



**A HYUNDAI CONSTRUCTION EQUIPMENT** 

# **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**

#### **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 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 / 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 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.

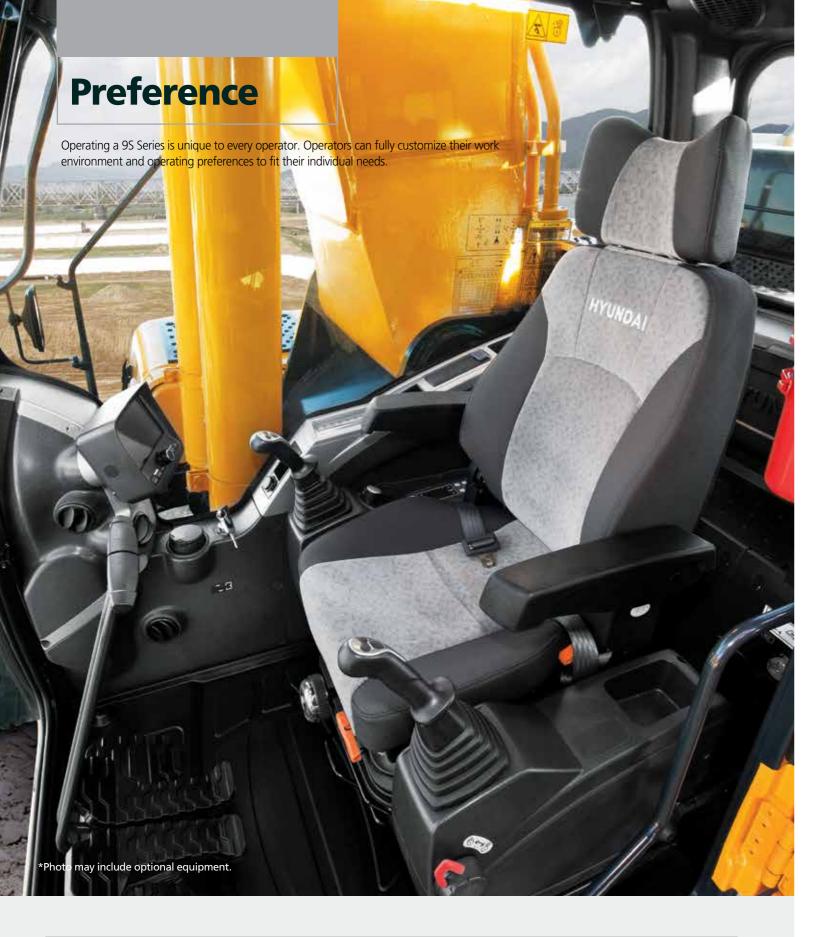
Auto power boost is now available - selectable (on/off) through the monitor.

Powerful air conditioning and heat with auto climate control, 20% more heat and air output than 7 series!

**Hi-mate** 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 9S 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**

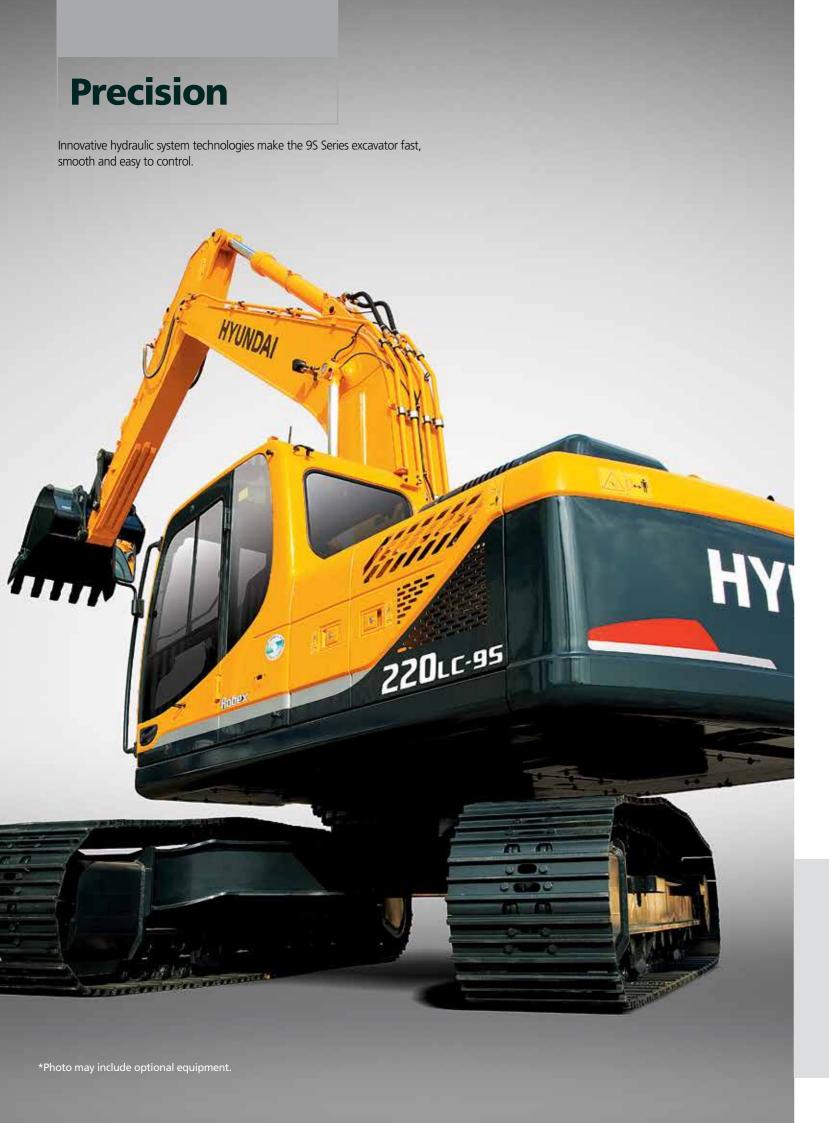
Work is stressful enough. Your work environment should be stress free. Hyundai's 9S Series provides improved cab amenities, additional space and a comfortable seat to minimize stress to the operator. A powerful climate control system provides the operator with optimum air temperature. An advanced audio 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 were integrated into the cluster to make the machine more versatile and the operator more productive.





### **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

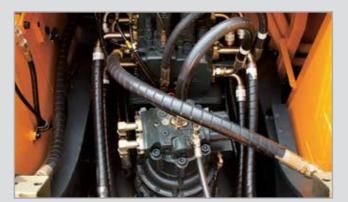


To achieve optimum precision, Hyundai redesigned the hydraulic system to provide the operator with super fine touch and improved controllability. Improved pump flow control reduces flow when controls are not being used to minimize fuel consumption.

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.



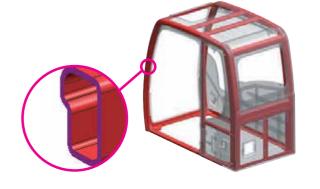
## **Auto Boom-swing Priority**

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.



### Structure Strength

The 9S 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.







## Improved Durability

9S series excavators are equipped with Hi-Grade hoses to make sure of ity without oil-leakage and stainless spring guards to protect hoses from external damages.

## 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.



#### **HYUNDAI HM5.9**

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

#### A More Reliable Way To Reach Your Dream.

The HYUNDAI HM5.9 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 HYUNDAI HM5.9 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.



# **Profitability**



# **Fuel Efficiency**

9S Series excavators are engineered to be extremely fuel efficient. New innovations like two-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 9S Series.



# Long-Life Components

9S 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 / R220-9S / R220LC-9S**

| MODEL               |     |                | HYUNDAI HM 5.9  |  |  |
|---------------------|-----|----------------|---|--|--|
| Туре                |     |                | Water cooled, 4 cycle Diesel, 6-cylinders in line, direct injection, turbocharged, charger air cooled |  |  |
| D-4-d               | CAE | J1995 (gross)  | 150 HP at 1,950 rpm   |  |  |
| Rated               | SAE | J1349 (net)    | 143 HP at 1,950 rpm   |  |  |
| flywheel            | DIN | 6271/1 (gross) | 152 PS at 1,950 rpm   |  |  |
| horse power         | DIN | 6271/1 (net)   | 145 PS at 1,950 rpm   |  |  |
| Max. torque         |     |                | 62.6kgf·m/1,500rpm  |  |  |
| Bore X stroke       |     |                | 102mm X 120mm   |  |  |
| Piston displacement |     |                | 5,900cc   |  |  |
| Batteries           |     |                | 2 X 12V X 100AH   |  |  |
| Starting motor      |     |                | 24V, 4.5kW  |  |  |
| Alternator          |     |                | 24V, 90Amp  |  |  |

#### **HYDRAULIC SYSTEM**

| MAIN PUMP                  |  |  |  |  |
|----------------------------|--|--|--|--|
| Туре                       |  | Variable displacement tandem axis piston pumps |  |  |
| Rated flow                 |  | 2 X 222.3 L/min (58.7 US gpm/48.9 UK gpm)      |  |  |
| Sub-pump for pilot circuit |  | Gear pump                                      |  |  |

#### Cross-sensing and fuel saving pump system.

| HYDRAULIC MOTORS                |   |
|---------------------------------|---|
| Travel                          | Two speed axial pistons motor               |
| Traver                          | 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/cm <sup>2</sup>                     |
| 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             |   |
|                                 | Boom: Boom: 2-120 X 1,290 mm (4.7" X 50.8") |
| No. of cylinder                 | Arm: 1-140 X 1,510 mm (5.5" X 59.4")        |
| bore X stroke                   | Bucket: 1-120 X 1,055 mm (4.7" X 41.5")     |

#### **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) | 5.5 km/hr (3.4mph) / 3.8 km/hr (2.4mph) |  |  |
| 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               | 11.1 rpm                              |  |  |

#### **COOLANT & LUBRICANT CAPACITY**

| Refilling                        | liter    |
|----------------------------------|----------|
| Fuel tank                        | 400.0    |
| Engine coolant                   | 35       |
| Engine oil                       | 24.0     |
| Swing device-gear oil(OTP)       | 5.0(6.2) |
| Final drive(each)-gear oil(OTP)  | 5.8(6.0) |
| Hydraulic system(including tank) | 275.0    |
| Hydraulic tank                   | 160.0    |

#### 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.

| Model                              | R220LC-9S           | R220-9S             |
|------------------------------------|---------------------|---------------------|
| Center frame                       | X - leg type        | X - leg type        |
| Track frame                        | Pentagonal box type | Pentagonal box type |
| No. of shoes on each side          | 49 EA               | 46 EA               |
| No. of carrier roller on each side | 2 EA                | 2 EA                |
| No. of track roller on each side   | 9 EA                | 7 EA                |
| No. of rail guard on each side     | 2 EA                | 1 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 5,600kg (12,350lb) |                   |  |  |  |
| Boom (with arm cylinder)          | 1,950kg (4,300lb) |  |  |  |
| Arm (with bucket cylinder)        | 1,095kg (2,410lb) |  |  |  |

| OPERATING WEIGHT |          |                          |                     |
|------------------|----------|--------------------------|---------------------|
| Shoes            |          | Operating weight         | Ground pressure     |
| Туре             | Width mm | kg                       | kgf/cm <sup>2</sup> |
|                  |          | R220LC-9S 21,900         | 0.47                |
|                  | 600      | R220LC-9S / H / W 23,360 | 0.50                |
|                  |          | R220-9S 21,200           | 0.49                |
|                  |          | R220LC-9S 22,250         | 0.41                |
|                  | 700      | R220LC-9S / H / W 23,710 | 0.43                |
|                  |          | R220-9S 21,470           | 0.42                |
| Triple           |          | R220LC-9S 22,515         | 0.36                |
| grouser          | 800      | R220LC-9S H/W 23,975     | 0.38                |
|                  |          | R220-9S 21,740           | 0.38                |
|                  |          | R220LC-9S 22,760         | 0.32                |
|                  | 900      | R220LC-9S / H / W 24,255 | 0.35                |
|                  |          | R220-9S 22,000           | 0.34                |
| Double grouser   | 700      | R220LC-9S H/W 24,220     | 0.43                |

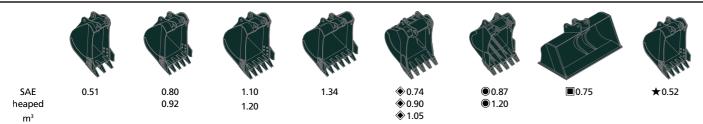
#### **AIR CONDITIONING SYSTEM**

The air condition system for the machine contains the fluorinated greenhouse gas with global warming potential of R134a. (Global Warming Potential: 1430) The system hold 0.8kg refrigerant consisting of a CO<sub>2</sub> equivalent 1.14kg metric tonne. For more information, Please refer to the manual

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#### **BUCKETS**

All buckets are welded with high-strength steel.



| =             | acity  | Wi          | dth         |       | Recommendation mm |           |           |           |            |
|---------------|--------|-------------|-------------|-------|-------------------|-----------|-----------|-----------|------------|
| m³ mm         |        | m           | Weight      |       | 5,680 Boom        |           |           |           |            |
| SAE           | CECE   | Without     | With        | kg    |                   | 3,000     | BOOM      |           | 8,200 Boom |
| heaped        | heaped | sidecutters | sidecutters |       | 2,000 Arm         | 2,400 Arm | 2,920 Arm | 3,900 Arm | 6,300 Arm  |
| 0.51          | 0.45   | 700         | 820         | 570   | •                 | •         | •         |           | =          |
| 0.80          | 0.70   | 1,000       | 1,120       | 700   | •                 | •         | •         | <b>A</b>  | -          |
| 0.92          | 0.80   | 1,150       | 1,270       | 770   | •                 | •         | •         | <b>A</b>  | =          |
| 1.10          | 0.96   | 1,320       | 1,440       | 830   | •                 | •         |           | <b>A</b>  | =          |
| 1.20          | 1.00   | 1,400       | 1,520       | 850   | •                 |           | <b>A</b>  | -         | -          |
| 1.34          | 1.15   | 1,550       | 1,670       | 920   |                   |           | <b>A</b>  | =         | =          |
| <b>♦</b> 0.74 | 0.65   | 985         | -           | 770   | •                 | •         | •         | <b>A</b>  | -          |
| ♦ 0.90        | 0.80   | 1,095       | -           | 810   | •                 | •         | •         | <b>A</b>  | -          |
| <b>1.05</b>   | 0.92   | 1,290       | -           | 890   | •                 | •         |           | <b>A</b>  | =          |
| ● 0.87        | 0.75   | 1,140       | -           | 900   | •                 | •         | •         | <b>A</b>  | _          |
| <b>1.20</b>   | 1.00   | 1,410       | -           | 1,030 |                   | <b>A</b>  | -         | -         | -          |
| ■ 0.75        | 0.65   | 1,790       | -           | 880   | •                 | •         |           | <b>A</b>  | -          |
| ★ 0.52        | 0.45   | 935         | 1,035       | 460   | ı                 | -         | -         | =         |            |

- Heavy duty bucket Rock-Heavy duty bucket
- Slope finishing bucket
- ★ Long reach bucket

- : Applicable for materials with density of 2,000 kg /m³ or less
- ■: Applicable for materials with density of 1,600 kg /m³ or less
- ▲: Applicable for materials with density of 1,100 kg /m³ or less

#### **ATTACHMENT**

Booms and arms are welded with a low-stress, full-box section design. 5.68m(18'8"), 8.20m(26'11") Booms and 2.0m(6'7"), 2.4m(7'10"), 2.92m(9'7"), 3.90m(12'10"), 6.3m(20'8") Arms are available.

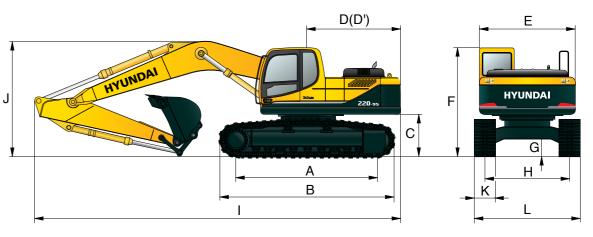
#### **DIGGING FORCE**

| D                | Length | mm |               | 8,200         | Dl            |               |       |                |
|------------------|--------|----|---------------|---------------|---------------|---------------|-------|----------------|
| Boom             | Weight | kg |               | 2,350         |               |               |       |                |
| Arm              | Length | mm | 2,000         | 2,400         | 2,920         | 3,900         | 6,300 | Remarks        |
| Arm              | Weight | kg | 975           | 1,045         | 1,095         | 1,295         | 1,330 |                |
| Bucket           | SAE    | kN | 133.4 [144.8] | 133.4 [144.8] | 133.4 [144.8] | 133.4 [144.8] | 72.6  |                |
| digging<br>force | ISO    | kN | 152.0 [165.0] | 152.0 [165.0] | 152.0 [165.0] | 152.0 [165.0] | 83.4  | []:            |
| Arm              | SAE    | kN | 144.2 [156.5] | 119.6 [129.9] | 102.0 [110.7] | 84.3 [91.6]   | 49.0  | Power<br>Boost |
| crowd<br>force   | ISO    | kN | 151.0 [164.0] | 125.5 [136.3] | 106.9 [116.1] | 87.3 [94.8]   | 50.0  |                |

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

# **Dimensions & Working Range**

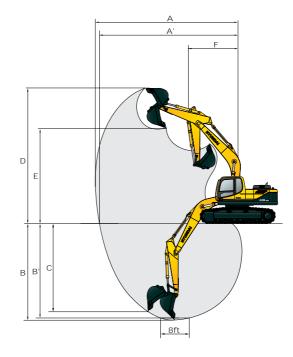
#### **R220-9S DIMENSIONS**



| A Tumbler distance                  | 3,360 |
|-------------------------------------|-------|
| B Overall length of crawler         | 4,114 |
| C Ground clearance of counterweight | 1,060 |
| D Tail swing radius                 | 2,840 |
| D' Rear-end length                  | 2,770 |
| E Overall width of upperstructure   | 2,740 |
| F Overall height of cab             | 3,000 |
| G Min. ground clearance             | 480   |
| H Track gauge                       | 2,200 |

|   |                        |       |       |       | Unit : mm |  |  |  |  |  |  |
|---|------------------------|-------|-------|-------|-----------|--|--|--|--|--|--|
|   | Boom length            | 5,680 |       |       |           |  |  |  |  |  |  |
|   | Arm length             | 2,000 | 2,400 | 2,920 | 3,900     |  |  |  |  |  |  |
| 1 | Overall length         | 9,650 | 9,570 | 9,530 | 9,520     |  |  |  |  |  |  |
| J | Overall height of boom | 3,200 | 3,110 | 3,030 | 3,480     |  |  |  |  |  |  |
| K | Track shoe width       | 600   | 700   | 800   | 900       |  |  |  |  |  |  |
| L | Overall width          | 2,800 | 2,900 | 3,000 | 3,100     |  |  |  |  |  |  |

#### **R220-9S WORKING RANGE**

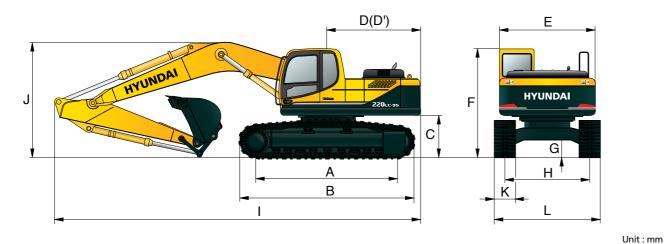


|    |                                  |       |       |       | Unit : mm |
|----|----------------------------------|-------|-------|-------|-----------|
| E  | Boom length                      |       | 5,6   | 580   |           |
| A  | Arm length                       | 2,000 | 2,400 | 2,920 | 3,900     |
| Α  | Max. digging<br>reach            | 9,140 | 9,500 | 9,980 | 10,910    |
|    | Max. digging<br>reach on ground  | 8,960 | 9,330 | 9,820 | 10,770    |
| В  | Max. digging<br>depth            | 5,820 | 6,220 | 6,730 | 7,720     |
| R. | Max. digging<br>depth (8' level) | 5,580 | 6,010 | 6,560 | 7,580     |
| C  | Max. vertical wall digging depth | 5,280 | 5,720 | 6,280 | 7,240     |
| υ  | Max. digging<br>height           | 9,140 | 9,340 | 9,600 | 10,110    |
| E  | Max. dumping<br>height           | 6,330 | 6,520 | 6,780 | 7,290     |
| F  | Min. swing radius                | 3,750 | 3,740 | 3,740 | 3,650     |

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# **Dimensions & Working Range**

#### **R220LC-9S DIMENSIONS**

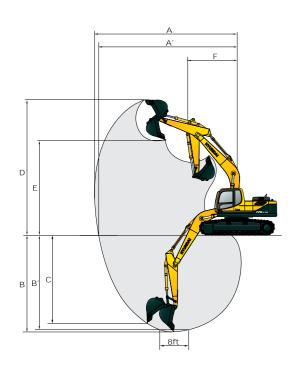


| A Tumbler distance                  | 3,650 |
|-------------------------------------|-------|
| B Overall length of crawler         | 4,440 |
| C Ground clearance of counterweight | 1,060 |
| D Tail swing radius                 | 2,840 |
| D' Rear-end length                  | 2,770 |
| E Overall width of upperstructure   | 2,740 |
| F Overall height of cab             | 3,000 |
| G Min. ground clearance             | 480   |
| H Track gauge                       | 2,390 |

|   | Boom length            | length 5,680 |       |       |     |           |  |        |  |  |  |  |
|---|------------------------|--------------|-------|-------|-----|-----------|--|--------|--|--|--|--|
|   | Arm length             | 2,000        | 2,400 | 2,920 |     | 3,900     |  | 6,300  |  |  |  |  |
| ı | Overall length         | 9,650        | 9,570 | 9,530 |     | 530 9,520 |  | 12,030 |  |  |  |  |
| J | Overall height of boom | 3,200        | 3,110 | 3,    | 030 | 3,480     |  | 3,280  |  |  |  |  |
| K | Track shoe width       | 600          | 700   | )     |     | 800       |  | 900    |  |  |  |  |
| L | Overall width          | 2,990        | 3,09  | 0     |     | 3,190     |  | 3,290  |  |  |  |  |

Unit:mm

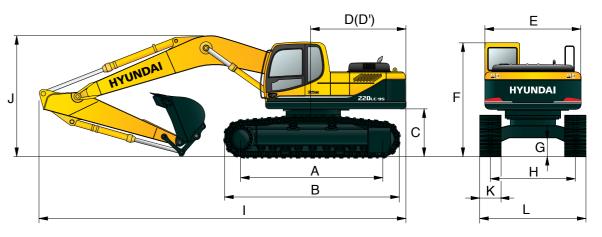
#### **R220LC-9S WORKING RANGE**



|    | Boom length                      |       | 5,0   | 580   |        | 8,200  |
|----|----------------------------------|-------|-------|-------|--------|--------|
|    | Arm length                       | 2,000 | 2,400 | 2,920 | 3,900  | 6,300  |
| Α  | Max. digging reach               | 9,140 | 9,500 | 9,980 | 10,910 | 15,220 |
| A  | Max. digging reach on ground     | 8,960 | 9,330 | 9,820 | 10,770 | 15,120 |
| В  | Max. digging depth               | 5,820 | 6,220 | 6,730 | 7,720  | 11,760 |
| B′ | Max. digging<br>depth (8' level) | 5,580 | 6,010 | 6,560 | 7,580  | 11,650 |
| c  | Max. vertical wall digging depth | 5,280 | 5,720 | 6,280 | 7,240  | 9,610  |
| D  | Max. digging<br>height           | 9,140 | 9,340 | 9,600 | 10,110 | 12,550 |
| E  | Max. dumping<br>height           | 6,330 | 6,520 | 6,780 | 7,290  | 10,280 |
| F  | Min. swing radius                | 3,750 | 3,740 | 3,740 | 3,650  | 4,870  |

# **Dimensions & Working Range**

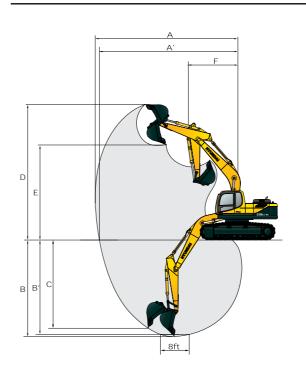
#### **R220LC-9S HIGH WALKER DIMENSIONS**



| A Tumbler distance                  | 3,650 |
|-------------------------------------|-------|
| B Overall length of crawler         | 4,440 |
| C Ground clearance of counterweight | 1,260 |
| D Tail swing radius                 | 2,840 |
| D' Rear-end length                  | 2,770 |
| E Overall width of upperstructure   | 2,740 |
| F Overall height of cab             | 3,000 |
| G Min. ground clearance             | 660   |
| H Track gauge                       | 2,795 |
|                                     |       |

|   |                        |       |    |     |            |      |       | Uni      | it:mm  |  |  |
|---|------------------------|-------|----|-----|------------|------|-------|----------|--------|--|--|
|   | Boom length            | 5,680 |    |     |            |      |       |          |        |  |  |
|   | Arm length             | 2,00  | 00 | 2   | 2,400      |      | 2,920 | 3,900    | )      |  |  |
| ı | Overall length         | 9,65  | 50 | 9   | ,550       |      | 9,470 | 9,560    | )      |  |  |
| J | Overall height of boom | 3,29  | 90 | 3   | 3,170      |      | 3,060 | 3,450    | )      |  |  |
| ĸ | Track shoe             | Туре  |    |     | Triple gro | user |       | Double g | rouser |  |  |
| K | width                  | 7.    |    | 00  | 700        | 800  |       | 700      | )      |  |  |
| L | Overall width          |       | 3, | 395 | 3,495      |      | 3,595 | 3,49     | 95     |  |  |

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



| Boom length                      |   | 5,0   | 580  |  |
|----------------------------------|---|---|--|--|
| Arm length                       | 2,000   | 2,400   | 2,920  | 3,900  |
| Max. digging reach               | 9,140   | 9,500   | 9,980  | 10,910   |
| Max. digging reach on ground     | 8,920   | 9,290   | 9,820  | 10,730   |
| Max. digging depth               | 5,630   | 6,010   | 6,550  | 7,530  |
| Max. digging<br>depth (8' level) | 5,390   | 5,820   | 6,380  | 7,390  |
| Max. vertical wall digging depth | 5,090   | 5,630   | 6,100  | 7,050  |
| Max. digging<br>height           | 9,330   | 9,530   | 9,780  | 10,300   |
| Max. dumping<br>height           | 6,520   | 6,710   | 6,960  | 7,480  |
| Min. swing radius                | 3,750   | 3,740   | 3,740  | 3,650  |
|                                  | Arm length  Max. digging reach  Max. digging reach on ground  Max. digging depth  Max. digging depth (8' level)  Max. vertical wall digging depth  Max. digging height  Max. dumping height | Arm length 2,000  Max. digging reach 9,140  Max. digging 8,920  reach on ground 5,630  Max. digging depth 5,390  Max. vertical wall digging depth Max. digging height 9,330  Max. digging 6,520 | Arm length         2,000         2,400           Max. digging reach         9,140         9,500           Max. digging reach on ground         8,920         9,290           Max. digging depth         5,630         6,010           Max. digging depth (8' level)         5,390         5,820           Max. vertical wall digging depth         5,090         5,630           Max. digging height         9,330         9,530           Max. dumping height         6,520         6,710 | Arm length         2,000         2,400         2,920           Max. digging reach         9,140         9,500         9,980           Max. digging reach on ground         8,920         9,290         9,820           Max. digging depth         5,630         6,010         6,550           Max. digging depth (8' level)         5,390         5,820         6,380           Max. vertical wall digging depth         5,090         5,630         6,100           Max. digging height         9,330         9,530         9,780           Max. dumping height         6,520         6,710         6,960 |

# **Lifting Capacity**

#### R220-9S

## Rating over-front Rating over-side or 360 degree

| Boom: 5.68    | Boom: 5.68m / Arm: 2.40 m / Bucket: 0.92 m³ SAE heaped / Shoe: 600mm triple grouser |        |        |               |        |       |      |       |       |       |      |          |      |       |
|---------------|---|--------|--------|---------------|--------|-------|------|-------|-------|-------|------|----------|------|-------|
| Landa         | -:  |        |        | At max. reach |        |       |      |       |       |       |      |          |      |       |
| Load po       |   | 1.5    | m      | 3.0 m         |        | 4.5 m |      | 6.0 m |       | 7.5   | m    | Capacity |      | Reach |
| height<br>(m) |   | l l    |        |               |        |       |      |       |       |       |      |          |      | (m)   |
| 7.5 m         | kg  |        |        |               |        |       |      |       |       |       |      | *3700    | 3220 | 7.15  |
| 6.0 m         | kg  |        |        |               |        |       |      | *4010 | *4010 |       |      | *3780    | 2410 | 8.20  |
| 4.5 m         | kg  |        |        |               |        |       |      | *4490 | 4140  | *4230 | 2730 | 3500     | 2020 | 8.82  |
| 3.0 m         | kg  |        |        |               |        | *6900 | 6100 | *5280 | 3870  | 4500  | 2620 | 3240     | 1830 | 9.11  |
| 1.5 m         | kg  |        |        |               |        | *8560 | 5540 | *6120 | 3590  | 4350  | 2490 | 3180     | 1780 | 9.10  |
| Ground        | kg  |        |        | *8790         | *8790  | *9490 | 5250 | 6050  | 3400  | 4250  | 2390 | 3340     | 1870 | 8.81  |
| -1.5 m        | kg  | *9760  | *9760  | *13510        | *10230 | 9630  | 5170 | 5960  | 3330  |       |      | 3770     | 2140 | 8.18  |
| -3.0 m        | kg  | *14150 | *14150 | *13240        | *10440 | *9090 | 5240 | 6010  | 3370  |       |      | *4700    | 2770 | 7.12  |
| -4.5 m        | kg  |        |        | *10630        | *10630 | *7400 | 5490 |       |       |       |      |          |      |       |

| Boom : 5.68  | Boom: 5.68m / Arm: 2.92 m / Bucket: 0.92 m³ SAE heaped / Shoe: 600mm triple grouser |        |        |               |       |       |       |       |       |       |       |       |       |       |  |
|--------------|---|--------|--------|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| Landin       | -1-4  |        |        | At max. reach |       |       |       |       |       |       |       |       |       |       |  |
| Load po      |   | 1.5 m  |        | 3.0           | m     | 4.5   | m     | 6.0   | ) m   | 7.5   | m     | Capa  | acity | Reach |  |
| heigh<br>(m) |   |        |        |               |       |       |       |       |       |       |       |       |       | m(m)  |  |
| 7.5 m        | kg  |        |        |               |       |       |       |       |       |       |       | *3360 | 2780  | 7.78  |  |
| 6.0 m        | kg  |        |        |               |       |       |       |       |       | *2340 | *2340 | *3450 | 2140  | 8.74  |  |
| 4.5 m        | kg  |        |        |               |       |       |       | *4010 | *4010 | *4230 | 2780  | 3180  | 1810  | 9.32  |  |
| 3.0 m        | kg  |        |        | *9780         | *9780 | *6150 | *6150 | *4840 | 3920  | 4220  | 2650  | 2950  | 1650  | 9.59  |  |
| 1.5 m        | kg  |        |        | *8810         | *8810 | *7960 | 5640  | *5750 | 3620  |       | 2490  | 2900  | 1600  | 9.59  |  |
| Ground       | kg  |        |        | *9550         | *9550 | *9160 | 5260  | 6040  | 3390  |       | 2370  | 3020  | 1660  | 9.31  |  |
| -1.5 m       | kg  | *8810  | *8810  | *12610        | 10050 | 9560  | 5110  | 5910  | 3270  |       | 2310  | 3360  | 1870  | 8.72  |  |
| -3.0 m       | kg  | *12190 | *12190 | *13980        | 10210 | *9320 | 5130  | 5900  | 3270  |       |       | 4120  | 2340  | 7.75  |  |
| -4.5 m       | kg  |        |        | *11860        | 10550 | *8120 | 5300  |       |       |       |       | *4330 | 3570  | 6.16  |  |

| Boom: 5.68m / Arm: 3.90 m / Bucket: 0.92 m³ SAE heaped / Shoe: 600mm triple grouser |     |        |          |               |        |       |      |       |       |       |       |       |      |          |       |       |
|---|-----|--------|----------|---------------|--------|-------|------|-------|-------|-------|-------|-------|------|----------|-------|-------|
| Landa   | - ! |        |          | At max. reach |        |       |      |       |       |       |       |       |      |          |       |       |
| Load point<br>height  |     | 1.5 m  |          | 3.0           | ) m    | 4.5   | m    | 6.0 m |       | 7.5   | m     | 9.0   | m    | Capacity |       | Reach |
| neigr<br>(m)  |     |        | <b>=</b> |               |        |       |      |       |       |       |       |       |      |          |       | (m)   |
| 9.0 m   | kg  |        |          |               |        |       |      |       |       |       |       |       |      | *2740    | *2740 | 7.66  |
| 7.5 m   | kg  |        |          |               |        |       |      |       |       | *1980 | *1980 |       |      | *2800    | 2110  | 8.94  |
| 6.0 m   | kg  |        |          |               |        |       |      |       |       | *2840 | *2840 |       |      | *2900    | 1680  | 9.77  |
| 4.5 m   | kg  |        |          |               |        |       |      |       |       | *3090 | 2860  | *2040 | 1910 | 2640     | 1440  | 10.28 |
| 3.0 m   | kg  |        |          |               |        |       |      | *3940 | *3940 | *3560 | 2690  | *2910 | 1840 | 2460     | 1310  | 10.52 |
| 1.5 m   | kg  |        |          | *11130        | *11130 | *6640 | 5860 | *4950 | 3690  | *4120 | 2490  | 3170  | 1730 | 2410     | 1260  | 10.52 |
| Ground  | kg  | *5260  | *5260    | *10600        | 10070  | *8250 | 5290 | *5860 | 3380  | 4180  | 2320  | 3070  | 1640 | 2480     | 1290  | 10.27 |
| -1.5 m  | kg  | *7500  | *7500    | *11650        | 9720   | *9150 | 4980 | 5810  | 3180  | 4050  | 2200  | *2370 | 1590 | 2700     | 1430  | 9.75  |
| -3.0 m  | kg  | *9990  | *9990    | *14350        | 9730   | 9330  | 4890 | 5720  | 3100  | 4010  | 2160  |       |      | 3170     | 1720  | 8.91  |
| -4.5 m  | kg  | *12960 | *12960   | *13360        | 9960   | *8830 | 4970 | 5780  | 3140  |       |       |       |      | *4030    | 2350  | 7.62  |
| -6.0 m  | kg  |        |          | *10610        | 10450  | *7100 | 5240 |       |       |       |       |       |      |          |       |       |

# **Lifting Capacity**

#### R220LC-9S

| Ļ | Rating over-front | Rating  | over-side o | or 360 | deare |
|---|-------------------|---------|-------------|--------|-------|
| - | Mating Over-Home  | - naung | Over-side C | JI 300 | uegre |

| Boom : 5.68 | 8m / Arr | m: 2.0 m / Buc | ket : 0.92 m <sup>3</sup> S/ | AE heaped / Sh | oe: 600mm tr | iple grouser |       |       |      |       |               |       |
|-------------|----------|----------------|------------------------------|----------------|--------------|--------------|-------|-------|------|-------|---------------|-------|
| l and m     | -:       |                |                              |                | Load         | radius       |       |       |      |       | At max. reach |       |
| Load po     |          | 3.0            | ) m                          | 4.5            | m            | 6.0          | m     | 7.5   | m    | Cap   | acity         | Reach |
| (m)         | ıı       |                | <b>=</b>                     |                | <b>=</b>     |              |       |       |      |       |               | (m)   |
| 7.5 m       | kg       |                |                              |                |              |              |       |       |      | *4010 | *4010         | 6.65  |
| 6.0 m       | kg       |                |                              |                |              | *4440        | *4440 |       |      | *4060 | 3040          | .78   |
| 4.5 m       | kg       |                |                              | *5730          | *5730        | *4860        | 4630  |       |      | *4190 | 2540          | 8.43  |
| 3.0 m       | kg       |                |                              | *7460          | 6840         | *5610        | 4370  | *4830 | 3000 | 4040  | 2310          | 8.74  |
| 1.5 m       | kg       |                |                              | *8990          | 6320         | *6390        | 4120  | 5060  | 2890 | 3990  | 2260          | 8.73  |
| Ground      | kg       |                |                              | *9690          | 6090         | *6910        | 3950  | 4980  | 2810 | 4200  | 2380          | 8.42  |
| -1.5 m      | kg       | *13990         | 12260                        | *9630          | 6070         | *6990        | 3910  |       |      | 4820  | 2750          | 7.76  |
| -3.0 m      | kg       | *12500         | 12500                        | *8820          | 6180         | *6350        | 3990  |       |      | *4850 | 3650          | 6.61  |
| -4.5 m      | kg       | *9460          | *9460                        |                |              |              |       |       |      |       |               |       |

| l and m      | -: |        |       |        |        | Load  | radius |       |       |       |      | Α     | t max. reach | า     |
|--------------|----|--------|-------|--------|--------|-------|--------|-------|-------|-------|------|-------|--------------|-------|
| Load po      |    | 1.5    | m     | 3.0    | m      | 4.5   | m      | 6.0   | m     | 7.5   | m    | Capa  | acity        | Reach |
| heigh<br>(m) |    |        |       |        |        |       |        |       |       |       |      |       |              | (m)   |
| 7.5 m        | kg |        |       |        |        |       |        |       |       |       |      | *3700 | 3640         | 7.15  |
| 6.0 m        | kg |        |       |        |        |       |        | *4010 | *4010 |       |      | *3780 | 2760         | 8.20  |
| 4.5 m        | kg |        |       |        |        |       |        | *4490 | *4490 | *4230 | 3130 | *3900 | 2340         | 8.82  |
| 3.0 m        | kg |        |       |        |        | *6900 | *6900  | *5280 | 4400  | *4560 | 3010 | 3760  | 2130         | 9.11  |
| 1.5 m        | kg |        |       |        |        | *8560 | 6380   | *6120 | 4130  | *4970 | 2880 | 3710  | 2080         | 9.10  |
| Ground       | kg |        |       | *8790  | *8790  | *9490 | 6080   | *6740 | 3930  | 4950  | 2780 | 3890  | 2180         | 8.81  |
| -1.5 m       | kg | *9760  | *9760 | *13510 | 12060  | *9650 | 6000   | *6960 | 3850  |       |      | 4390  | 2480         | 8.18  |
| -3.0 m       | kg | *14150 | 14150 | *13240 | 12280  | *9090 | 6080   | *6590 | 3900  |       |      | *4700 | 3190         | 7.12  |
| -4.5 m       | kg |        |       | *10630 | *10630 | *7400 | 6330   |       |       |       |      |       |              |       |

| Land.        |    |        |        |        |        | Load  | radius |       |       |       |       |       | At max. reach | h     |
|--------------|----|--------|--------|--------|--------|-------|--------|-------|-------|-------|-------|-------|---------------|-------|
| Load po      |    | 1.5    | m      | 3.0    | m      | 4.5   | m      | 6.0   | ) m   | 7.5   | m     | Capa  | acity         | Reach |
| heigh<br>(m) | π  |        |        |        |        |       |        |       |       |       |       |       |               | m(m)  |
| 7.5 m        | kg |        |        |        |        |       |        |       |       |       |       | *3360 | 3150          | 7.78  |
| 6.0 m        | kg |        |        |        |        |       |        |       |       | *2340 | *2340 | *3450 | 2460          | 8.74  |
| 4.5 m        | kg |        |        |        |        |       |        | *4010 | *4010 | *3830 | 3180  | *3580 | 2100          | 9.32  |
| 3.0 m        | kg |        |        | *9780  | *9780  | *6150 | *6150  | *4840 | 4460  | *4230 | 3040  | 3440  | 1930          | 9.59  |
| 1.5 m        | kg |        |        | *8810  | *8810  | *7960 | 6490   | *5750 | 4160  | *4710 | 2880  | 3390  | 1880          | 9.59  |
| Ground       | kg |        |        | *9550  | *9550  | *9160 | 6090   | *6490 | 3920  | 4930  | 2750  | 3520  | 1950          | 9.31  |
| -1.5 m       | kg | *8810  | *8810  | *12610 | 11870  | *9600 | 5940   | *6870 | 3800  | 4860  | 2690  | 3920  | 2190          | 8.72  |
| -3.0 m       | kg | *12190 | *12190 | *13980 | 12040  | *9320 | 5960   | *6740 | 3800  |       |       | *4460 | 2710          | 7.75  |
| -4.5 m       | kg |        |        | *11860 | *11860 | *8120 | 6140   |       |       |       |       | *4330 | 4080          | 6.16  |

- 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.
- 3. The load point is a hook located on the back of the bucket.
- 4. (\*) indicates the load limited by hydraulic capacity.

# **Lifting Capacity**

#### R220LC-9S

| Ιį | Rating over-front | Rating over-side o | r 360 degree |
|----|-------------------|--------------------|--------------|
|    | , •               | •                  |              |

| Boom : 5.68      | 8m / Ar | m: 3.90 m. | / Bucket : 0 | ).92 m <sup>3</sup> SAI | heaped / | Shoe : 600 | mm triple | grouser |       |       |       |       |       |                |             |       |
|------------------|---------|------------|--------------|-------------------------|----------|------------|-----------|---------|-------|-------|-------|-------|-------|----------------|-------------|-------|
| Landa            | -:-+    |            |              |                         |          |            | Load      | radius  |       |       |       |       |       | A <sup>-</sup> | t max. read | ch    |
| Load po<br>heigh |         | 1.5        | m            | 3.0                     | ) m      | 4.5        | m         | 6.0     | m     | 7.5   | m     | 9.0   | ) m   |                | acity       | Reach |
| (m)              |         |            |              |                         |          |            |           |         |       |       |       |       |       |                |             | (m)   |
| 9.0 m            | kg      |            |              |                         |          |            |           |         |       |       |       |       |       | *2740          | *2740       | 7.66  |
| 7.5 m            | kg      |            |              |                         |          |            |           |         |       | *1980 | *1980 |       |       | *2800          | 2420        | 8.94  |
| 6.0 m            | kg      |            |              |                         |          |            |           |         |       | *2840 | *2840 |       |       | *2900          | 1960        | 9.77  |
| 4.5 m            | kg      |            |              |                         |          |            |           |         |       | *3090 | *3090 | *2040 | *2040 | *3020          | 1700        | 10.28 |
| 3.0 m            | kg      |            |              |                         |          |            |           | *3940   | *3940 | *3560 | 3080  | *2910 | 2140  | 2890           | 1560        | 10.52 |
| 1.5 m            | kg      |            |              | *11130                  | *11130   | *6640      | *6640     | *4950   | 4220  | *4120 | 2880  | *3450 | 2040  | 2840           | 1510        | 10.52 |
| Ground           | kg      | *5260      | *5260        | *10600                  | *10600   | *8250      | 6130      | *5860   | 3910  | *4650 | 2710  | *3530 | 1950  | 2930           | 1550        | 10.27 |
| -1.5 m           | kg      | *7500      | *7500        | *11650                  | 11540    | *9150      | 5810      | *6490   | 3700  | 4750  | 2590  | *2370 | 1900  | 3180           | 1700        | 9.75  |
| -3.0 m           | kg      | *9990      | *9990        | *14350                  | 11540    | *9360      | 5720      | *6700   | 3620  | 4710  | 2550  |       |       | 3710           | 2030        | 8.91  |
| -4.5 m           | kg      | *12960     | *12960       | *13360                  | 11780    | *8830      | 5800      | *6340   | 3670  |       |       |       |       | *4030          | 2730        | 7.62  |
| -6.0 m           | kg      |            |              | *10610                  | *10610   | *7100      | 6080      |         |       |       |       |       |       |                |             |       |

#### **R220LC-9S HIGH WALKER**

Rating over-front Rating over-side or 360 degree

| Boom : 5.68 | 3m / Arı | m: 2.40 m/l | Bucket: 0.92 | m³ SAE hea | ped / Shoe : | 600mm trip | le grouser |       |       |       |      |       |               |       |
|-------------|----------|-------------|--------------|------------|--------------|------------|------------|-------|-------|-------|------|-------|---------------|-------|
| Landon      | -:       |             |              |            |              | Load       | radius     |       |       |       |      | A     | At max. reach | h     |
| Load po     |          | 1.5         | 5 m          | 3.0        | ) m          | 4.5        | m          | 6.0   | m     | 7.5   | m    | Capa  | acity         | Reach |
| (m)         |          |             |              | ·          |              |            |            |       |       |       |      |       |               | (m)   |
| 7.5 m       | kg       |             |              |            |              |            |            |       |       |       |      | *3700 | *3700         | 7.31  |
| 6.0 m       | kg       |             |              |            |              |            |            | *4050 | *4050 |       |      | *3790 | 3480          | 8.30  |
| 4.5 m       | kg       |             |              |            |              | *5360      | *5360      | *4580 | *4580 | *4260 | 4030 | *3920 | 3020          | 8.87  |
| 3.0 m       | kg       |             |              |            |              | *7130      | *7130      | *5390 | *5390 | *4610 | 3900 | 4010  | 2810          | 9.12  |
| 1.5 m       | kg       |             |              |            |              | *8720      | 8370       | *6220 | 5360  | *5020 | 3770 | 3990  | 2780          | 9.08  |
| Ground      | kg       |             |              | *9350      | *9350        | *9550      | 8080       | *6790 | 5170  | 5290  | 3670 | 4210  | 2940          | 8.75  |
| -1.5 m      | kg       | *10290      | *10290       | *14180     | *14180       | *9620      | 8020       | *6950 | 5100  |       |      | *4650 | 3360          | 8.07  |
| -3.0 m      | kg       | *14760      | *14760       | *12990     | *12990       | *8950      | 8120       | *6470 | 5170  |       |      | *4690 | 4350          | 6.94  |
| -4.5 m      | ka       |             |              | *10150     | *10150       | *7020      | *7020      |       |       |       |      |       |               |       |

| Boom : 5.68  | 3m / Arı | m : 2.92 m / I | Bucket : 0.92 | m³ SAE hea | ped / Shoe : | 600mm trip | le grouser |       |       |       |       |       |               |       |
|--------------|----------|----------------|---------------|------------|--------------|------------|------------|-------|-------|-------|-------|-------|---------------|-------|
| Laada        | -1       |                |               |            |              | Load       | radius     |       |       |       |       | A     | At max. reach | h     |
| Load po      |          | 1.5            | m             | 3.0        | m            | 4.5        | m          | 6.0   | ) m   | 7.5   | m     | Capa  | acity         | Reach |
| heigh<br>(m) | π        |                |               |            |              |            |            |       |       | •     |       |       |               | (m)   |
| 7.5 m        | kg       |                |               |            |              |            |            |       |       |       |       | *3370 | *3370         | 7.93  |
| 6.0 m        | kg       |                |               |            |              |            |            |       |       | *2700 | *2700 | *3460 | 3130          | 8.83  |
| 4.5 m        | kg       |                |               |            |              |            |            | *4110 | *4110 | *3870 | *3870 | *3600 | 2740          | 9.37  |
| 3.0 m        | kg       |                |               | *10440     | *10440       | *6400      | *6400      | *4960 | *4960 | *4290 | 3930  | 3680  | 2560          | 9.60  |
| 1.5 m        | kg       |                |               | *8610      | *8610        | *8150      | *8150      | *5860 | 5380  | *4760 | 3770  | 3650  | 2530          | 9.57  |
| Ground       | kg       |                |               | *9870      | *9870        | *9260      | 8080       | *6560 | 5150  | *5150 | 3640  | 3820  | 2650          | 9.25  |
| -1.5 m       | kg       | *9210          | *9210         | *13090     | *13090       | *9600      | 7940       | *6880 | 5040  | 5200  | 3590  | 4280  | 2980          | 8.62  |
| -3.0 m       | kg       | *12660         | *12660        | *13780     | *13780       | *9230      | 7990       | *6670 | 5060  |       |       | *4470 | 3710          | 7.59  |
| -4.5 m       | kg       |                |               | *11470     | *11470       | *7860      | *7860      |       |       |       |       | *4250 | *4250         | 5.89  |

# Lifting Capacity

#### **R220LC-9S HIGH WALKER**

Rating over-front Rating over-side or 360 degree

| Boom: 5.6    | 8m / Ar | m: 3.90 m | / Bucket : 0 | ).92 m <sup>3</sup> SA | E heaped / | Shoe: 600 | mm triple | grouser |       |       |          |       |       |                |             |       |
|--------------|---------|-----------|--------------|------------------------|------------|-----------|-----------|---------|-------|-------|----------|-------|-------|----------------|-------------|-------|
| l and m      | -:      |           |              |                        |            |           | Load      | radius  |       |       |          |       |       | A <sup>-</sup> | t max. read | :h    |
| Load p       |         | 1.5       | 5 m          | 3.0                    | ) m        | 4.5       | m         | 6.0     | ) m   | 7.5   | m        | 9.0   | ) m   | Capa           | acity       | Reach |
| heigl<br>(m) |         |           |              |                        | <b>=</b>   |           |           |         |       |       | <b>=</b> | ŀ     |       |                |             | (m)   |
| 9.0 m        | kg      |           |              |                        |            |           |           |         |       |       |          |       |       | *2750          | *2750       | 7.86  |
| 7.5 m        | kg      |           |              |                        |            |           |           |         |       | *2220 | *2220    |       |       | *2810          | *2810       | 9.06  |
| 6.0 m        | kg      |           |              |                        |            |           |           |         |       | *2850 | *2850    |       |       | *2910          | 2550        | 9.85  |
| 4.5 m        | kg      |           |              |                        |            |           |           |         |       | *3140 | *3140    | *2180 | *2180 | *3030          | 2270        | 10.33 |
| 3.0 m        | kg      |           |              |                        |            |           |           | *4060   | *4060 | *3620 | *3620    | *2990 | 2840  | 3100           | 2120        | 10.54 |
| 1.5 m        | kg      |           |              | *11630                 | *11630     | *6880     | *6880     | *5070   | *5070 | *4190 | 3770     | *3490 | 2730  | 3070           | 2090        | 10.50 |
| Ground       | kg      | *5540     | *5540        | *10590                 | *10590     | *8400     | 8100      | *5960   | 5130  | *4710 | 3590     | *3480 | 2640  | 3180           | 2160        | 10.22 |
| -1.5 m       | kg      | *7800     | *7800        | *11920                 | *11920     | *9220     | 7800      | *6540   | 4940  | *5060 | 3480     |       |       | 3480           | 2370        | 9.67  |
| -3.0 m       | kg      | *10330    | *10330       | *14530                 | *14530     | *9340     | 7730      | *6690   | 4870  | 5060  | 3450     |       |       | *3920          | 2820        | 8.78  |
| -4.5 m       | kg      | *13390    | *13390       | *13120                 | *13120     | *8690     | 7840      | *6230   | 4940  |       |          |       |       | *4030          | 3800        | 7.41  |
| -6.0 m       | kg      |           |              | *10090                 | *10090     | *6720     | *6720     |         |       |       |          |       |       |                |             |       |

| Landa        | -: |        |        |        |        | Load  | radius |       |       |       |      | A     | t max. reacl | h     |
|--------------|----|--------|--------|--------|--------|-------|--------|-------|-------|-------|------|-------|--------------|-------|
| Load po      |    | 1.5    | m      | 3.0    | m      | 4.5   | m      | 6.0   | m     | 7.5   | m    | Capa  | acity        | Reach |
| heigl<br>(m) |    |        |        |        |        |       |        |       |       |       |      |       |              | (m)   |
| 7.5 m        | kg |        |        |        |        |       |        |       |       |       |      | *3700 | *3700        | 7.31  |
| 6.0 m        | kg |        |        |        |        |       |        | *4050 | *4050 |       |      | *3790 | 3570         | 8.30  |
| 4.5 m        | kg |        |        |        |        | *5360 | *5360  | *4580 | *4580 | *4260 | 4130 | *3920 | 3110         | 8.87  |
| 3.0 m        | kg |        |        |        |        | *7130 | *7130  | *5390 | *5390 | *4610 | 4010 | *4080 | 2890         | 9.12  |
| 1.5 m        | kg |        |        |        |        | *8720 | 8580   | *6220 | 5500  | *5020 | 3870 | 4110  | 2860         | 9.08  |
| Ground       | kg |        |        | *9350  | *9350  | *9550 | 8290   | *6790 | 5310  | *5320 | 3780 | 4340  | 3020         | 8.75  |
| -1.5 m       | kg | *10290 | *10290 | *14180 | *14180 | *9620 | 8230   | *6950 | 5240  |       |      | *4650 | 3450         | 8.07  |
| -3.0 m       | kg | *14760 | *14760 | *12990 | *12990 | *8950 | 8330   | *6470 | 5310  |       |      | *4690 | 4470         | 6.94  |
| -4.5 m       | kg |        |        | *10150 | *10150 | *7020 | *7020  |       |       |       |      |       |              |       |

| Boom : 5.68  | 8m / Arr | m: 2.92 m/E | Bucket : 0.92 | m³ SAE hea | ped / Shoe : | 800mm trip | le grouser |       |       |       |       |       |              |       |
|--------------|----------|-------------|---------------|------------|--------------|------------|------------|-------|-------|-------|-------|-------|--------------|-------|
| Loodin       | -:       |             |               |            |              | Load       | radius     |       |       |       |       | A     | t max. reacl | h     |
| Load po      |          |             | m             |            | m            | 4.5        | m          | 6.0   | m     | 7.5   | m     | Capa  | acity        | Reach |
| heigh<br>(m) |          |             |               |            |              |            |            |       |       |       |       |       |              | (m)   |
| 7.5 m        | kg       |             |               |            |              |            |            |       |       |       |       | *3370 | *3370        | 7.93  |
| 6.0 m        | kg       |             |               |            |              |            |            |       |       | *2700 | *2700 | *3460 | 3220         | 8.83  |
| 4.5 m        | kg       |             |               |            |              |            |            | *4110 | *4110 | *3870 | *3870 | *3600 | 2820         | 9.37  |
| 3.0 m        | kg       |             |               | *10440     | *10440       | *6440      | *6440      | *4960 | *4960 | *4290 | 4030  | *3760 | 2640         | 9.60  |
| 1.5 m        | kg       |             |               | *8610      | *8610        | *8150      | *8150      | *5860 | 5520  | *4760 | 3870  | 3760  | 2610         | 9.57  |
| Ground       | kg       |             |               | *9870      | *9870        | *9260      | 8290       | *6560 | 5300  | *5150 | 3750  | 3940  | 2730         | 9.25  |
| -1.5 m       | kg       | *9210       | *9210         | *13090     | *13090       | *9600      | 8150       | *6880 | 5180  | *5300 | 3690  | *4340 | 3060         | 8.62  |
| -3.0 m       | kg       | *12660      | *12660        | *13780     | *13780       | *9230      | 8200       | *6670 | 5200  |       |       | *4470 | 3810         | 7.59  |
| -4.5 m       | kg       |             |               | *11470     | *11470       | *7860      | *7860      |       |       |       |       | *4250 | *4250        | 5.89  |

- 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.
- 3. The load point is a hook located on the back of the bucket.
- 4. (\*) indicates the load limited by hydraulic capacity.

# **Lifting Capacity**

#### **R220LC-9S HIGH WALKER**

| - | Rating over-front | Rating | over-side or | 360 degre |
|---|-------------------|--------|--------------|-----------|
|   |                   |        |              |           |

| Boom : 5.68m / Arm : 3.90 m / Bucket : 0.92 m³ SAE heaped / Shoe : 800mm triple grouser |    |             |        |        |        |       |       |       |       |       |       |       |       |          |               |       |  |
|---|----|-------------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|----------|---------------|-------|--|
| Load point<br>height<br>(m)   |    | Load radius |        |        |        |       |       |       |       |       |       |       |       |          | At max. reach |       |  |
|   |    | 1.5 m       |        | 3.0 m  |        | 4.5 m |       | 6.0 m |       | 7.5 m |       | 9.0 m |       | Capacity |               | Reach |  |
|   |    |             |        |        |        |       |       |       |       |       |       |       |       |          |               | (m)   |  |
| 9.0 m   | kg |             |        |        |        |       |       |       |       |       |       |       |       | *2750    | *2750         | 7.86  |  |
| 7.5 m   | kg |             |        |        |        |       |       |       |       | *2220 | *2220 |       |       | *2810    | *2810         | 9.06  |  |
| 6.0 m   | kg |             |        |        |        |       |       |       |       | *2850 | *2850 |       |       | *2910    | 2620          | 9.85  |  |
| 4.5 m   | kg |             |        |        |        |       |       |       |       | *3140 | *3140 | *2180 | *2180 | *3030    | 2340          | 10.33 |  |
| 3.0 m   | kg |             |        |        |        |       |       | *4060 | *4060 | *3620 | *3620 | *2990 | 2920  | *3180    | 2190          | 10.54 |  |
| 1.5 m   | kg |             |        | *11630 | *11630 | *6880 | *6880 | *5070 | *5070 | *4190 | 3870  | *3490 | 2820  | 3170     | 2160          | 10.50 |  |
| Ground  | kg | *5540       | *5540  | *10590 | *10590 | *8400 | 8310  | *5960 | 5270  | *4710 | 3700  | *3480 | 2730  | 3280     | 2230          | 10.22 |  |
| -1.5 m  | kg | *7800       | *7800  | *11920 | *11920 | *9220 | 8010  | *6540 | 5080  | *5060 | 3580  |       |       | 3590     | 2450          | 9.67  |  |
| -3.0 m  | kg | *10330      | *10330 | *14530 | *14530 | *9340 | 7940  | *6690 | 5010  | *5090 | 3550  |       |       | *3920    | 2900          | 8.78  |  |
| -4.5 m  | kg | *13390      | *13390 | *13120 | *13120 | *8690 | 8050  | *6230 | 5080  |       |       |       |       | *4030    | 3910          | 7.41  |  |
| -6.0 m  | ka |             |        | *10090 | *10090 | *6720 | *6720 |       |       |       |       |       |       |          |               |       |  |

#### **R220LC-9S LONG REACH**



| Boom: 8.2m / Arm: 6.3 m / Bucket: 0.52 m <sup>3</sup> SAE heaped / Shoe: 800mm triple grouser |            |             |       |       |          |       |          |       |          |       |          |       |          |       |          |               |          |       |
|---|------------|-------------|-------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|---------------|----------|-------|
|   |            | Load radius |       |       |          |       |          |       |          |       |          |       |          |       |          | At max. reach |          |       |
|   | Load point |             | 4.5 m |       | 6.0 m    |       | 7.5 m    |       | 9.0 m    |       | 10.5 m   |       | 12.0 m   |       | 13.5 m   |               | Capacity |       |
| height<br>(m)   |            |             |       |       | <u>+</u> | ·     | <b>=</b> |       | <b>F</b> | ŀ     | <b>=</b> |       | <b>=</b> |       | <b>=</b> |               |          | (m)   |
| 10.5 m  | kg         |             |       |       |          |       |          |       |          |       |          |       |          |       |          | *1480         | *1480    | 12.11 |
| 9.0 m   | kg         |             |       |       |          |       |          |       |          |       |          | *930  | *930     |       |          | *1510         | *1510    | 13.11 |
| 7.5 m   | kg         |             |       |       |          |       |          |       |          |       |          | *1550 | *1550    |       |          | *1550         | 1320     | 13.84 |
| 6.0 m   | kg         |             |       |       |          |       |          |       |          | *1600 | *1600    | *1610 | *1610    |       |          | *1600         | 1160     | 14.37 |
| 4.5 m   | kg         |             |       |       |          |       |          |       |          | *1790 | *1790    | *1730 | 1720     | *1260 | *1260    | *1660         | 1050     | 14.72 |
| 3.0 m   | kg         |             |       |       |          | *2520 | *2520    | *2220 | *2220    | *2020 | *2020    | *1880 | 1630     | *1590 | 1220     | *1720         | 980      | 14.89 |
| 1.5 m   | kg         | *5620       | *5620 | *3940 | *3940    | *3090 | *3090    | *2590 | *2590    | *2270 | 2000     | *2050 | 1530     | *1790 | 1170     | *1800         | 940      | 14.90 |
| Ground  | kg         | *6990       | 6720  | *4770 | 4490     | *3620 | 3240     | *2950 | 2430     | *2510 | 1860     | *2220 | 1440     | *1820 | 1110     | 1880          | 930      | 14.75 |
| -1.5 m  | kg         | *7830       | 6210  | *5390 | 4120     | *4060 | 2990     | *3260 | 2260     | *2740 | 1740     | *2380 | 1360     | *1570 | 1070     | 1930          | 960      | 14.42 |
| -3.0 m  | kg         | *8230       | 5990  | *5780 | 3920     | *4370 | 2830     | *3490 | 2140     | *2900 | 1660     | *2490 | 1310     |       |          | 2030          | 1020     | 13.92 |
| -4.5 m  | kg         | *8310       | 5940  | *5950 | 3830     | *4540 | 2740     | *3630 | 2070     | *3000 | 1620     | 2510  | 1290     |       |          | *2210         | 1140     | 13.20 |
| -6.0 m  | kg         | *8100       | 6010  | *5900 | 3840     | *4550 | 2730     | *3640 | 2060     | *2970 | 1620     |       |          |       |          | *2340         | 1330     | 12.25 |
| -7.5 m  | kg         | *7580       | 6180  | *5610 | 3930     | *4350 | 2790     | *3460 | 2120     | *2740 | 1690     |       |          |       |          | *2460         | 1670     | 10.97 |
| -9.0 m  | kg         | *6650       | 6460  | *4980 | 4110     | *3840 | 2940     | *2930 | 2260     |       |          |       |          |       |          |               |          |       |
| -10.5 m   | kg         | *5040       | *5040 | *3730 | *3730    |       |          |       |          |       |          |       |          |       |          |               |          |       |

- 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.
- 3. The load point is a hook located on the back of the bucket.
- 4. (\*) 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

Radio & USB player

Cabin roof-steel cover

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

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

Door and cab locks, one key

Two outside rearview mirrors

Fully adjustable suspension seat

Pilot-operated slidable joystick

Four front working lights (2 boom mounted, 2 front frame mounted)

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**

| OI HOITAL LQOII MEI                | ••             |
|------------------------------------|----------------|
| Fuel filler pump (35 L/min)        |                |
| Beacon lamp                        |                |
| Single-acting piping kit (breaker, |                |
| Double-acting piping kit (clamshe  | III, etc.)     |
| Quick coupler                      |                |
| Travel alarm                       |                |
| Booms<br>5.68 m, 18' 8"            |                |
| •                                  |                |
| 8.2 m, 26′ 11″ Long reach          |                |
| Arms<br>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           | l m\           |
| Cabin FOPS/FOG (ISO/DIS 10262 Lo   | —·             |
| FOPS (Falling Object Protective    | Structure)     |
| FOG (Falling Object Guard)         |                |
| Cabin guard-front                  |                |
| Wire net                           |                |
| Fine net                           |                |
| Cabin ROPS (ISO 12117-2)           |                |
| ROPS (Roll Over Protective Stru    | · ·            |
| *R220LC-9S/220-9S, R300LC-9S,      | R330LC-9S Only |
| Cabin lights                       |                |
| Cabin front window rain guard      |                |
| Sun visor                          |                |
| Track shoes                        | 20// \         |
| Triple grousers shoe (700 mm,      |                |
| Triple grousers shoe (800 mm,      |                |
| Triple grousers shoe (900 mm,      |                |
| Double grousers shoe (700 mm       |                |
| Full track rail guard - High wall  | •              |
| Lower frame under cover (Addition  | onal)          |
| Pre-heating system, coolant        |                |
| Tool kit                           |                |
| Rearview camera                    |                |
| Seat                               |                |
| Mechanical suspension seat wi      |                |
| Hi-mate (Remote Management Sy      | ystem)         |
| Fuel warmer                        |                |
| Air compressor                     |                |
| Rear work lamp                     |                |
| Precleaner                         |                |
| 4 Pattern changer                  |                |
| Cabin Rain Guard                   |                |
| MCV Under Cover                    |                |

- $\mbox{\ensuremath{\star}}$  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.

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