoe (700 mm; 28")

Full track rail guard

### Additional cover under lower frame

### Coolant pre-heating system

### Tool kit

### Operator suit

### Rearview camera

### Seat

Adjustable air suspension seat

Adjustable air suspension seat with heater

Mechanical suspension seat with heater

### Pattern change valve (2 patterns)

### Oil washed air cleaner

### Hi-mate (Remote Management System)

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 Heavy Industries Europe N.V.

VOSSENDAAL 11, 2440 GEEL, BELGIUM TEL: (32) 14-56-2200 FAX: (32) 14-59-3405