

**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
Radio & USB player
Cabin roof-steel cover
12 volt power outlet (24V DC to 12V DC converter)
Computer aided power optimization (New CAPD) 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
Overload
Communication error
Low battery
Air cleaner clogging
Indicators
Max power
Low speed/High speed
Fuel warmer
Auto idle
Door and cab locks, one key
Two outside rearview mirrors
Fully adjustable suspension seat with seat belt
Pilot-operated slideable joystick
Four front working lights
Electric horn
Batteries (2 x 12V x 100 AH)
Battery master switch
Removable clean-out dust net for cooler
Automatic swing brake
Removable reservoir tank
Fuel pre-filter
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)

**OPTIONAL EQUIPMENT**

Fuel filler pump (35 l/min)
Beacon lamp
Single-acting piping kit (breaker, etc.)
Double-acting piping kit (camshell, etc.)
Quick coupler
Travel alarm
Booms
5.68 m, 18' 8"
8.2 m, 26' 11" Long reach
Arms
2.0 m, 6' 7"
2.4 m, 7' 10"
2.92 m, 9' 7"
3.9 m, 12' 10"
6.3 m, 20' 8" Long reach
Climate control
Air conditioner only
Heater only
Cabin FOPS/FOG (ISO/DIS.10262)
FOPS (Falling Object Protective Structure)
FOG (Falling Object Guard)
Cabin lights
Cabin front window rain guard
Sun visor
Track shoes
Triple grousers shoe (700 mm, 28")
Triple grousers shoe (800 mm, 32")
Triple grousers shoe (900 mm, 36")
Double grousers shoe (710 mm, 28")
Full track rail guard
Lower frame under cover (Additional)
Pre-heating system, coolant
Tool kit
Operator suit
Rearview camera
Seat
Mechanical suspension seat with heater
Hi-mate (Remote Management System)
Fuel warmer
Viscous fan clutch

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

**Rabex**  
**220LC-9S**  
**220LC-9SH**

With Tier 2 Engine installed



## 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!

**Robex 220LC-9S  
220LC-9SH**



### Machine Walk-Around

#### Engine Technology

Easy & Simple Serviceability / Auto engine warm up feature / Anti-restart feature

#### 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 4 solenoid valves, 1 EPPR valves, 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 / 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  
New joystick consoles - now adjustable in height by way of dial at bottom  
Adjustable arm rests - turn dial to raise or lower for optimum comfort

##### Advanced 7" Color Cluster

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 / satellite technology  
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, 20% more heat and air output than 7 series!  
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



#### Wide Cabin with Excellent Visibility

The newly designed cabin was conceived for 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 precision aspects put the operator in the perfect position to work safely and securely.

#### Operator Comfort

In 95 Series cabin you can easily adjust the seat, console and armrest settings to best suit your personal operating preferences. Seat and console position can be set together and independent from each other. Other preference settings that add to overall operator comfort include the fully automatic high capacity airconditioning system and the radio / USB player.



#### Reduced Stress

Work is stressful enough. Your work environment should be stress free. Hyundai's 95 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 is perfect for listening to music favorites.



#### Operator - Friendly Cluster

The advanced new 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 were integrated into the cluster to make the machine more versatile and the operator more productive.



**Precision**

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



\*Photo may include optional equipment.

## 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 hydraulic flow.

### Power Mode

P (Power Max) mode maximizes machine speed and power for mass production. 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 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 9S

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.

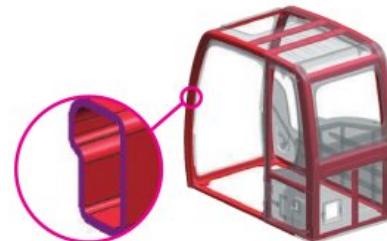


## Performance

95 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 95 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.

### CUMMINS B5.9-C ENGINE

The six cylinders, turbocharged, 4 cycle, charger air cooled engine is built for power, reliability, economy and low emissions.

A more reliable way to reach your dream.

The Cummins B5.9-C engine has been designed with 40% fewer parts than the competition. That means there's less that can go wrong when you need it most. It also means fewer parts to inventory.

Repairs are simplified because no special tools are needed for maintenance. The weight of the machine is reduced without sacrificing strength.

The B5.9-C engine is capable of reaching emission standards without electronic engine controls. You get a proven power plant that meets ecological concerns, without paying a premium for technology you don't need.



### HYUNDAI D6BV-C ENGINE

The six cylinders, 4 cycle, turbocharged, charger air cooled engine is built for power, reliability, economy and low emissions.

Reliability you can depend on.

When you have a tough job to do, you need power precision and flexibility of Hyundai D6BV-C engine. It is built to withstand the toughest work environment. Bearings have more surface area to handle higher loads with greater durability. Reduced friction in the power cylinder means longer life and increased power output. From the structurally reinforced block to the stiffened gear housing, the D6BV-C is built stronger to last longer.

The D6BV-C engine is capable of reaching Tier 2 emission standards without electronic engine controls. It uses durable mechanical IN-LINE fuel injection system. You get a proven power plant that meets ecological concerns, without paying a premium for technology you don't need.



## Profitability

95 Series is designed to maximize profitability through improved efficiencies, enhanced service features and longer life components.



## Fuel Efficiency

95 Series excavators are engineered to be extremely fuel efficient. New innovations like three-stage auto decel system and the new economy mode help to conserve fuel and reduce the impact on the environment.



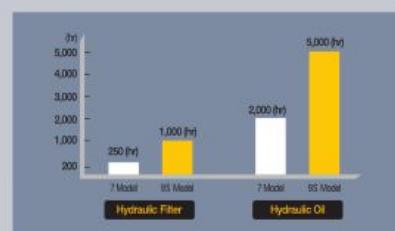
### Hi-mate (Remote Management System)

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.



## Easy Access

Ground-line access to filters, lube fittings, fuses, machine computer components and wide open compartments makes service more convenient on the 95 Series.



## Extended Life Components

95 Series excavators were designed with bushings designed for extended lube intervals (250 hrs) & polymer shims (wear resistant, noise reducing), extended-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 / R220LC-9S

MODEL		CUMMINS B5.9-C	
Type		Water cooled, 4 cycle Diesel, 6-cylinders in line, direct injection, turbocharged, charger air cooled	
Rated flywheel horse power	SAE DIN	J1995 (gross) J1349 (net) 6271/1 (gross) 6271/1 (net)	150 HP (112 kW) at 1,950 rpm 143 HP (107 kW) at 1,950 rpm 152 PS (112 kW) at 1,950 rpm 145 PS (107 kW) at 1,950 rpm
Max. torque		62.6kgf-m (453lb-ft) 102mm X 120mm (4.02" X 4.72")	500rpm
Bore X stroke		5,880cc (359 in³)	
Piston displacement		Batteries	2 X 12V 100AH
Starting motor		24V, 4.5kW	
Alternator		24V, 70Amp	

### ENGINE / R220LC-9SH

MODEL		HYUNDAI D6BV-C	
Type		Water cooled, 4 cycle Diesel, 6-cylinders in line, direct injection, turbocharged, charger air cooled	
Rated flywheel horse power	SAE DIN	J1995 (gross) J1349 (net) 6271/1 (gross) 6271/1 (net)	148 HP (110 kW) at 1,950 rpm 143 HP (107 kW) at 1,950 rpm 150 PS (110 kW) at 1,950 rpm 145 PS (107 kW) at 1,950 rpm
Max. torque		58kgf-m (420lb-ft)	1,600rpm
Bore X stroke		118mm X 115mm (4.65" X 4.53")	
Piston displacement		7,545cc (460 in³)	
Batteries		2 X 12V 100AH	
Starting motor		24V, 5kW	
Alternator		24V, 70Amp	

### HYDRAULIC SYSTEM

MAIN PUMP	
Type	Variable displacement tandem axis piston pumps
Rated flow	2 X 222 L/min (58.7 US gpm/48.9 UK gpm) R220LC-9SH
Sub-pump for pilot circuit	2 X 216.5 L/min (57.2 US gpm/47.6 UK gpm)

Cross-sensing and fuel saving pump system.

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

### RELIEF VALVE SETTING

Implement circuits	350 kgf/cm² (4,980 psi)
Travel	350 kgf/cm² (4,980 psi)

Power boost (boom, arm, bucket)	380 kgf/cm² (5,400 psi)
Swing circuit	265 kgf/cm² (3,770 psi)

Pilot circuit	40 kgf/cm² (570 psi)
Service valve	Installed

### HYDRAULIC CYLINDERS

No. of cylinder bore X stroke	Boom: 2-120 X 1,290 mm (4.7" X 50.8") Arm: 1-140 X 1,510 mm (5.5" X 59.4") Bucket: 1-120 X 1,055 mm (4.7" X 41.5")
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### DRIVES & BRAKES

Drive method	Fully hydrostatic type
Drive motor	Axial piston motor, in-shoe design
Reduction system	Planetary reduction gear
Max. drawbar pull	21,100 kgf (46,517 lbf)
Max. travel speed (high) / (low)	R220LC-9S: 5.5 km/hr (3.4mph) / 3.8 km/hr (2.4mph) R220LC-9SH: 5.5 km/hr (3.4mph) / 3.7 km/hr (2.3mph)
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	Fixed displacement axial piston motor
Swing reduction	Planetary gear reduction
Swing bearing lubrication	Grease-bathed
Swing brake	Multi wet disc
Swing speed	R220LC-9S: 11.1 rpm R220LC-9SH: 12 rpm

### COOLANT & LUBRICANT CAPACITY

Refilling		liter	US gal	UK gal
Fuel tank		400.0	105.7	88.0
Engine coolant		35.0	9.2	7.7
Engine oil	R220LC-9S	24.0	6.3	5.3
Engine oil	R220LC-9SH	16.3	3.6	4.3
Swing device-gear oil		5.0	1.3	1.1
Final drive(each)-gear oil		5.8	2.0	1.0
Hydraulic system(including tank)		275.0	72.6	60.5
Hydraulic tank		160.0	42.3	35.2

### 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	49 EA
No. of carrier roller on each side	2 EA
No. of track roller on each side	9 EA
No. of rail guard on each side	2 EA

### OPERATING WEIGHT (APPROXIMATE)

Operating weight, including 5,680mm (18' 8") boom, 2,920mm (9' 7") arm, SAE heaped 0.92m³ (1.20 yd³) bucket, lubricant, coolant, full fuel tank, full hydraulic tank, and all standard equipments.

MAJOR COMPONENT WEIGHT	
Upperstructure	5,850kg (12,900lb)
Boom (with arm cylinder)	1,950kg (4,300lb)
Arm (with bucket cylinder)	1,095kg (2,410lb)

### OPERATING WEIGHT

Shoes	Operating weight	Ground pressure
Type	Width mm (in)	kg (lb)
600 mm (24")	R220LC-9S: 21,900 (48,280)	0.46 (6.54)
	R220LC-9S HAW: 23,360 (51,500)	0.50 (7.11)
700 mm (28")	R220LC-9S: 22,250 (49,050)	0.40 (5.69)
	R220LC-9S HAW: 23,710 (52,270)	0.43 (6.11)
800 mm (32")	R220LC-9S: 22,515 (49,640)	0.36 (5.12)
	R220LC-9S HAW: 23,975 (52,855)	0.38 (5.40)
900 mm (36")	R220LC-9S: 22,700 (50,220)	0.32 (4.55)
	R220LC-9S HAW: 24,135 (53,210)	0.43 (6.11)
Double grouser	710 mm (28")	

### BUCKETS

All buckets are welded with high-strength steel.

SAE heaped m³ (yd³)	0.51 (0.67)	0.80 (1.05)	1.10 (1.44)	1.34 (1.75)	0.74 (0.97)	0.90 (1.18)	1.05 (1.37)	0.75 (0.98)	★ 0.52 (0.68)
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Capacity m³ (yd³)	Width mm (in)	Weight kg (lb)	Recommendation mm (ft-in)					8,200 (26' 11") Boom
			Without sidecutters	With sidecutters	2,000 (6' 7") Arm	2,400 (7' 10") Arm	2,920 (9' 7") Arm	
0.51 (0.67)	700 (27.6)	820 (32.3)	570 (1,260)	570 (1,260)	●	●	●	—
0.80 (1.05)	1,000 (39.4)	1,120 (44.1)	700 (1,540)	700 (1,540)	●	●	●	—
0.92 (1.20)	1,150 (45.3)	1,270 (50.0)	770 (1,700)	770 (1,700)	●	●	●	—
1.10 (1.44)	1,320 (52.0)	1,440 (56.7)	830 (1,830)	830 (1,830)	●	●	●	—
1.20 (1.57)	1,000 (31.1)	1,520 (59.8)	850 (1,870)	850 (1,870)	●	●	●	—
1.34 (1.75)	1,150 (46.1)	1,670 (65.7)	920 (2,030)	920 (2,030)	●	●	●	—
0.74 (0.97)	985 (38.8)	-	770 (1,700)	770 (1,700)	●	●	●	—
0.90 (1.18)	1,070 (42.0)	-	810 (1,790)	810 (1,790)	●	●	●	—
1.05 (1.37)	1,290 (50.8)	-	890 (1,960)	890 (1,960)	●	●	●	—
0.87 (1.14)	1,140 (44.9)	-	900 (1,980)	900 (1,980)	●	●	●	—
1.20 (1.57)	1,000 (31.1)	1,410 (55.5)	-	1,030 (2,270)	●	●	—	—
0.75 (0.98)	1,790 (70.5)	-	880 (1,940)	880 (1,940)	●	●	●	—
★ 0.52 (0.68)	935 (36.8)	1,035 (40.8)	460 (1,010)	-	—	—	—	—

● : Applicable for materials with density of 2,000 kg/m³ (3,370 lb/yd³) or less  
■ : Applicable for materials with density of 1,600 kg/m³ (2,700 lb/yd³) or less  
▲ : Applicable for materials with density of 1,100 kg/m³ (1,850 lb/yd³) or less

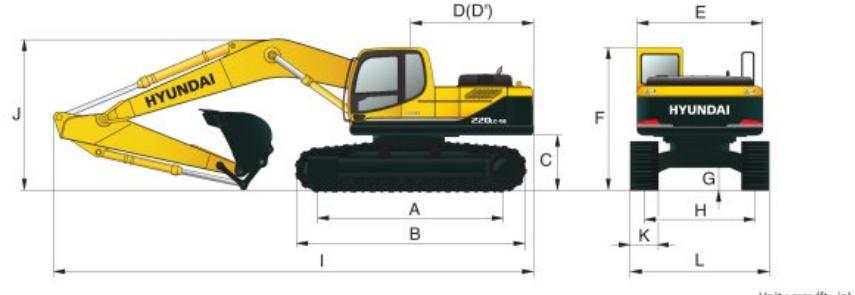
### ATTACHMENT

Booms and arms are welded with a low-stress, full-box section design. 5.68m, 8.20m Booms and 2.0m, 2.4m, 2.92m, 3.90m, 6.3m Arms are available.

Length mm (ft-in)	Weight kg (lb)	5,680 (18' 8")					Remarks
		2,000 (6' 7")	2,400 (7' 10")	2,920 (9' 7")	3,900 (12' 10")	8,200 (26' 11")	
Length mm (ft-in)	Weight kg (lb)	975 (2,150)	1,045 (2,300)	1,095 (2,410)	1,295 (2,850)	6,300 (20' 8")	
SAE	kN	133.4 [145.5]	133.4 [145.5]	133.4 [145.5]	133.4 [145.5]	72.6 [79.2]	
	kgf	13600 [14840]	13600 [14840]	13600 [14840]	13600 [14840]	7400 [8070]	
	lbf	29980 [32710]	29980 [32710]	29980 [32710]	29980 [32710]	16310 [17790]	
ISO	kN	152.0 [165.8]	152.0 [165.8]	152.0 [165.8]	152.0 [165.8]	83.4 [91.0]	
	kgf	15500 [16910]	15500 [16910]	15500 [16910]	15500 [16910]	8500 [9270]	
	lbf	34170 [37280]	34170 [37280]	34170 [37280]	34170 [37280]	18740 [20440]	
SAE	kN	144.2 [156.5]	119.6 [129.9]	102.0 [110.7			

## Dimensions & Working Range

### R220LC-9S / 9SH DIMENSIONS

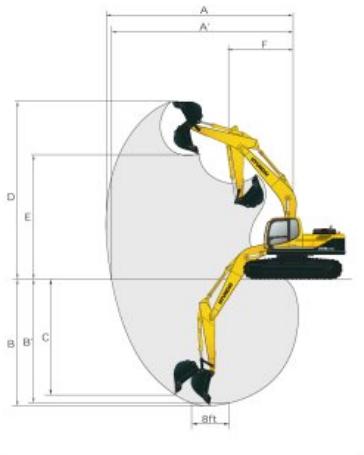


Unit : mm (ft · in)

A Tumbler distance	3,650 (11' 12")
B Overall length of crawler	4,440 (14' 7")
C Ground clearance of counterweight	1,060 (3' 6")
D Tail swing radius	2,830 (9' 3")
D' Rear-end length	2,770 (9' 1")
E Overall width of upperstructure	2,740 (8' 12")
F Overall height of cab	2,920 (9' 7")
G Min. ground clearance	480 (1' 7")
H Track gauge	2,390 (7' 10")

Boom length	5,680 (18' 8")			8,200 (26' 11")
Arm length	2,000 (6' 7")	2,400 (7' 10")	2,920 (9' 7")	3,900 (12' 10")
I Overall length	9,650 (31' 8")	9,570 (31' 5")	9,530 (31' 3")	9,520 (39' 6")
J Overall height of boom	3,200 (10' 6")	3,110 (10' 2")	3,030 (9' 11")	3,480 (11' 5")
K Track shoe width	600 (24")	700 (28")	800 (32")	900 (36")
L Overall width	2,990 (9' 10")	3,090 (10' 2")	3,190 (10' 6")	3,290 (10' 10")

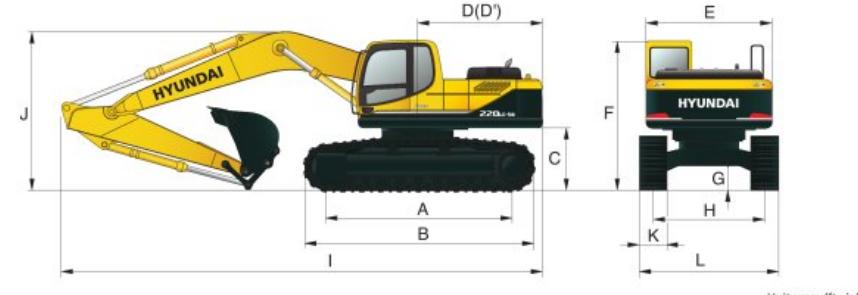
### R220LC-9S / 9SH WORKING RANGE



Boom length	5,680 (18' 8")			8,200 (26' 11")
Arm length	2,000 (6' 7")	2,400 (7' 10")	2,920 (9' 7")	3,900 (12' 10")
A Max. digging reach	9,140 (29' 12")	9,500 (31' 2")	9,980 (32' 9")	10,910 (49' 11")
A' Max. digging reach on ground	8,960 (29' 5")	9,330 (30' 7")	9,820 (32' 3")	10,730 (35' 4")
B Max. digging depth	5,820 (19' 1")	6,220 (20' 5")	6,730 (22' 1")	7,720 (25' 4")
B' Max. digging depth (B' level)	5,580 (18' 4")	6,010 (19' 9")	6,560 (21' 6")	7,580 (24' 10")
C Max. vertical wall digging depth	5,280 (17' 4")	5,720 (18' 9")	6,280 (20' 7")	7,240 (23' 9")
D Max. digging height	9,140 (29' 12")	9,340 (30' 8")	9,600 (31' 6")	10,110 (33' 2")
E Max. dumping height	6,330 (20' 9")	6,520 (21' 5")	6,780 (22' 3")	7,290 (23' 11")
F Min. swing radius	3,750 (12' 4")	3,740 (12' 3")	3,740 (12' 3")	4,870 (15' 12")

## Dimensions & Working Range

### R220LC-9S / 9SH HIGH WALKER DIMENSIONS



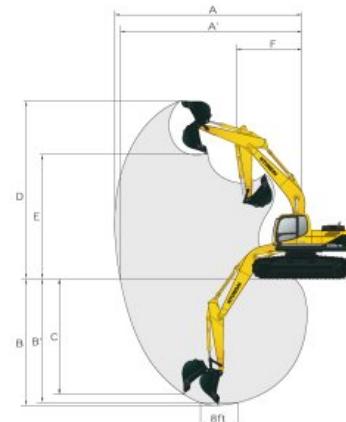
Unit : mm (ft · in)

A Tumbler distance	3,650 (11' 12")
B Overall length of crawler	4,440 (14' 7")
C Ground clearance of counterweight	1,240 (4' 1")
D Tail swing radius	2,840 (9' 4")
D' Rear-end length	2,770 (9' 1")
E Overall width of upperstructure	2,740 (8' 12")
F Overall height of cab	3,100 (10' 2")
G Min. ground clearance	660 (2' 2")
H Track gauge	2,795 (9' 2")

Boom length	5,680 (18' 8")		
Arm length	2,000 (6' 7")	2,400 (7' 10")	2,920 (9' 7")
I Overall length	9,650 (31' 8")	9,550 (31' 4")	9,470 (31' 1")
J Overall height of boom	3,290 (10' 10")	3,170 (10' 5")	3,060 (10' 0")
K Track shoe width	Type Triple grouser	Width 600 (24")	Double grouser 710 (28")
L Overall width		3,395 (11' 2")	3,495 (11' 6")
		3,595 (11' 10")	3,505 (11' 6")

### R220LC-9S / 9SH HIGH WALKER WORKING RANGE

Boom length	5,680 (18' 8")		
Arm length	2,000 (6' 7")	2,400 (7' 10")	2,920 (9' 7")
A Max. digging reach	9,140 (29' 12")	9,500 (31' 2")	9,980 (32' 9")
A' Max. digging reach on ground	8,920 (29' 3")	9,330 (30' 6")	9,820 (32' 3")
B Max. digging depth	5,630 (18' 6")	6,010 (19' 9")	6,550 (21' 6")
B' Max. digging depth (B' level)	5,390 (17' 8")	5,820 (19' 1")	6,380 (20' 11")
C Max. vertical wall digging depth	5,090 (16' 8")	5,630 (18' 6")	6,100 (20' 0")
D Max. digging height	9,330 (30' 7")	9,530 (31' 3")	9,780 (32' 1")
E Max. dumping height	6,520 (21' 5")	6,710 (22' 0")	7,480 (24' 6")
F Min. swing radius	3,750 (12' 4")	3,740 (12' 3")	3,740 (12' 3")



## Lifting Capacity

### R220LC-9S / 9SH

Boom : 5.68m (18' 8") / Arm : 2.0 m (6' 7") / Bucket : 0.92 m<sup>3</sup> (1.20 yd<sup>3</sup>) SAE heaped / Shoe : 600mm (24") triple grouser

Load point height m (ft)	Load radius						Capacity	Reach
	3.0 m (10 ft)	4.5 m (15 ft)	6.0 m (20 ft)	7.5 m (25 ft)				
7.5 m kg (25 ft) lb							*4010 *4010	6.65 (21.8)
6.0 m kg (20 ft) lb							*4060 3040	7.78
4.5 m kg (15 ft) lb							*8950 6700	(25.5)
3.0 m kg (10 ft) lb	*5730 *5730	*4860 4630					*4190 2540	8.43
1.5 m kg (5 ft) lb	*12630 *12630	*10710 10210					*3240 5600	(27.7)
Ground kg Line lb	*7460 6840	*5610 4370	*4830 3000	4040	2310		8.74	
-1.5 m kg (-5 ft) lb	*16450 15080	*12370 9630	*10650 6610	8910	5090		(28.7)	
-3.0 m kg (-10 ft) lb	*8990 6320	*6390 4120	5060	2890	3990		2260	8.73
-4.5 m kg (-15 ft) lb	*19820 13930	*14090 9080	11160	6370	8800		4980	(28.6)
Ground kg Line lb	*9690 6090	*6910 3950	4980	2810	4200		2380	8.42
-1.5 m kg (-5 ft) lb	*21360 13430	*15230 8710	10980	6190	9260		5250	(27.6)
Ground kg Line lb	*13990 12260	6070	*6990 3910				4820 2750	7.76
-1.5 m kg (-5 ft) lb	*30840 27030	*21230 13380	*15140 8620				10630 6060	(25.5)
-3.0 m kg (-10 ft) lb	*12500 12500	*8820 6180	*6350 3990				*4850 3650	6.61
-4.5 m kg (-15 ft) lb	*27560 27560	*19440 13620	*14000 8800				*10690 8050	(21.7)

Boom : 5.68m (18' 8") / Arm : 2.40 m (7' 10") / Bucket : 0.92 m<sup>3</sup> (1.20 yd<sup>3</sup>) SAE heaped / Shoe : 600mm (24") triple grouser

Load point height m (ft)	Load radius						Capacity	Reach
	1.5 m (5 ft)	3.0 m (10 ft)	4.5 m (15 ft)	6.0 m (20 ft)	7.5 m (25 ft)			
7.5 m kg (25 ft) lb							*3700 3640	7.15
6.0 m kg (20 ft) lb							*8160 8020	(23.5)
4.5 m kg (15 ft) lb							*4010 *4010	
3.0 m kg (10 ft) lb							*3780 2760	8.20
1.5 m kg (5 ft) lb							*8380 6080	(26.9)
Ground kg Line lb	*6900 *9630	*5280 4400	*4560 3010	3760	2130		8.82	
-1.5 m kg (-5 ft) lb	*15210 *15210	*11640 9700	*10500 6640	8290	4700		(29.9)	
-3.0 m kg (-10 ft) lb	*18780 14070	*13490 9110	*10960 6350	8180	4590		(29.9)	
Ground kg Line lb	*8790 *8790	*9490 6080	*6740 3930	4950	2780		3890 2180	8.81
-1.5 m kg (-5 ft) lb	*19380 *19380	*20920 13400	*14860 8660	10910	6130		8580 4810	(28.9)
-3.0 m kg (-10 ft) lb	*12100 *31200	*29190 27070	*20400 13400	*14530 8600			*10360 7030	(23.4)
-4.5 m kg (-15 ft) lb	*10630 *23440	*7400 *23440	6330					

Boom : 5.68m (18' 8") / Arm : 2.92 m (9' 7") / Bucket : 0.92 m<sup>3</sup> (1.20 yd<sup>3</sup>) SAE heaped / Shoe : 600mm (24") triple grouser

Load point height m (ft)	Load radius						Capacity	Reach
	1.5 m (5 ft)	3.0 m (10 ft)	4.5 m (15 ft)	6.0 m (20 ft)	7.5 m (25 ft)			
7.5 m kg (25 ft) lb							*3360 3150	7.78
6.0 m kg (20 ft) lb							*7410 6940	(25.5)
4.5 m kg (15 ft) lb							*2340 *2340	
3.0 m kg (10 ft) lb							*3450 2460	8.74
1.5 m kg (5 ft) lb							*5160 *5160	(28.7)
Ground kg Line lb	*9780 *9780	*6150 *6150	*4840 4460	*4230 3040	3440	1930	9.59	
-1.5 m kg (-5 ft) lb	*21560 *21560	*13560 *13560	*10670 9830	*9330 6700	7580	4250	(31.5)	
-3.0 m kg (-10 ft) lb	*19420 *19420	*17550 *17550	*14310 *12680	9170 *10380	6350	7470	4140	(31.5)
-4.5 m kg (-15 ft) lb	*21050 *21050	*20190 13430	*14310 8640	10870	6060	7760	4300	(30.5)

1. Lifting capacity is based on SAE J1097, ISO 10567.

3. The load point is a hook located on the back of the bucket.

2. Lifting capacity of the Robex Series does not exceed 75% of the tipping load with

4. (\*) indicates the load limited by hydraulic capacity.

## Lifting Capacity

### R220LC-9S / 9SH

Boom : 5.68m (18' 8") / Arm : 3.90 m (12' 10") / Bucket : 0.92 m<sup>3</sup> (1.20 yd<sup>3</sup>) SAE heaped / Shoe : 600mm (24") triple grouser

Load point height m (ft)	Load radius						Capacity	Reach
	1.5 m (5 ft)	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)		
9.0 m kg (30 ft) lb								*2740 *2740
7.5 m kg (25 ft) lb								*6040 *6040
6.0 m kg (20 ft) lb								*1980 *1980
4.5 m kg (15 ft) lb								*4370 *4370
3.0 m kg (10 ft) lb								*2840 *2840
1.5 m kg (5 ft) lb								*6260 *6260
Ground kg Line lb	*11300 *11300	*6640 6640	*6640 *4950	4220	*4120		2888 *3450	1700
-1.5 m kg (-5 ft) lb	*24540 *24540	*24540 *10910	9300				2048 *2841	1510
-3.0 m kg (-10 ft) lb	*11600 *11600	*23370 *23370	*18190 13510	*12920 8620			6260 *6260	3330
-4.5 m kg (-15 ft) lb	*22020 *22020	*31640 25440	*20640 12610					
-6.0 m kg (-20 ft) lb	*28570 *28570	*28570 *19470	12790	*13980 8090				

R220LC-9S / 9SH HIGH WALKER

Boom : 5.68m (18' 8") / Arm : 2.40 m (7' 10") / Bucket : 0.92 m<sup>3</sup> (1.20 yd<sup>3</sup>) SAE heaped / Shoe : 600mm (24") triple grouser

Load point height m (ft)	Load radius						Capacity	Reach
	1.5 m (5 ft)	3.0 m (10 ft)	4.5 m (15 ft)	6.0 m (20 ft)	7.5 m (25 ft)			
7.5 m kg (25 ft) lb								*3700 *3700
6.0 m kg (20 ft) lb								*8160 *8160
4.5 m kg (15 ft) lb								*4050 *4050
3.0 m kg (10 ft) lb								*8360 *8360
1.5 m kg (5 ft) lb								*11820 *11820
Ground kg Line lb	*9350 *9350	*9550 8080	*6790 5170					5290 *5290
-1.5 m kg (-5 ft) lb	*10290 *10290	*14180 *14180	*9620 8020					*4650 3360
-3.0 m kg (-10 ft) lb	*22690 *22690	*32160 *32160	*21210 17680	*15230 11240				*10250 7410
-4.5 m kg (-15 ft) lb	*14760 *14760	*12990 *12990	*8950 8120	*6470 5170				*4690 4350

Boom : 5.68m (18' 8") / Arm : 2.92 m (9' 7") / Bucket : 0.92 m<sup>3</sup> (1.20 yd<sup>3</sup>) SAE heaped / Shoe : 600mm (24") triple grouser

Load point height m (ft)	Load radius						Capacity	Reach
	1.5 m (5 ft)	3.0 m (10 ft)	4.5 m (15 ft)	6.0 m (20 ft)	7.5 m (25 ft)			
7.5 m kg (25 ft) lb								*3370 *3370
6.0 m kg (20 ft) lb								*7430 *7430
4.5 m kg (15 ft) lb								*2700 *2700
3.0 m kg (10 ft) lb								*5950 *5950
1.5 m kg (5 ft) lb								*4110 *4110
Ground kg Line lb	*10440 *10440	*6400 *6400	*4960 *4960	*4290 3930				3680 2560
-1.5 m kg (-5 ft) lb	*23020 *23020	*14110 *14110	*10930 *10930	*9460 8660				8110 5640
-3.0 m kg (-10 ft) lb	*8610 *8610	*8150 *8150	*5860 5380	*4760 3770				6570 *6570
-4.5 m kg (-15 ft) lb	*18980 *18980	*17970 *17970	*12920 11860	*10490 8310				5580 *5580
-6.0 m kg (-20 ft) lb	*9870 *9870	*8260 *8260	*8080 *6560	*5150 3640				3820 2650
-7.5 m kg (-25 ft) lb	*21760 *21760	*20410 *20410	*17810 *14660	*11350 *11350				8420 5840
-9.0 m kg (-30 ft) lb	*9210 *9210	*9210 *13090	*7940 *6880	*5040 3590				4280 2980
-10.5 m kg (-35 ft) lb	*20300 *20300	*28860 *28860	*21610 *17500	*15170 11110				9440 6570
-12.0 m kg (-40 ft) lb	*12660 *12660	*13780 *13780	*9230 7990	*6670 5060				3710 7.59
-13.5 m kg (-45 ft) lb	*27910 *27910	*30380 *30380	*20350 *17610	*14700 11160				*9850 8180
-15.0 m kg (-50 ft) lb	*11150 *11150	*11150 *17330	*17330 *17330					*4250 *4250
-16.5 m kg (-55 ft) lb	*25290 *25290	*25290 *17330						*9370 *9370

## Lifting Capacity

### R220LC-9S / 9SH HIGH WALKER

Boom : 5.68m (18' 8") / Arm : 3.90 m (12' 10") / Bucket : 0.92 m<sup>3</sup> (1.20 yd<sup>3</sup>) SAE heaped / Shoe : 600mm (24") triple grouser

Load point height m (ft)	Load radius							At max. reach	
	1.5 m (5 ft)	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	
9.0 m (30 ft) kg							*2750	*2750	7.86
7.5 m (25 ft) kg					*2220	*2220	*2810	*2810	9.06
6.0 m (20 ft) kg					*4890	*4890	*6060	*6060	(25.8)
4.5 m (15 ft) kg					*2850	*2850	*6190	*6190	(29.7)
3.0 m (10 ft) kg					*6280	*6280	*6420	*6420	32.3
1.5 m (5 ft) kg					*3140	*3140	*3140	*3140	10.33
3.0 m (10 ft) lb					*4060	*4060	*3620	*3620	2900
1.5 m (5 ft) lb	*11630	*11630	*6880	*6880	*5070	*5070	*4190	*4190	3770
3.0 m (10 ft) lb	*25640	*25640	*15170	*15170	*11180	*11180	*9240	*9240	8310
1.5 m (5 ft) lb	*12210	*12210	*23350	*23350	*18520	*18520	*13140	*13140	6020
3.0 m (10 ft) lb	*22770	*22770	*32030	*32030	*20590	*20590	*17450	*17450	10740
1.5 m (5 ft) lb	*7800	*7800	*11920	*11920	*9220	*9220	*8000	*8000	5130
3.0 m (10 ft) lb	*17200	*17200	*26280	*26280	*20330	*20330	*17200	*17200	4940
1.5 m (5 ft) kg	*10330	*10330	*14530	*14530	*9340	*9340	*6960	*6960	3470
3.0 m (10 ft) kg	*22770	*22770	*32030	*32030	*20590	*20590	*17450	*17450	10740
1.5 m (5 ft) kg	*13390	*13390	*13120	*13120	*8690	*8690	*6230	*6230	4940
3.0 m (10 ft) kg	*29520	*29520	*28920	*28920	*19160	*19160	*17280	*17280	10890
1.5 m (5 ft) kg	*10090	*10090	*6720	*6720					
3.0 m (10 ft) kg	*22240	*22240	*14820	*14820					

Boom : 5.68m (18' 8") / Arm : 2.40 m (7' 10") / Bucket : 0.92 m<sup>3</sup> (1.20 yd<sup>3</sup>) SAE heaped / Shoe : 800mm (32") triple grouser

Load point height m (ft)	Load radius							At max. reach	
	1.5 m (5 ft)	3.0 m (10 ft)	4.5 m (15 ft)	6.0 m (20 ft)	7.5 m (25 ft)	Capacity	Reach		
7.5 m (25 ft) kg						*3700	*3700	7.31	
6.0 m (20 ft) kg					*4050	*4050	*8160	*8160	(24.0)
4.5 m (15 ft) kg					*8930	*8930	*8360	*8360	7870
3.0 m (10 ft) kg					*5360	*5360	*4580	*4580	4260
1.5 m (5 ft) kg					*11820	*11820	*10100	*10100	9390
3.0 m (10 ft) lb					*15720	*15720	*11880	*11880	10160
1.5 m (5 ft) lb					*8720	*8720	*6220	*6220	5500
3.0 m (10 ft) lb					*19220	*19220	*18920	*18920	13710
1.5 m (5 ft) lb					*9350	*9350	*9500	*9500	8290
3.0 m (10 ft) lb					*20610	*20610	*2050	*2050	18280
1.5 m (5 ft) lb	*10290	*10290	*14180	*14180	*9620	*9620	*6950	*6950	5240
3.0 m (10 ft) lb	*22690	*22690	*31260	*31260	*21210	*21210	*15320	*15320	11550
1.5 m (5 ft) kg	*14760	*14760	*14290	*14290	*8950	*8950	*8330	*8330	6470
3.0 m (10 ft) kg	*32540	*32540	*28640	*28640	*19730	*19730	*18360	*18360	14260
1.5 m (5 ft) kg	*10150	*10150	*10150	*10150	*7020	*7020			7020
3.0 m (10 ft) kg	*22380	*22380	*15480	*15480					

Boom : 5.68m (18' 8") / Arm : 2.92 m (9' 7") / Bucket : 0.92 m<sup>3</sup> (1.20 yd<sup>3</sup>) SAE heaped / Shoe : 800mm (32") triple grouser

Load point height m (ft)	Load radius							At max. reach	
	1.5 m (5 ft)	3.0 m (10 ft)	4.5 m (15 ft)	6.0 m (20 ft)	7.5 m (25 ft)	Capacity	Reach		
7.5 m (25 ft) kg						*3370	*3370	7.93	
6.0 m (20 ft) kg						*7430	*7430	26.0	
4.5 m (15 ft) kg						*4110	*4110	3870	
3.0 m (10 ft) kg						*2700	*2700	3460	
1.5 m (5 ft) kg						*5950	*5950	7630	
3.0 m (10 ft) lb						*9060	*9060	8530	
1.5 m (5 ft) lb						*10440	*10440	6440	
3.0 m (10 ft) lb						*23020	*23020	14110	
1.5 m (5 ft) kg						*18980	*18980	17970	
3.0 m (10 ft) kg						*9870	*9870	9260	
1.5 m (5 ft) kg						*21760	*21760	20410	
3.0 m (10 ft) kg						*10440	*10440	6440	
1.5 m (5 ft) kg						*13090	*13090	9600	
3.0 m (10 ft) kg						*20300	*20300	28860	
1.5 m (5 ft) kg						*12660	*12660	13780	
3.0 m (10 ft) kg						*27910	*27910	30380	
1.5 m (5 ft) kg						*11470	*11470	7860	
3.0 m (10 ft) kg						*25290	*25290	17330	

1. Lifting capacity is based on SAE J1097, ISO 10567.

2. 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.

## Lifting Capacity

### R220LC-9S / 9SH HIGH WALKER

Boom : 5.68m (18' 8") / Arm : 3.90 m (12' 10") / Bucket : 0.92 m<sup>3</sup> (1.20 yd<sup>3</sup>) SAE heaped / Shoe : 800mm (32") triple grouser

Load point height m (ft)	Load radius							At max. reach	
	1.5 m (5 ft)	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	
9.0 m (30 ft) kg							*2750	*2750	7.86
7.5 m (25 ft) kg					*2220	*2220	*2810	*2810	9.06
6.0 m (20 ft) kg					*4890	*4890	*6190	*6190	(29.7)
4.5 m (15 ft) kg					*2850	*2850	*2910	*2910	9.85
3.0 m (10 ft) kg					*6280	*6280	*6420	*6420	32.3
1.5 m (5 ft) kg					*3140	*3140	*3140	*3140	10.33
3.0 m (10 ft) lb					*4060	*4060	*3620	*3620	2900
1.5 m (5 ft) lb	*11630	*11630	*6880	*6880	*5070	*5070	*4190	*4190	3770
3.0 m (10 ft) lb	*25640	*25640	*15170	*15170	*11180	*11180	*9240	*9240	8310
1.5 m (5 ft) lb	*12210	*12210	*23350	*23350	*18520	*18520	*13140	*13140	6460
3.0 m (10 ft) lb	*22770	*22770	*32030	*32030	*20590	*20590	*17500	*1750	1050
1.5 m (5 ft) lb	*7800	*7800	*11920	*11920	*9220	*9220	*8010	*8010	5130
3.0 m (10 ft) lb	*17200	*17200	*26280	*26280	*20330	*20330	*17600	*1760	4940
1.5 m (5 ft) kg	*10330	*10330	*14530	*14530	*9340	*9340	*6960	*6960	3470
3.0 m (10 ft) kg	*22770	*22770	*32030	*32030	*20590	*20590	*17500	*1750	1050
1.5 m (5 ft) kg	*13390	*13390	*13120	*13120	*8690	*8690	*6230	*6230	4940
3.0 m (10 ft) kg	*29520	*29520	*28920	*28920	*19160	*19160	*17280	*17280	10890
1.5 m (5 ft) kg	*10090	*10090	*6720	*6720					
3.0 m (10 ft) kg	*22240	*22240	*14820	*14820					

Boom : 8.2m (26' 11") / Arm : 6.3 m (20' 8") / Bucket : 0.52 m<sup>3</sup> (0.68 yd<sup>3</sup>) SAE heaped / Shoe : 800mm (32") triple grouser

Load point height m (ft)	Load radius							At max. reach	
	4.5 m (15 ft)	6.0 m (20 ft)	7.5 m (25 ft)	9.0 m (30 ft)	10.5 m (35 ft)	12.0 m (40 ft)	13.5 m (45 ft)	Capacity	Reach
10.5 m (35 ft) kg								*1480	*1480
9.0 m (30 ft) kg								*1510	*1510
7.5 m (25 ft) kg								*2050	*2050
6.0 m (20 ft) kg								*1550	*1550
4.5 m (15 ft) kg								*3420	*3420
3.0 m (10 ft) kg								*1600	*1600
1.5 m (5 ft) kg								*1790	*1790
3.0 m (10 ft) lb								*2520	*2520
1.5 m (5 ft) lb	*5620	*5620	*3940	*3940	*3090	*3090	*2590	*2590	2220
3.0 m (10 ft) lb	*12390	*12390	*8690	*8690	*6810	*6810	*5710	*5710	2000
1.5 m (5 ft) kg	*6990							*5000	*5000
3.0 m (10 ft) kg	*15410	*15410	*10250	*10250	*9900	*9900	*74		