# 480<sub>LC-9A</sub>

With Tier 4 Interim Engine installed

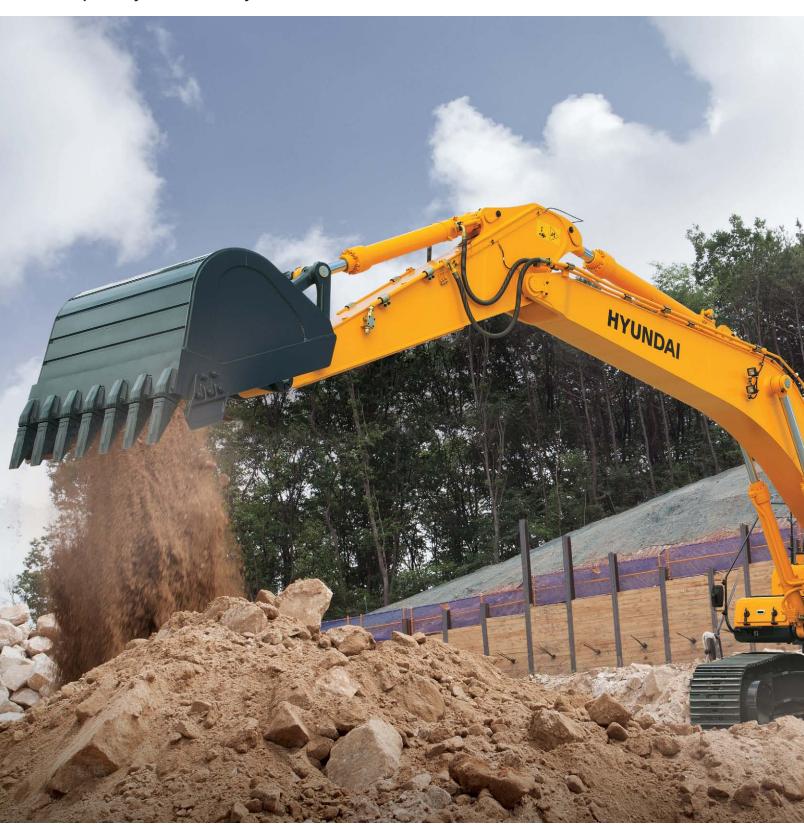
MOVING YOU FURTHER



# PRIDE AT WORK

Hyundai Heavy Industries 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!





## Machine Walk-Around



Proven, reliable, fuel efficient, low emission and low noise Cummins Tier 4 interim & EU stage III B engine

## **Hydraulic System Improvements**

New patented hydraulic control for improved controllability / Improved control valve design for added efficiency and smoother operation / New auto boom and swing priority system for optimum speed / New auto power boost feature for additional power when needed / Improved arm-in and boom-down flow regeneration system for added speed and efficiency

#### **Pump Compartment**

Industry-leading, powerful, reliable Kawasaki designed, variable volume in-line axial piston pumps New compact solenoid block equipped with 3 solenoid valves, 1 EPPR valve, 1 check valve accumulator and pilot filter - controls 2 speed travel, power boost, boom priority, safety lock

#### **Enhanced Operator Cab**

#### Improved Visibility

Enlarged cab with improved visibility / See-through upper skylight for visibility and ventilation Larger right-side glass, now one piece, for better right visibility

Safety glass windows on all sides - less expensive than (polycarbonate) and won't scratch or fade Closeable sunshade for operator convenience / Reduced front window seam for improved operator view

#### **Improved Cab Construction**

New steel tube construction for added operator safety, protection and durability New window open/close mechanism designed with cable and spring lift assist and single latch release

#### Improved Suspension Seat / Console Assembly

Ergonomic joysticks with auxiliary control buttons for attachment use, now with new sleek styling Heated suspension (standard) or optional air ride suspension with heat New joystick consoles - now adjustable in height by pushing a button Integrated seat with consoles - reduces the operator fatigue

#### Advanced 7" Color Cluster with Touch Screen

New Color LCD Display with easy to read digital gauges for hydraulic oil temperature, water temperature, and fuel. Simplified design makes adjustment and diagnostics easier. Also, new enhanced features such as rear-view camera are integrated into monitor.

3 power modes : (P) Power, (S) Standard, (E) Economy, 2 work modes : Dig & Attachment, (U) User mode for operator preference

Enhanced self-diagnostic features with GPS download capability

One pump flow or two pump flow for optional attachment is now selectable through the cluster New anti-theft system with password capability

Boom speed and arm regeneration are selectable through the monitor.

Auto power boost is now available - selectable (on/off) through the monitor.

Powerful air conditioning and heat with auto climate control

RMS (Remote Management System) works through GPS/satellite technology to ultimately provide better customer service and support.

#### **Undercarriage**

Sealed track chain (urethane seals) / Standard track rail guard / Comfortable bolt-on steps Large upper roller cut-outs for debris clean-out / Tapered side frames for debris clean-out / Grease-type track tensioner



# **PRECISION**

Innovative hydraulic system technologies make the 9A series excavator fast, smooth and easy to control.



## **Computer Aided Power**

The engine horsepower and hydraulic horsepower together in unison through the advanced CAPO (Computer Aided Power Optimization) system flow for the job at hand. Operator can set their own preferences for boom or swing priority, power mode selection and optional work tools at the touch of a button.

The CAPO system also provides complete self-diagnostic features and digital gauges for important information like hydraulic oil temperature, water temperatures and fuel level. This system interfaces with multiple sensors placed throughout the hydraulic system as well as the electronically controlled engine to provide the optimum level of engine power and hydraulic flow.

P (Power Max) mode maximizes machine speed and power for mass production.

Power Mode

S (Standard) mode provides a reduced, fixed rpm for optimum performance and improved fuel economy. For maximum fuel savings and improved control, E (Economy) mode provides precise flow and engine power based on load demand. Three unique power modes provide the operator with custom power, speed and fuel economy.

Work Mode

The work mode allows the operator to select single flow attachments like a hydraulic breaker or bi-directional flow attachments like a crusher. Flow settings unique to each attachment can be programmed from within the cluster.

User Mode

Some jobs require more precise machine settings. Using the versatile U (User) mode, the operator can customize engine speed, pump output, idle speed and other machine settings for the job at hand.

## Improved Hydraulic System



To achieve optimum precision, Hyundai redesigned the hydraulic system to provide the operator with super fine touch and improved controllability. Improved pump flow control reduces flow when controls are not being used to minimize fuel consumption.

Improved spool valves in the control valve are engineered to provide more precise flow to each function with less effort

Improved hydraulic valves, precision-designed variable volume piston pumps, fine-touch pilot controls, and enhanced travel functions make any operator running a 9A series look like a smooth operator. Newly improved

features include arm-in and boom-down flow regeneration, improved control valve technology and innovative auto boom and swing priority for optimal performance in any application.



## **Auto Boom-swing Priority**

This smart function automatically and continuously looks the ideal hydraulic flow balance for the boom and swing motions of the machine. The advanced CAPO system monitors the hydraulic system and adjusts its settings to maximize performance and productivity.

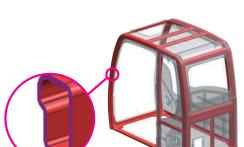
## **PERFORMANCE**

9A series is designed for maximum performance to keep the operator working productively.



## Track Rail Guard & Adjusters

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



## Structure Strength

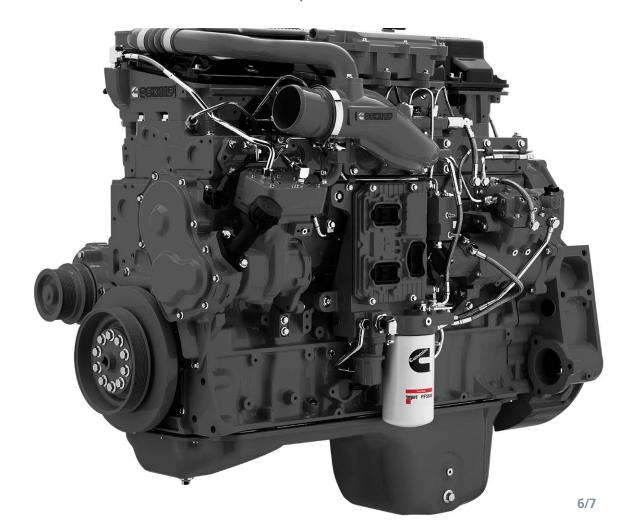
The 9 series cabin structure has been fitted with stronger but slimmer tubing for more safety and improved visibility. Low-stress, high-strength steel is integrally welded to form a stronger, more durable upper and lower frame. Structural integrity was tested by way of FEM (Finite Elements Method) analysis and long-term durability tests.

The optional ROPS (Roll Over Protective Structure) cab can be equipped to enhance operator safety.

## Cummins QSX11.9 Engine

The key to success is building upon your strengths. The proof is Cummins Tier 4 Interim/Stage IIIB QSX11.9. We've taken everything we've learned with the Cummins QSM engine and combined it with the advanced technology platform of the QSX15. The result is a compact engine with 290-500 hp (216-373 kW) and up to 1600 lb-ft (2169 N·m) of peak torque. The QSX11.9 has one of the highest power-to-weight ratios in its class, and its remarkable torque rise (up to 50%) enables the engine to more quickly take full advantage of the torque power – just as rpm speed falls due to tougher working conditions. Reliability, durability and productivity are similar to the QSX15, because the QSX11.9 shares virtually every major component and subsystem. This includes the XPI fuel injection system, Direct Flow air filter, the Cummins CM2250 Electronic Control Module (ECM), proprietary Cummins VGT (Variable Geometry Turbocharger) and the Cummins Particulate Filter.

The addition of the Cummins Particulate Filter reduces particulate matter emissions by over 90%, while the cooled-EGR subsystem reduces NOx emissions by 45%.







### Wide Cabin with Excellent Visibility

The newly designed cabin has more space, a wider field of view and operator comfort. Special attention was given to a clear, open and convenient interior with plenty of visibility on the machine surroundings and the job at hand. This well-balanced combination of comfort and visibility puts the operator in the perfect position to work safely and securely.

## Operator Comfort

In 9A series cabin you can easily adjust the seat, console and armrest settings to best suit your comfort level. The seat is integrated with console and absorbs console vibration with the seat suspension to reduce operator's

fatigue. New joystick consoles are adjustable in height by pushing a button. Other preference settings that add to overall operator comfort include the fully automatic high capacity airconditioning system, transparent polycarbonate glass sun roof, large and easy to control sun visor, and the radio / USB player.





## **Reduced Stress**

Work is stressful enough. Your work environment should be stress free. Hyundai's 9A series provides improved cab 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 USB player, AM/FM stereo and MP3 capabilities, plus remotely located controls is perfect for listening to your favorite music.

Operators can even talk on the phone with the hands-free cell phone feature. The newly designed optional remote control offers mobile hands-free bluetooth and hands-free radio cable functions.



## Smart Key System (Option)

9A series excavators provide smart key system as an option. This allows the operator to start the engine by the push of a starter button without inserting a key in the ignition.



## **Operator - Friendly Cluster**

The advanced new cluster with 7-inch wide color LCD touch screen with 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 were integrated into the cluster to make the machine more versatile and the operator more productive. The newly applied FM transmitter application transmits signal to USB & radio player with the same frequency as cluster. The player outputs the audio through the internal speaker in the cab. An adjustable cluster hinge bracket improves cluster visibility, and video & firmware updates are easy with the USB host support.

## Monitor Tilt Range







# **PROFITABILITY**

9A 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.

## **Fuel Efficiency**

9A series excavators are engineered to be extremely fuel efficient. New innovations like the variable speed remote fan, two-stage auto decel system and the new economy mode help to conserve fuel and reduce the impact on the environment.





## Easy Access

Ground-line access to filters, lube fittings, fuses, machine computer components and wide open compartments makes service more convenient on the 9A series.





## Long-Life Components

9A series excavators were designed with bushings designed for long-life lube intervals (250 hrs) & polymer shims (wear resistant, noise reducing), long-life hydraulic filters (1,000hrs), long-life hydraulic oil (5,000hrs), more efficient cooling systems and integrated preheating systems which extend service intervals, minimize operating costs and reduce machine down time.

## **Specifications**

## **ENGINE**

MODEL			CUMMINS QSX11.9
			Water-cooled, 4-cycle Diesel,
Tuna			6-Cylinder in-line, Direct injection,
Туре			Turbocharged, Charger air cooled,
			Low emission
Rated	C 4 F	J1995 (gross)	372HP (277kW)/ 1,800rpm
	SAE	J1349 (net)	352HP (263kW)/ 1,800rpm
flywheel	DIN	6271/1 (gross)	377PS (277kW)/ 1,800rpm
horsepower	DIN	6271/1 (net)	357PS (263kW)/ 1,800rpm
Max. torque			186.7kgf·m (1,350lbf·ft)/1,400rpm
Bore X stroke			130mm X 150mm (5.12" X 5.91")
Piston displace	ment		11,900cc (726 in <sup>3</sup> )
Batteries			2 X 12V X 160AH
Starting motor	r		24V, 7.2kW
Alternator			24V, 70Amp

## **HYDRAULIC SYSTEM**

MAIN PUMP	
Туре	Variable displacement tandem-axis piston pumps
Max. flow	2 X 360 L /min (97.7 US gpm / 81.4 UK gpm)
Sub-pump for pilot circuit	Gear pump
Cross-sensing and fuel saving pump	system
HYDRAULIC MOTORS	
Travel	Two-speed axial pistons motor
ITavei	with brake valve and parking brake
Swing	Axial piston motor with automatic brake
RELIEF VALVE SETTING	
Implement circuits	330 kgf/cm² (4,690 psi)
Travel	330 kgf/cm² (4,690 psi)
Power boost (boom, arm, bucket)	360 kgf/cm² (5,120 psi)
Swing circuit	285 kgf/cm² (4,050 psi)
Pilot circuit	40 kgf/cm² (570 psi)
Service valve	Installed
HYDRAULIC CYLINDERS	
N. C. P. I	Boom: 2-170 X1,570 mm (6.7" X 61.8")
No. of cylinder	Arm: 1-190 X 1,820 mm (7.5" X 71.7")
bore X stroke	Bucket: 1-160 X 1,370 mm (6.3" 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)	4.8 km/hr (3.0 mph) / 3.1 km/hr (1.9 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

## **SWING SYSTEM**

Swing motor	Axial pistons motor
Swing reduction	Planetary gear reduction
Swing bearing lubrication	Grease-bathed
Swing brake	Multi wet disc
Swing speed	8.2 rpm

## **COOLANT & LUBRICANT CAPACITY**

Re-filling	liter	US gal	UK gal
Fuel tank	621.0	164.0	136.6
Engine coolant	68.0	18.0	15.0
Engine oil	41.6	11.0	9.15
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)	480.0	100.4	83.6
Hydraulic tank	262.0	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	2
No. of track rollers on each side	9
No. of rail guards on each side	2

#### **OPERATING WEIGHT (APPROXIMATE)**

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

MAJOR COMPONENT WEIGHT	
Upperstructure	10,940kg (24,120lb)
Boom (with arm cylinder)	4,110kg (9,060lb)

<b>OPERATING WE</b>	IGHT		
Shoes		Operating weight	Ground pressure
Туре	Width mm (in)	kg (lb)	kgf/cm² (psi)
	600 mm (24")	48,100 (106,040)	0.83 (11.80)
Tabala	700 mm (28")	48,640 (107,230)	0.72 (10.24)
Triple	750 mm (30")	48,910 (107,830)	0.68 (9.67)
grouser	800 mm (32")	49,180 (108,420)	0.64 (9.10)
	900 mm (36")	49,720 (109,610)	0.57 (8.11)
Davida marra	600 mm (24")	48,100 (106,040)	0.83 (11.80)
Double grouser	700 mm (28")	48,640 (107,230)	0.72 (10.24)
Triple grouser	600 mm (24")	48,308 (106,500)	0.84 (11.94)
(Heavy Duty)	700 mm (28")	48,870 (107,740)	0.73 (10.38)

#### **BUCKETS**

All buckets are welded with high-strength steel.

















SAE heaped m³ (yd³)

1.38 (1.80)

1.84 (2.41) 2.15 (2.81)

**②** 2.79 (3.65) **3.03 (3.96)** 

2.20 (2.88) 2.43 (3.18) 2.70 (3.53)

**General Duty** 

**Heavy Duty** 

Tiger

Capa	acity	Wi	dth				Recommenda	tion mm (ft·in)		
m³ (	(yd³)	mm	(in)	Weight		7.060(23'	2") Boom		6 550/21' 6") Room	9,000(29' 6") Boom
SAE	CECE	Without	With	kg (lb)		7,000(23	2 / 500111		0,550(21 0 ) B00111	3,000(23 0 ) B00111
heaped	heaped	sidecutters	sidecutters		2,400 (7' 10") Arm	2,900 (9' 6") Arm	3,380(11' 1") Arm	4,000(13' 1") Arm	2,400 (7' 10") Arm	5,850(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)	•	•	•	•	•	
1.84 (2.41)	1.65 (2.16)	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)	•	•		<b>A</b>	•	_
<b>2.79 (3.65)</b>	2.47 (3.23)	1,760 (69.3)	1,910 (75.2)	1,960 (4,320)			<b>A</b>	_	•	_
<b>◆</b> 3.03 (3.96)	2.67 (3.49)	1,890 (74.4)	2,040 (80.3)	2,090 (4,610)	<b>A</b>	<b>A</b>	_	_		_
2.20 (2.88)	1.80 (2.35)	1,840 (72.4)	-	2,295 (5,060)	•	•		_	•	_
<b>②</b> 2.43 (3.18)	2.10 (2.75)	1,885 (74.2)	-	2,335 (5,150)	<b>A</b>	_	_	_		_
<b>2.70 (3.53)</b>	2.5 (3.27)	1,790 (70.4)	-	2,715 (5,990)	<b>A</b>	_	_	_		_

Heavy Duty Bucket

## **ATTACHMENT**

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

#### **DIGGING FORCE**

Boom	Length	mm (ft·in)		7,060(	23′ 2″)		
BOOM	Weight	kg (lb)		3,260 (	(7,180)		Dl.
A	Length	mm (ft·in)	2,400 (7' 10")	2,900 (9' 6")	3,380 (11′ 1″)	4,000 (13' 1")	Remarks
Arm	Weight	kg (lb)	2,070 (4,560)	2,230 (4,920)	2,100 (4,630)	2,370 (5,220)	
		kN	216.7 [236.4]	219.7 [239.6]	220.7 [240.7]	222.6 [242.9]	
ъ .	SAE	kgf	22,100 [24,110]	22,400 [24,440]	22,500 [24,550]	22,700 [24,760]	
Bucket		lbf	48,720 [53,150]	49,380 [53,870]	49,600 [54,110]	50,040 [54,590]	
digging		kN	251.1 [273.9]	254.0 [277.1]	255.0 [278.2]	256.9 [280.3]	
force	ISO	kgf	25,600 [27,930]	25,900 [28,250]	26,000 [28,360]	26,200 [28,580]	
		lbf	56,440 [61,570]	57,100 [62,290]	57,320 [62,530]	57,760 [63,010]	[]:
		kN	276.6 [301.7]	224.6 [245.0]	191.2 [208.6]	170.6 [186.2]	Power
	SAE	kgf	28,200 [30,760]	22,900 [24,980]	19,500 [21,270]	17,400 [18,980]	Boost
Arm		lbf	62,170 [67,820]	50,490 [55,080]	42,990 [46,900]	38,360 [41,850]	
crowd		kN	290.3 [316.7]	234.4 [255.7]	199.1 [217.2]	176.5 [192.6]	
force	ISO	kgf	29,600 [32,290]	23,900 [26,070]	20,300 [22,150]	18,000 [19,640]	
		lbf	65,260 [71,190]	52,690 [57,480]	44,750 [48,820]	39,680 [43,290]	

Note: Boom weight includes arm cylinder, piping, and pin Arm weight includes bucket cylinder, linkage, and pin

Rock-Heavy Duty Bucket

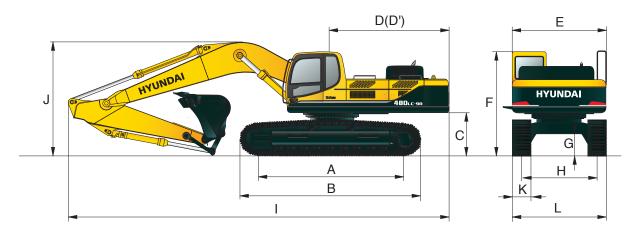
<sup>•:</sup> Applicable for materials with density of 2,000 kg/m³ (3,370 lb/yd³) or less

 $<sup>\</sup>square$ : Applicable for materials with density of 1,600 kg /m $^{3}$  (2,700 lb/ yd $^{3}$ ) or less

<sup>▲:</sup> Applicable for materials with density of 1,100 kg/m³ (1,850 lb/yd³) or less

## **Dimensions & Working Range**

## **R480LC-9A DIMENSIONS**



mm (ft·in)
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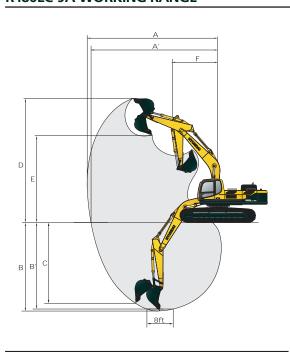
mm (ft·in)

A Tumbler distance	4,470 (14′ 8″)
B Overall length of crawler	5,462 (17′ 11″)
C Ground clearance of counterweight	1,295 (4′ 3″)
D Tail swing radius	3,910 (12′ 4″)
D' Rear-end length	3,855 (12′ 1″)
E Overall width of upperstructure	2,980 (9′ 9″)
F Overall height of cab	3,190 (10′ 6″)
G Min. ground clearance	555 (1′ 10″)
H Track gauge	2,740 (9′ 0″)

	Boom length		7,0 (23'	6,550 (21' 6")		9,000 (29' 6")				
	Arm length	2,400 2,900 (7' 10") (9' 6")			3,380 1′ 1″)	4,000 (13′ 1″)		2,400 (7′ 10″)		5,850 (19' 2")
I	Overall length	12,430 (40′ 3″)	12,360 (40′ 0″)	12,220 (39' 7")		12,200 (39′ 6″)		11,930 (38′ 7″)		13,820 (44′ 10″)
J	Overall height of boom	3,840 3,770 (12' 7") (12' 4")		3,730 (12′ 3″)		4,040 (13′ 3″)		4,030 (13′ 3″)		5,200 (17' 1")
К	Track shoe width	600 (24")	700 (28")		75 (30			800 (32")		900 (36")
L	Overall width	3,340 (10′ 11″)	1	3,440 (11′ 3″)		490 ' 5")	(	3,540 (11′ 7″)		3,640 (11' 11")

## **R480LC-9A WORKING RANGE**

mm (ft·in)



	Boom length		7,0 (23'	6,550 (21' 6")	9,000 (29' 6")		
	Arm length	2,400 (7′ 10″)	2,900 (9' 6")	2,400 (7′ 10″)	5,850 (19' 2")		
Α	Max. digging reach	11,160 (36′ 7″)	11,550 (37′ 11″)	12,100 (39' 8")	12,660 (41′ 6″)	10,610 (34' 10")	16,350 (53' 8")
A	Max. digging reach on ground	10,940 (35′ 11″)	11,340 (37′ 2″)	11,900 (39' 1")	12,470 (40′ 11″)	10,370 (34′ 0″)	16,200 (53' 2")
В	Max. digging depth	6,850 (22' 6")	7,350 (24' 1")	7,810 (25′ 7″)	8,450 (27' 9")	6,370 (20′ 11″)	11,560 (37′ 11″)
B'	Max. digging depth (8' level)	6,670 (21′ 11″)	7,190 (23′ 7″)	7,670 (25′ 2″)	8,320 (27′ 4″)	6,190 (20' 4")	11,460 (37' 7")
С	Max. vertical wall digging depth	5,960 (19' 7")	5,930 (19' 5")	6,590 (21′ 7″)	7,170 (23' 6")	5,400 (17' 9")	10,320 (33′ 10″)
D	Max. digging height	10,560 (34' 8")	10,530 (34′ 7″)	10,980 (36′ 0″)	11,210 (36′ 9″)	10,170 (33′ 4″)	13,840 (45′ 5″)
E	Max. dumping height	7,120 (23′ 4″)	7,180 (23' 7")	7,620 (25′ 0″)	7,820 (25′ 8″)	6,750 (22′ 2″)	10,440 (34' 3")
F	Min. swing radius	5,090 (16′ 8″)	4,910 (16′ 1″)	4,780 (15′ 8″)	4,910 (16′ 1″)	4,620 (15′ 2″)	5,940 (19' 6")

## **Lifting Capacity**

## R480LC-9A

Rating over-front Rating over-side or 360 degree

Boom: 6.55m (21' 6") / Arm: 2.40 m (7' 10") / Bucket: 2.15 m<sup>-</sup> (2.81 yd<sup>-</sup>) SAE heaped / Shoe: 600mm (24") triple grouser

Load p	oint			At max. reach								
Load po heigh		3.0 m	(10 ft)	4.5 m	(15 ft)	6.0 m	(20 ft)	7.5 m	(25 ft)	Capa	acity	Reach
m (fi												m (ft )
6.0 m	kg					*12480	*12480	*11020	9310	*9470	6570	9.15
(25 ft)	lb					*27510	*27510	*24290	20530	*20880	14480	(30.0)
4.5 m	kg			*18440	*18440	*13960	13040	11650	9010	*9440	5790	9.65
(20 ft)	lb			*40650	*40650	*30780	28750	25680	19860	*20810	12760	(31.7)
3.0 m	kg					*15580	12220	12420	8610	*9470	5410	9.86
(15 ft)	(15 ft) lb					*34350	26940	27380	18980	*20880	11930	(32.3)
1.5 m	kg					*16700	11550	13000	8240	*9510	5340	9.80
(5 ft)	lb					*36820	25460	28660	18170	*20970	11770	(32.2)
Ground	kg			*22790	17330	*16900	11170	13090	8000	*9480	5590	9.47
Line	lb			*50240	38210	*37260	24630	28860	17640	*20900	12320	(31.1)
-1.5 m	kg	*25320	*25320	*20990	17370	*16060	11060	12360	7920	*9240	6280	8.83
(-5 ft)	lb	*55820	*55820	*46270	38290	*35410	24380	27250	17460	*20370	13850	(29.0)
-3.0 m	kg	*21780	*21780	*17910	17670	*13920	11190			*8390	7800	7.79
(-10 ft)	lb	*48020	*48020	*39480	38960	*30690	24670			*18500	17200	(25.6)
-4.5 m	kg			*12770	*12770							
(-15 ft) lb				*28150	*28150							

Boom : 7.06m (23' 2") / Arm : 2.40 m (7' 10") / Bucket : 2.15 m² (2.81 yd²) SAE heaped / Shoe : 600mm (24") triple grouser

Boom : 7.0	30om: 7.0bm (23' 2") / Arm: 2.40 m (/' 10") / Bucket: 2.15 m (2.81 yd) SAE heaped / Shoe: 600mm (24") triple grouser													
Load p	oint					Load	radius					A	t max. reach	າ
•		3.0 m	(10 ft)	4.5 m (15 ft)		6.0 m (20 ft)		7.5 m (25 ft)		9.0 m (30 ft)		Capa	acity	Reach
height m (ft)						ŀ								m (ft )
6.0 m	kg					*12000	*12000	*10370	9210			*8610	5730	9.75
(20 ft)	lb					*26460	*26460	*22860	20300			*18980	12630	(32.0)
4.5 m	kg					*13640	12660	*11150	8820			*8600	5100	10.21
(15 ft)	lb					*30070	27910	*24580	19440			*18960	11240	(33.5)
3.0 m	kg					*15310	11770	*12010	8370	*10080	6180	8630	4780	10.41
(10 ft)	lb					*33750	25950	*26480	18450	*22220	13620	19030	10540	(34.2)
1.5 m	kg					*16370	11110	*12650	7990	*10340	5980	8590	4720	10.36
(5 ft)	lb					*36090	24490	*27890	17610	*22800	13180	18940	10410	(34.0)
Ground	kg					*16540	10780	*12830	7740	*10270	5850	*8720	4930	10.05
Line	lb					*36460	23770	*28290	17060	*22640	12900	*19220	10870	(33.0)
-1.5 m	kg			*20270	16950	*15820	10710	*12360	7660			*8570	5470	9.46
(-5 ft)	lb			*44690	37370	*34880	23610	*27250	16890			*18890	12060	(31.0)
-3.0 m	kg	*20660	*20660	*17780	17250	*14130	10850	*10900	7770			*8040	6620	8.51
(-10 ft)	lb	*45550	*45550	*39200	38030	*31150	23920	*24030	17130			*17730	14590	(27.9)
-4.5 m	kg			*13800	*13800	*10900	*10900					*6360	*6360	7.04
(-15 ft)	lb			*30420	*30420	*24030	*24030					*14020	*14020	(23.1)

<sup>1.</sup> Lifting capacity is based on SAE J1097, ISO 10567.

<sup>2.</sup> 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.

<sup>3.</sup> The load point is a hook located on the back of the bucket.

<sup>4. (\*)</sup> indicates the load limited by hydraulic capacity.

## **Lifting Capacity**

\*19160

\*42240

\*19160

\*42240

\*15510

\*34190

#### **R480LC-9A**

-4.5 m

(-15 ft)

kg

Rating over-front Rating over-side or 360 degree

\*7000

\*15430

\*7000

\*15430

7.64

(25.1)

Boom: 7.06m (23' 2") / Arm: 2.90 m (9' 6") / Bucket: 2.15 m (2.81 yd) SAE heaped / Shoe: 600mm (24") triple grouser Load radius At max. reach Load point 3.0 m (10 ft) 4.5 m (15 ft) 6.0 m (20 ft) 7.5 m (25 ft) 9.0 m (30 ft) Capacity Reach height m (ft) m (ft) 6.0 m 9320 \*7970 5290 10.17 kg \*9720 (20 ft) lb \*21430 20550 \*17570 11660 (33.4)\*17130 \*17130 \*12810 4.5 m kg \*12810 \*10570 8900 \*9230 6420 \*8010 4720 10.62 (15 ft) \*37770 \*37770 \*28240 \*28240 14150 lb \*23300 19620 \*20350 \*17660 10410 (34.8)\*20840 \*14600 18260 3.0 m kg 11920 \*11520 8410 \*9700 6170 8080 4430 10.80 (10 ft) lb \*45940 40260 \*32190 26280 \*25400 18540 \*21380 13600 17810 9770 (35.4)\*15920 \*22630 1.5 m 17010 \*12300 \*10090 kg 11160 7970 5930 8030 4360 10.75 (5 ft) \*49890 37500 \*35100 17570 13070 17700 24600 \*27120 \*22240 9610 (35.3)\*22430 16650 \*16410 Ground kg 10720 \*12670 7670 \*10200 5760 \*8290 4520 10.46 Line \*49450 36710 \*36180 \*27930 \*18280 lb 23630 16910 \*22490 12700 9960 (34.3)\*21180 -1.5 m \*19830 \*19830 16670 \*16030 10560 \*12460 9.89 kg 7530 \*8270 4970 (-5 ft) \*43720 \*43720 \*46690 36750 \*35340 23280 \*27470 16600 \*18230 10960 (32.4)\*24070 \*24070 \*18990 \*11420 -3.0 m kg 16910 \*14720 10630 7570 \*8000 5900 9.00 (-10 ft) lb \*53070 \*53070 \*41870 37280 \*32450 23440 \*25180 16690 \*17640 13010 (29.5)

10930

24100

Boom : 7.06m (23' 2") / Arm : 3.38 m (11' 1") / Bucket : 2.15 m<sup>3</sup> (2.81 yd<sup>3</sup>) SAE heaped / Shoe : 600mm (24") triple grouser

\*15510

\*34190

\*12130

\*26740

Boom : 7.0	30om: 7.06m (23' 2") / Arm: 3.38 m (11' 1") / Bucket: 2.15 m' (2.81 yd') SAE heaped / Shoe: 600mm (24") triple grouser													
Load p	oint					Load	radius					F	t max. reach	i
Load p		3.0 m (10 ft)		4.5 m (15 ft)		6.0 m (20 ft)		7.5 m	(25 ft)	9.0 m (30 ft)		Capacity		Reach
heigl m (fi		ŀ												m (ft )
6.0 m	kg							*9220	*9220	*8240	6740	*7490	4800	10.75
(20 ft)	lb							*20330	*20330	*18170	14860	*16510	10580	(35.3)
4.5 m	kg					*12140	*12140	*10130	9050	*8910	6530	*7530	4320	11.17
(15 ft)	lb					*26760	*26760	*22330	19950	*19640	14400	*16600	9520	(36.6)
3.0 m	kg			*19830	18930	*14060	12170	*11170	8540	*9450	6260	7470	4070	11.35
(10 ft)	lb			*43720	41730	*31000	26830	*24630	18830	*20830	13800	16470	8970	(37.2)
1.5 m	kg			*22320	17460	*15610	11360	*12080	8080	*9940	5990	7420	4010	11.30
(5 ft)	lb			*49210	38490	*34410	25040	*26630	17810	*21910	13210	16360	8840	(37.1)
Ground	kg			*22800	16860	*16390	10850	*12610	7730	*10190	5790	7670	4140	11.02
Line	lb			*50270	37170	*36130	23920	*27800	17040	*22470	12760	16910	9130	(36.2)
-1.5 m	kg	*18070	*18070	*21950	16730	*16290	10610	*12600	7550	*10010	5680	*7770	4500	10.49
(-5 ft)	lb	*39840	*39840	*48390	36880	*35910	23390	*27780	16640	*22070	12520	*17130	9920	(34.4)
-3.0 m	kg	*24350	*24350	*20080	16870	*15280	10820	*11850	7530			*7590	5240	9.66
(-10 ft)	lb	*53680	*53680	*44270	37190	*33690	23850	*26120	16600			*16730	11550	(31.7)
-4.5 m	kg	*22100	*22100	*16990	*16990	*13120	10820	*9890	7710			*6910	6720	8.43
(-15 ft)	lb	*48720	*48720	*37460	*37460	*28920	23850	*21800	17000			*15230	14820	(27.7)
-6.0 m	kg			*11930	*11930	*8900	*8900							
(-20 ft)	lb			*26300	*26300	*19620	*19620							

<sup>1.</sup> Lifting capacity is based on SAE J1097, ISO 10567.

<sup>2.</sup> 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.

<sup>3.</sup> The load point is a hook located on the back of the bucket.

<sup>4. (\*)</sup> indicates the load limited by hydraulic capacity.

## **Lifting Capacity**

## R480LC-9A

Rating over-front Rating over-side or 360 degree

Boom: 7.0	Boom: 7.06m (23' 2") / Arm: 4.00 m (13' 1") / Bucket: 2.15 m (2.81 yd) SAE heaped / Shoe: 600mm (24") triple grouser															
Loods	oint						Load	radius						А	t max. read	:h
Load p			(10 ft)		(15 ft)		(20 ft)		7.5 m (25 ft)		(30 ft)	10.5 m (35 ft)		Capacity		Reach
heigh m (fi																m (ft)
6.0 m	kg									*7750	6810			*6780	4260	11.35
(20 ft)	lb									*17090	15010			*14950	9390	(37.2)
4.5 m	kg							*9300	9140	*8250	6560	*5010	4790	*6840	3840	11.75
(15 ft)	lb							*20500	20150	*18190	14460	*11050	10560	*15080	8470	(38.5)
3.0 m	kg			*17970	*17970	*13000	12370	*10430	8590	*8880	6250	*6710	4630	6790	3610	11.91
(10 ft)	lb			*39620	*39620	*28660	27270	*22990	18940	*19580	13780	*14790	10210	14970	7960	(39.1)
1.5 m	kg			*21130	17770	*14790	11450	*11470	8070	*9480	5940	*7610	4460	6730	3550	11.87
(5 ft)	lb			*46580	39180	*32610	25240	*25290	17790	*20900	13100	*16780	9830	14840	7830	(38.9)
Ground	kg	*13120	*13120	*22460	16830	*15900	10800	*12200	7650	*9880	5680	*7180	4330	6920	3640	11.60
Line	lb	*28920	*28920	*49520	37100	*35050	23810	*26900	16870	*21780	12520	*15830	9550	15260	8020	(38.1)
-1.5 m	kg	*17270	*17270	*22270	16480	*16180	10450	*12440	7390	*9940	5520			*7210	3930	11.11
(-5 ft)	lb	*38070	*38070	*49100	36330	*35670	23040	*27430	16290	*21910	12170			*15900	8660	(36.5)
-3.0 m	kg	*22170	*22170	*20930	16490	*15580	10350	*12030	7300	*9420	5480			*7150	4500	10.34
(-10 ft)	lb	*48880	*48880	*46140	36350	*34350	22820	*26520	16090	*20770	12080			*15760	9920	(33.9)
-4.5 m	kg	*25260	*25260	*18420	16750	*13970	10470	*10700	7390					*6800	5600	9.21
(-15 ft)	lb	*55690	*55690	*40610	36930	*30800	23080	*23590	16290					*14990	12350	(30.2)
-6.0 m	kg	*18790	*18790	*14270	*14270	*10820	*10820							*5580	*5580	7.55
(-20 ft)	lb	*41420	*41420	*31460	*31460	*23850	*23850							*12300	*12300	(24.8)

Boom: 9.0m (29' 6") / Arm: 5.85 m (19' 2") / Bucket: 1.38 m³ (1.80 yd²) SAE heaped / Shoe: 600mm (24") triple grouser

Landin	-1-4					•	Load	radius						A	t max. read	:h
Load po		3.0 m	(10 ft)	5.0 m	(15 ft)	7.0 m	(25 ft)	9.0 m	(30 ft)	11.0 m	(35 ft)	13.0 m	(45 ft)	Capa	acity	Reach
heigh m (ft																m (ft)
10.0 m	kg													*4310	3590	13.54
(35 ft)	lb													*9500	7910	(44.4)
8.0 m	kg											*2660	*2660	*4240	2910	14.55
(25 ft)	lb											*5860	*5860	*9350	6420	(44.7)
6.0 m	kg									*5190	*5190	*4250	3640	*4230	2490	15.20
(20 ft)	lb									*11440	*11440	*9370	8020	*9330	5490	(49.9)
4.0 m	kg							*6800	*6800	*5710	4950	*4990	3450	*4270	2240	15.55
(15 ft)	lb							*14990	*14990	*12590	10910	*11000	7610	*9410	4940	(51.0)
2.0 m	kg			*16010	16000	*10420	9730	*7780	6520	*6260	4560	*5280	3230	*4320	2110	15.61
(5 ft)	lb			*35300	35270	*22970	21450	*17150	14370	*13800	10050	*11640	7120	*9520	4650	(51.2)
Ground	kg			*16790	14290	*11730	8750	*8570	5940	*6720	4210	*5510	3020	*4390	2110	15.38
Line	lb			*37020	31500	*25860	19290	*18890	13100	*14820	9280	*12150	6660	*9680	4650	(50.5)
-2.0 m	kg	*10920	*10920	*17330	13650	*12300	8170	*9000	5540	*6970	3950	*5550	2880	*4450	2250	14.87
(-5 ft)	lb	*24070	*24070	*38210	30090	*27120	18010	*19840	12210	*15370	8710	*12240	6350	*9810	4960	(48.8)
-4.0 m	kg	*14070	*14070	*17370	13550	*12100	7950	*8940	5340	*6850	3820	*4730	2830	*4450	2560	14.02
(-15 ft)	lb	*31020	*31020	*38290	29870	*26680	17530	*19710	11770	*15100	8420	*10430	6240	*9810	5640	(46.0)
-6.0 m	kg	*17730	*17730	*15490	13780	*11110	7980	*8260	5340	*6160	3850			*4320	3160	12.76
(-20 ft)	lb	*39090	*39090	*34150	30380	*24490	17590	*18210	11770	*13580	8490			*9520	6970	(41.9)
-8.0 m	kg	*17880	*17880	*12400	*12400	*9090	8270	*6620	5560					*3820	*3820	10.94
(-25 ft)	lb	*39420	*39420	*27340	*27340	*20040	18230	*14590	12260					*8420	*8420	(35.9)
-10.0 m	kg					*5220	*5220									
(-35 ft)	lb					*11510	*11510									

<sup>1.</sup> Lifting capacity is based on SAE J1097, ISO 10567.

<sup>2.</sup> 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.

<sup>3.</sup> The load point is a hook located on the back of the bucket.

<sup>4. (\*)</sup> 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(LH)

Lockable door

Hot & cool box

Storage compartment & Ashtray

Transparent cabin roof-cover

Radio & USB player

Handsfree mobile phone system with USB

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

Sun visor

Computer aided power optimization (New CAPO) system

3-power mode, 2-work mode, User mode

Auto deceleration & one-touch deceleration system

Auto warm-up system

Auto overheat prevention system

Automatic climate control

Air conditioner & heater

Defroster

Self-diagnostics system

Starting Aid (air grid heater) for cold weather

Centralized monitoring

LCD display

Engine speed or Trip meter/Accel.

Clock

Gauges

Fuel level gauge

Engine coolant temperature gauge

Hyd. oil temperature gauge

Warnings

Check engine

Overload

Communication error

Low battery

Air cleaner clogging

Indicators

Max power

Low speed/High speed

Fuel warmer

Auto idle

Three outside rearview mirrors

Mechanical suspension seat with heater

Pilot-operated slidable joystick

Console box height adjust system

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

Track shoes (600mm, 24")

Track rail guard

Accumulator for lowering work equipment

Electric transducer

Lower frame under cover (Normal)

Viscous fan clutch

Travel alarm

Rear work Lahp

Smart key

Predeaner(Dry)

#### **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

Booms

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

Short boom (6.55m,21'6")

Long boom (9.0m,29'6")

Arms

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

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

Short arm (2.9m,9'6")

Long arm (5.85m,19'2")

Counterweight

9,200kg (20,280lb)

9,700kg (21,380lb)

10,200kg (22,490lb)

10,700kg (23,590lb)

Climate control

Air conditioner only

Heater only

Cabin FOPS/FOG (ISO/DIS 10262 Level II)

FOPS (Falling Object Protective Structure)

FOG (Falling Object Guard)

Cabin ROPS (ISO 12117-2)

**ROPS (Roll Over Protective Structure)** 

Cabin guard front

Wire net

Fine net

Cabin roof-steel cover

Cabin lights

Cabin front window rain guard

<u>Frack shoes</u>

Triple grousers shoe (700mm, 28") (Heavy Duty Type)

Triple grousers shoe (600mm, 24") (Heavy Duty Type)

Triple grousers shoe (700mm, 28")

Triple grousers shoe (750mm, 30")

Triple grousers shoe (800mm, 32")

Triple grousers shoe (900mm, 36") Double grousers shoe (600mm, 24")

Double grousers shoe (700mm, 28")

Full track rail guard

Lower frame under cover (Additional)

Tool kit

Operator suit

Rearview camera

Seat

Adjustable air suspension seat with heater

Pattern change valve (2 patterns)

<u>Hi-mate (Remote Management System)</u>

Air compressor

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





6100 Atlantic Blvd Norcross, GA 30071 TEL: (678) 823 7777 FAX: (678) 823 7778