STANDARD EQUIPMENT

- ISO Standard cabin
- All-weather steel cab with 180º visibility
- Safety glass windows
- Rise-up type windshield wiper
- Sliding fold-in front window
- Sliding side window
- Lockable door
- Hot & cool box
- Storage compartment & Ashtray
- Transparent cabin roof-cover
- CD/MP3 Player
- Handsfree mobile phone system with USB
- Sun visor
- Computer aided power optimization (New CAPO) system
- 5-power mode, 2 work mode, User mode
- Auto deactivation & one-touch deactivation system
- Auto warm-up system
- Auto overheat prevention system
- Automatic climate control
- Full automatic temperature controller
- Defroster
- Self-diagnosis system
- Starting And air & heat heated 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
- Warning
- Check engine
- Overload
- Communication error
- Low battery
- Air cleaner clogging
- Indicators
- Max power
- Low speed/high speed
- Fuel warmer
- Auto idle
- Three outside rearview mirrors
- Fully adjustable suspension seat with seat belt
- Pilot-operated slidable joystick
- Console box height adjust system
- Rear front warning lights, one rear light
- Batteries (2 x 12V x 200 AH)
- Battery master switch
- Removable clean-out dust net for cooler
- Automatic swing brake
- Automatic fuel line deaeration
- Fuel pre-filter with fuel warmer
- Boom holding system
- Arm holding system
- Counterweight (9,200kg, 20,280lb)
- Track shoes (600mm, 24”)
- Track rail guard
- Automatic swing brake
- Accumulator for lowering work equipment
- Electric transducer
- Lower frame under cover (Normal)
- Bucket Tap (G80)
- Trip alarm

OPTIONAL EQUIPMENT

- Fuel filter pump (90 L/min)
- Beacon lamp
- Safety lock valve for boom cylinder with overload warning device
- Safety lock valve for arm cylinder
- Preheating piping kit (breaker, etc.)
- Double acting piping kit (breaker, etc.)
- Quick coupler
- 12 volt power outlet (24V DC to 12V DC converted)
- Booms
  - Heavy duty boom (7.06m, 23’2”)
  - Short boom (5.09m, 19’11”)
  - Long boom (8.66m, 28’6”)
- Arms
  - Heavy duty arm (3.88m, 12’11”)
  - Super short arm (2.49m, 8’10”)
  - Short arm (2.96m, 9’11”)
  - Long arm (3.88m, 12’11”)
- Climate control
  - Air conditioner only
  - Heater only
  - Air conditioner & heater manually
- Cabin FOPS/FOG (ISO/DIS 10262)
- FOPS (Falling Object Protective Structure)
- FOG (Falling Object Guard)
- Cabin roof-steel cover
- Cabin lights
- Cabin front window rain guard
- Track shoes
  - Triple grooves shoe (700mm, 28”)
  - Double grooves shoe (750mm, 30”)
  - Triple grooves shoe (800mm, 32”)
  - Double grooves shoe (800mm, 32”)
  - Double grooves shoe (600mm, 24”)
  - Double grooves shoe (700mm, 28”)
- Full track rail guard
- Lesser frame under cover (Optional)
- Air heating system (incubator)
- Tool kit
- Operator suit
- Auxiliary camera
- Seat
- Mechanical suspension seat
- Air suspension seat with heater
- Air suspension seat
- Pattern change valve (2 patterns)
- Hi-mate (Remote Management System)

STANDARD EQUIPMENT

- Black-out windows
- Tool kit
- Operator suit
- Rearview camera
- Seat
- Pattern change valve (2 patterns)
- Hi-mate (Remote Management System)

OPTIMAL EQUIPMENT

- Fuel filter pump (90 L/min)
- Beacon lamp
- Safety lock valve for boom cylinder with overload warning device
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* Standard and optional equipment may vary. Contact your Hyundai dealer for more information. The machine may vary according to International standards.
* 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.
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!

### 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

### Engine Technology
- Proven, reliable, fuel efficient Cummins Tier III QSM11 engine
- Electronically controlled for optimum fuel to air ratio and clean, efficient combustion
- Low noise / Auto engine overheat 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 / See-through upper skylight for visibility and ventilation
- Larger right side glass, now one piece, for better right visibility
- Safety glass windows on all sides - less expensive than (polycarbonate) and won’t scratch or fade
- Closeable sunshade for operator convenience / Reduced front window seam for improved operator view

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

#### Improved Suspension Seat / Console Assembly
- 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 cameras are integrated into monitor.
- 3 power modes : (P) Power, (S) Standard, (E) Economy, 2 work modes : Dig & Attachment, (U) User mode for operator preference
- Enhanced self-diagnostic features with GPS download capability
- One pump flow or two pump flow for optional attachment now selectable through the cluster / New anti-theft system with password capability
- 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 7A series
- RMS (Remote Management System) works through GPS/satellite technology to ultimately provide better customer service and support.
Preference

Operating a 9 series is unique to every operator. Operators can fully customize their work environment and operating preferences to fit their individual needs.

*Photo may include optional equipment.

Operator Comfort

In 9 series cabin you can easily adjust the seat, console and armrest settings to best suit your preferred comfort level. Seat and console position and height can be set together and independent from each other. Other preference settings that add to overall operator comfort include the full automatic high capacity air conditioning system and the CD/MP3 radio.

Reduced Stress

Work is stressful enough. Your work environment should be stress free. Hyundai’s 9 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 CD player, AM/FM stereo and MP3 capabilities, plus remotely located controls is perfect for listening to music favorites. Operators can even talk on the phone with the hands-free cell phone feature.

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.

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.
Precision

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

Computer Aided Power

The engine horsepower and hydraulic horsepower together in unison through the advanced CAPO (Computer Aided Power Optimization) system, flow for the job at hand. Operator can set their own preferences for boom or swing priority, power mode selection and optional work tools at the touch of a button. The CAPO system also provides complete self diagnostic features and digital gauges for important information like hydraulic oil temperature, water temperatures and fuel level. This system interfaces with multiple sensors placed throughout the hydraulic system as well as the electronically controlled engine to provide the optimum level of engine power and hydraulic flow.

- **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 and engine power based on load demand. Three unique power modes provide the operator with custom power, speed and fuel economy.

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

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

Improved Hydraulic System

To achieve optimum precision, Hyundai redesigned the hydraulic system to provide the operator with super fine touch and improved controllability. Improved pump flow control reduces flow when controls are not being used to minimize fuel consumption. Improved spool valves in the control valve are engineered to provide more precise flow to each function with less effort.

Improved hydraulic valves, precision-designed variable volume piston pumps, fine-touch pilot controls, and enhanced travel functions make any operator running a 9 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.

*Photo may include optional equipment.*
9 series is designed for maximum performance to keep the operator working productively.

**Performance**

**Structure Strength**

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

**CUMMINS QSM11 Engine**

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

**Heavy-duty strength**


The QSM11 is built to withstand the toughest work environment. Bearings have more surface area to handle higher loads with greater durability. The exhaust manifold allows for heat expansion and contraction, eliminating metal stress fractures. Reduced friction in the power cylinder means longer life and increased power output. From the structurally reinforced block to the stiffened gear housing, the QSM11 is built stronger to last longer.

**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.

*Photo may include optional equipment.*
Profitable

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

*Photo may include optional equipment.

Hi-mate (Remote Management System)

Hi-mate, Hyundai’s proprietary remote management system, provides operators and dealer service personnel access to vital service and diagnostic information on the machine from any computer with internet access. Users can pinpoint machine location using digital mapping and set machine work boundaries, reducing the need for multiple service calls. Hi-mate saves time and money for the owner and dealer by promoting preventative maintenance and reducing machine downtime.

Fuel Efficient

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

Easy Access

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

Extended Life Components

9 series excavators were designed with extended lubricant bush life & ultra high molecular weight polymer shim (wear resistant, noise reducing), extended-life hydraulic filters (1,000hr), long-life hydraulic oil (5,000hr), more efficient cooling systems and integrated preheating systems to long extend service intervals, minimize operating costs and reduce machine down time.
### Specifications

#### ENGINE
- **Model**: MINI MINI
- **Type**: Water-cooled, 4-cylinder Diesel, 6-Cylinder in-line, Direct injection, Turbocharged, Charge air cooled, Low emission
- **Rated power**:
  - 357 HP (266 kW) / 1,900 rpm
  - 342 HP (255 kW) / 1,900 rpm
  - 362 HP (266 kW) / 1,900 rpm
  - 347 HP (255 kW) / 1,900 rpm
- **Max. torques**:
  - 170 Nm (127 lb-ft) / 1,400 rpm
- **Bore x Stroke**:
  - 125 mm x 147 mm (4.92” x 5.79”)
- **Piston displacement**:
  - 10.80 cc (0.67 cu.in)
- **Batteries**:
  - 2 x 12V 200 Ah
- **Starting motor**:
  - 24V, 3.0 kW
- **Alternator**:
  - 24V, 70Amp

#### HYDRAULIC SYSTEM
- **Main pump**:
  - Type: Variable displacement tandem-as piston pumps
  - Max. flow:
    - 2 x 360 l/min (05.1 US gpm/72.9 UK gpm)
  - Sub-pump for pilot circuit:
    - Gear pump
- **Hydraulic tank**:
  - Swing device - gear oil
  - Engine oil
  - Engine coolant
  - Fuel tank
- **Hydraulic system**:
  - Cross-sensing and fuel saving pump system

#### COOLANT & LUBRICANT CAPACITY
- **Rated flywheel horsepower**:
  - 1,210 HP (902 kW)
- **Cross-sensing and fuel saving pump system**
- **Rating**:
  - UK gal
    - 136.6
  - US gal
    - 11.0
  - Imp gal
    - 8.3
  - Imperial
    - 1.1

#### 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.**

#### OPERATING WEIGHT (APPROXIMATE)
- **Operating weight, including 7,000mm (22’ 10”) boom, 3,380mm (11’ 1”) arm, SAE heaped 2.5m3 (28.1 yd3) bucket**:
  - 48,910 kg (107,830 lb)
  - 48,100 kg (106,040 lb)
  - 47,900 kg (106,040 lb)
  - 46,700 kg (102,960 lb)

#### MAJOR COMPONENT WEIGHT
- **Upper structure**:
  - 10,940 kg (23,992 lb)
  - **Countermass**:
    - 2,000 kg (4,409 lb)
  - **Boom with arm cylinder**:
    - 1,410 kg (3,106 lb)

#### OPERATING FORCES
- **Shovels**:
  - **Width (in)**:
    - 600 mm (24”)
    - 700 mm (28”)
    - 800 mm (32”)
    - 900 mm (36”)
    - 1,000 mm (40”)
- **Ground pressure**:
  - 0.57 (8.11)
  - 0.72 (10.24)

#### ATTACHMENT
- **Boom and arm lengths**:
  - 12/13
  - **Capacity**:
    - 3,900 mm (12’ 9”)
  - **Material**:
    - 2.000 kg/m3 (12’ 9”)
    - 1.100 kg/m3 (12’ 9”)

#### DIGGING FORCE
- **Boom length**:
  - **Weight (in)**:
    - 4,200 (13’ 9”)
    - 2,900 (9’ 6”)
  - **Power (in)**:
    - 3,380 (11’ 1”)
    - 4,000 (13’ 1”)

#### BUCKETS
- **All buckets are welded with high-strength steel.**

#### CONTROL
- **Pilot pressure operated joysticks and pedals with detachable lever provide almost effortless and fatigue-free operation.**
- **Pilot control**:
  - **Two joysticks with one safety lever**
  - **Boom and bucket (ISO)**
  - **Traveling and steering**:
    - Two levers with pedals
  - **Engine throttle**:
    - Electric, Dial type
  - **Lights**:
    - Four lights mounted on the boom, one light mounted under the battery box, one light mounted under the cab, one light mounted on the cab.

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

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12/13
### Dimensions & Working Range

**R480LC-9 DIMENSIONS**

- **Track gauge**: 1,295 (4' 3")
- **Overall height of cab**: 600 (24")
- **Height of boom**: 12,040 (39' 6")
- **Height of arm**: 11,770 (35' 3")
- **Height of slewing**: 11,110 (36' 1")
- **Height of front**: 7,820 (25' 8")
- **Height of rear**: 600 (24")
- **Height of load**: 10,270 (33' 6")

**R480LC-9 WORKING RANGE**

- **Arm length (20' 11")**: 12,050 (36' 6")
- **Arm length (27' 9")**: 11,770 (35' 3")
- **Arm length (34' 3")**: 11,110 (33' 8")
- **Arm length (41' 11")**: 10,270 (31' 2")

### Lifting Capacity

#### R480LC-9

- **Load point**: 10,400 (34' 0")
- **Load radius**: 10,400 (34' 0")
- **Load capacity**: 8,500 (28' 1")

#### R480LC-9

- **Load point**: 10,400 (34' 0")
- **Load radius**: 10,400 (34' 0")
- **Load capacity**: 9,000 (30' 0")

#### Lifting Capacity

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.
Lifting Capacity

**R480LC-9**

Rating over-front: \(\text{Rating over-side or 360 degree}^\dagger\)

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<tr>
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3. The load point is a hook located on the back of the bucket.
4. \(^\dagger\) indicates the load limited by hydraulic capacity.