

**Robex** Equipped with EU Stage IIIB Engine

**140LC-9A**  
**145LCR-9A**

**160LC-9A**  
**180LC-9A**

MOVING YOU FURTHER

**HYUNDAI HEAVY INDUSTRIES**



 **HYUNDAI**

# PRIDE AT WORK

Hyundai Heavy Industries strives to build state-of-the-art earthmoving equipment to give every operator maximum performance, optimal controllability, versatile machine settings and proven technology.

*Be proud of your work with Hyundai!*



\*Photo may include optional equipment.



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## Machine Walk-Around

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### Engine Technology

Proven, reliable, fuel efficient, low emission and low noise Perkins Tier 4 Interim & EU Stage IIIB engine.

### Hydraulic System Improvements

New patented hydraulic system for maximum controllability / Automatic boom vs. swing priority for maximum productivity / Automatic power boost for extra power / Improved arm & boom regeneration for higher speed and better efficiency.

### Pump Compartment

Powerful and reliable axial piston pumps.

Compact solenoid block to control: 2 speed travel, power boost, boom priority, arm regeneration and safety lock.

### Enhanced Operators' Cab

#### Improved Visibility

Spacious cabin with large glass area.

Roll-up type sun visor for operators' convenience.

#### Rigid Cabin Construction

New steel tube construction for operator safety, higher level of protection and increased durability. All windows consist of Safety glass.

#### Improved Seat & Console

Ergonomic joysticks with auxiliary buttons for attachment control.

Standard mechanic suspension with heater or optional air suspension.

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

New Color LCD Display with easy to read digital gauges for hydraulic oil temperature, coolant temperature and fuel level.

A new developed rear-view camera is integrated.

3 power modes: Power / Standard / Economy, 2 work modes : Digging / Attachment, User mode for saving operators' preferences.

One pump flow or two pump flow summation for attachment control /

Anti-theft system with password entry.

Air conditioning and heater with automatic climate control.

Hi-Mate (Remote Management System) enables machine owners to follow-up machine performance, to verify machine location and to access diagnostic information on a distance through any internet connection.

### Robust Undercarriage

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

# PRECISION

Innovative hydraulic system technologies make the 9A series excavator fast, smooth and easy to control. With a precise machine response, the 9A series excavators are offering optimal performance and maximum productivity.

\*Photo may include optional equipment.



## Computer Aided Power

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

### Power Mode

Power-mode maximizes machine speed and power for maximum productivity. Standard-mode provides a reduced, fixed rpm for optimum performance and improved fuel economy. Economy-mode provides precise flow and engine power based on load conditions, for maximum fuel efficiency and controllability.

### Work Mode

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

### User Mode

Using the User-mode, the operator can customize engine speed, pump output, idle speed and other machine settings according to personal preferences.

## Hydraulic System Improvements



To achieve optimum precision, Hyundai redesigned the hydraulic system to provide the operator with top level controllability. Newly improved features include arm and boom regeneration, enhanced control valve technology and innovative auto boom and swing priority for best performances in any application.



### Auto Boom vs. Swing Priority

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

# PERFORMANCE

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

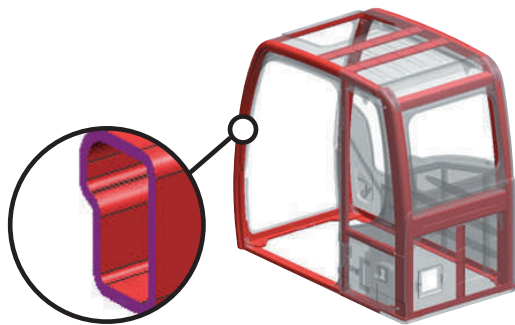


\*Photo may include optional equipment.



## Track Rail Guard & Adjusters

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



## Structural Strength

A reinforced cabin, with ROPS-certificate up to R480LC-9A, is designed with slimmer but stronger tubing to enhance operator safety and visibility.



## Perkins 1204E Engine

Tier 4 interim, four cylinder, 4 cycle, turbo-charged, charge air cooled Perkins 1204E engine provides maximum power, reliability, optimum fuel economy, and reduced emissions. Electronically controlled fuel injection and diagnostic capabilities add to the engines efficiency and serviceability.

## Easy to maintain engine components

The cooling and preheating system are provided for optimum and immediate operation, guaranteeing longer life for the engine and hydraulic components. Servicing of the engine and hydraulics is considerably simplified due to total accessibility.

## Better Performance

Using DPF (Diesel Particulate Filter) enables uncompromised, fuel economy and reduced cooling pack size, because the engine calibration does not solely need to be focussed on low particulates. By using mainly passive regeneration and low back pressure aftertreatment designs fuel economy is not negatively impacted.

## Integrated aftertreatment without operating impact

The 1204E engines have fully transparent regeneration strategies and service free DPF, completely seamless to the operator.

## One solution for all regions

Area mandating the use of DPF are increasing and european air quality directive will drive more non-attainment zones. Because our products use DPFs, our customers don't have to offer a retrofit DPF option to allow machines to operate in these territories.

# PREFERENCE

An operator, who sets his machine to his needs, takes pleasure in his work. 9A Series respects operator preference with regards to comfort, ease-of-use and controllability.



\*Photo may include optional equipment.



## Spacious Cabin with Excellent Visibility

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



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## Operator Comfort

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



## Stressless

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



## Easy to Use Cluster

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

## Monitor Tilt Range



# PROFITABILITY

9A series machines are designed to maximize profitability through improved fuel efficiency, enhanced service features and long-lasting components.



\*Photo may include optional equipment.

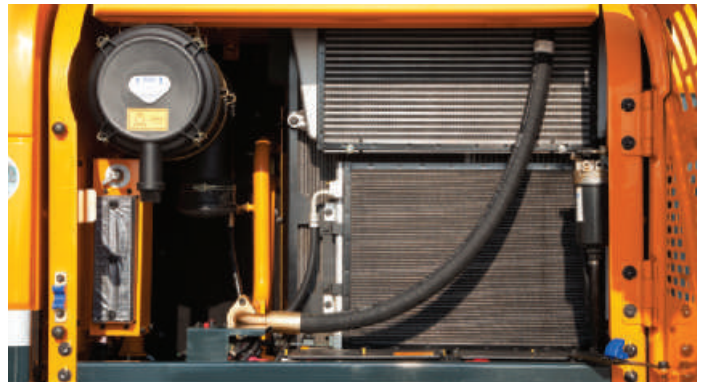
## Fuel Efficiency

9A series excavators are developed to do more work with less fuel. Innovations like the variable speed fan, three-stage auto decel system and the new economy mode are saving fuel and reducing the impact on the environment.



### Hi-mate (Remote Management System)

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



## Easy Access

Access from ground level to filters, lubrication fittings, fuses, drains and machine computer components, combined with wide open compartments makes service more convenient on the 9A series.

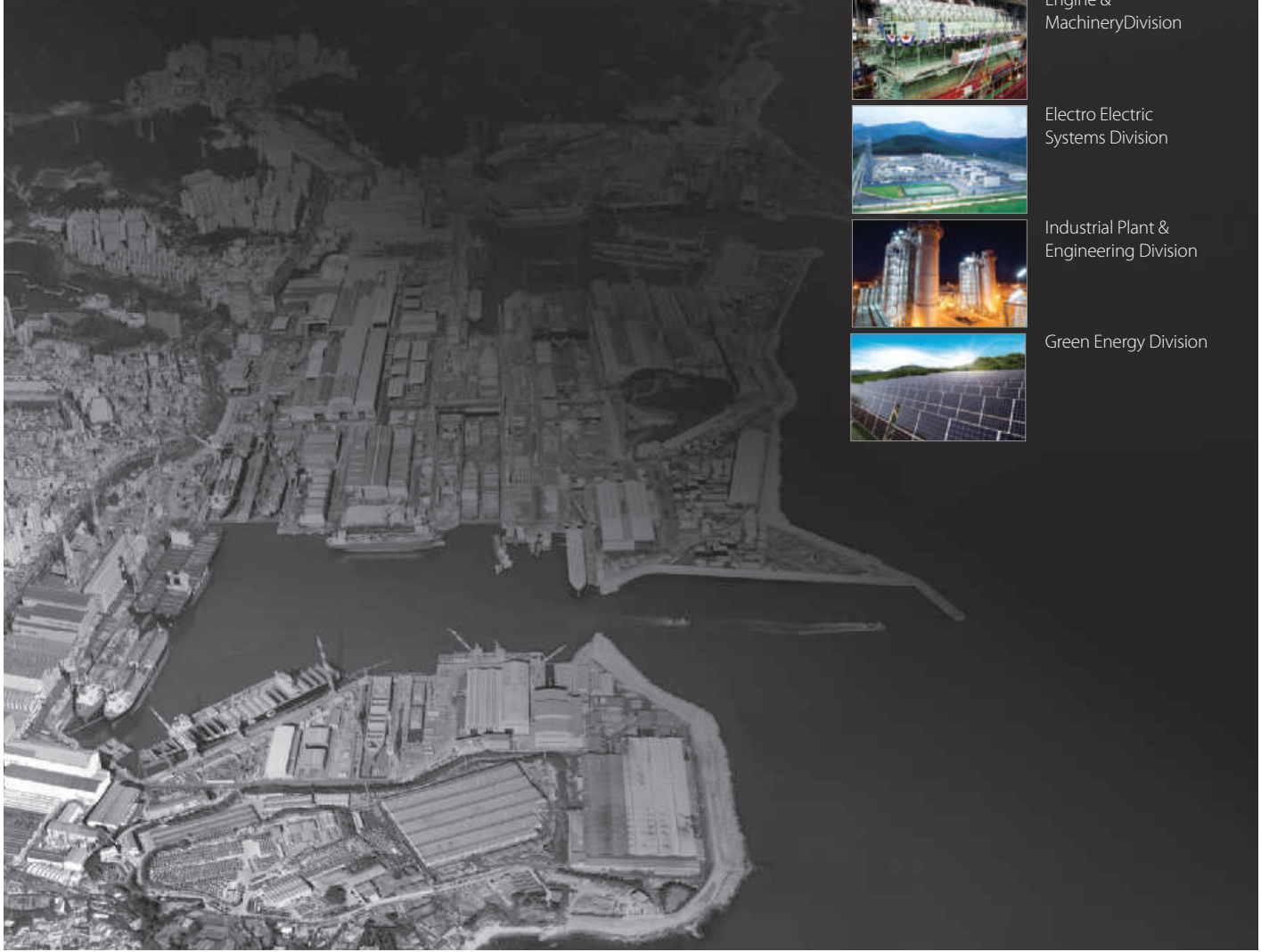
## Extended Life of Components



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

# Company Organization

Hyundai Heavy Industries (HHI) had its groundbreaking ceremony in March 1972. HHI spreads across 2,300 acres that cover 1,500 acres of its production facilities and 800 acres of amenities (apartment complexes, schools, and recreational centers). Since the successful construction of its first two 260,000 DWT supertankers in 1974, HHI has built and delivered almost every kind of ship to customers the world over. Backed by technology and experience acquired through shipbuilding as well as streamlined modern facilities and a highly skilled work force, HHI has diversified its business activities from shipbuilding into other heavy industrial fields. On this vast compound, HHI operates various business lines: Shipbuilding, Engine & Machinery, Offshore & Engineering, Industrial Plant & Engineering, Electro Electric Systems, Construction Equipment and Green Energy, ISO 9001 & ISO 14001 certified.



Shipbuilding Division



Construction Equipment Division



Offshore & Engineering Division



Engine & Machinery Division



Electro Electric Systems Division



Industrial Plant & Engineering Division



Green Energy Division

- \* 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.

PLEASE CONTACT



Hyundai Heavy Industries Europe N.V.

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