

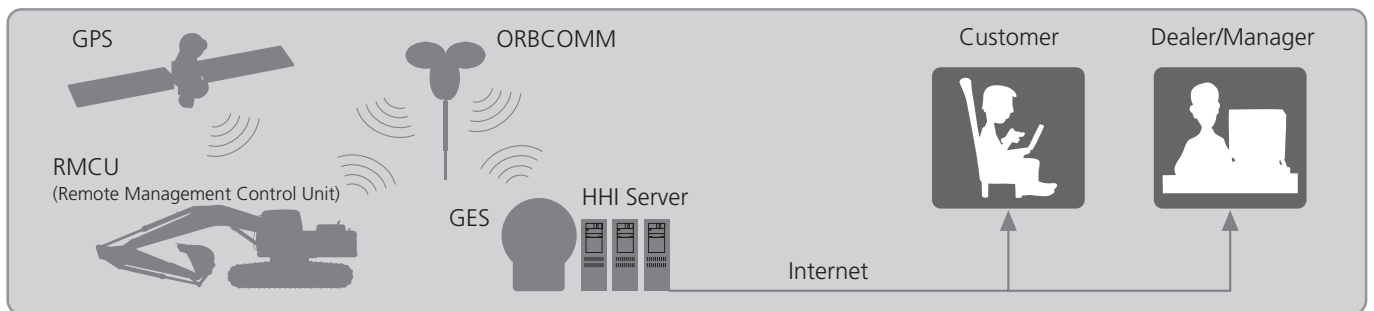


# Hi-mate

Remote Management System



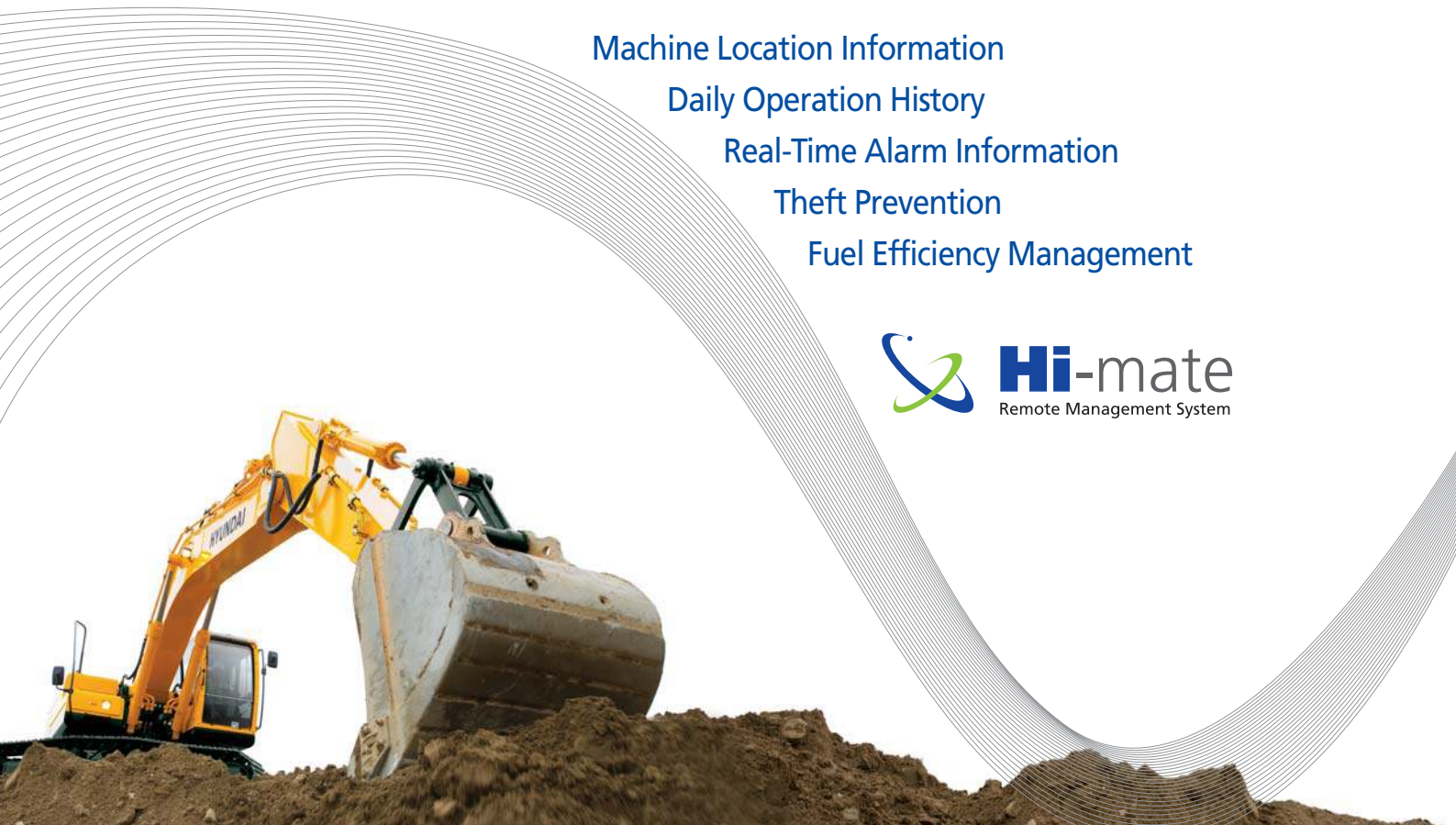
## How it Works



Hi-mate, Hyundai's newly developed remote management system, utilizes GPS-satellite technology to provide customers with the highest level of service and product support available. Hi-mate enables users to remotely evaluate machine performance, access diagnostic information, and verify machine locations at the touch of a button.

## Benefits of Hi-mate

- Machine Location Information
- Daily Operation History
- Real-Time Alarm Information
- Theft Prevention
- Fuel Efficiency Management





Path: Operation Information > Location Information

Hi-mate

Location Information

Model	Serial No	Delivery date	Service start date	Service end date	Country	Dealer
R210LC-9	9999	2008-07-01	2009-03-13	2011-03-13	U.S.A	J&P

Date: 2009-01-01 - 2009-03-20

Latest Location Information

Date: 2009-02-18 17:58  
 Latitude: N 40° 31' 51.85"  
 Longitude: W 75° 38' 29.18"  
 Region: U.S.A, Pennsylvania, Lehigh County, Breinigville

Date	Time	Latitude	Longitude	Country	Location
2009-02-18	17:58	N 40° 31' 51.85"	W 75° 38' 29.18"	U.S.A	Pennsylvania, Lehigh County, Breinigville
2009-02-18	15:34	N 40° 31' 51.85"	W 75° 38' 29.18"	U.S.A	Pennsylvania, Lehigh County, Breinigville
2009-02-18	15:33	N 40° 31' 51.85"	W 75° 38' 29.18"	U.S.A	Pennsylvania, Lehigh County, Breinigville
2009-02-18	15:31	N 40° 31' 51.85"	W 75° 38' 29.18"	U.S.A	Pennsylvania, Lehigh County, Breinigville
2009-02-18	15:13	N 40° 31' 51.85"	W 75° 38' 29.18"	U.S.A	Pennsylvania, Lehigh County, Breinigville
2009-02-18	10:16	N 40° 31' 51.85"	W 75° 38' 29.18"	U.S.A	Pennsylvania, Lehigh County, Breinigville
2009-02-18	08:11	N 40° 31' 51.85"	W 75° 38' 29.18"	U.S.A	Pennsylvania, Lehigh County, Breinigville

## Location Information

Up-to-date machine location information, including latitude, longitude, country and region is available through GPS-satellite technology. If machine is moved from one location to another, users can track the location by clicking on the "Machine Travel" menu.

Path: Operation Information > Daily Report

Hi-mate

Daily Report

Model	Serial No	Delivery date	Service start date	Service end date	Country	Dealer
R210LC-9	9999	2008-07-01	2009-03-13	2011-03-13	U.S.A	J&P

Date: 2009-02-17

Hourmeter

Hourmeter Local date Local time  
 1165 H 2009-02-17 GMT-5

Working Hours

History of Engine operation

Engine operation 8h 20m  
 Actual working 5h 53m  
 Travelling 1h 29m

Fuel (L) [Unit: L]

53% 266

Key On / Off Time

First key on time 06:11 AM  
 Last key off time 06:52 PM

## Daily Report

Detailed information regarding the machines daily operating history is available on the daily report section. Included in this report is: hourmeter, engine hours, fuel remaining, time of key-on and key-off, and machine location visible on a digital map.

Path: Operation Information > Geo-Fencing

Hi-mate

Geo-Fencing

Model	Serial No	Delivery date	Service start date	Service end date	Country	Dealer
R210LC-9	9999	2008-07-01	2009-03-13	2011-03-13	U.S.A	J&P

Date: 2009-01-01 - 2009-03-20

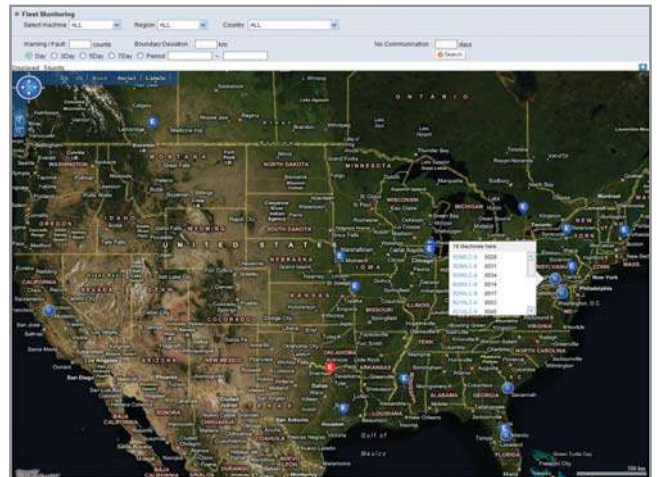
Status

Geo-Fencing status  
 Geo-Fencing On  
 Latest Location Date  
 2009-02-18 17:58:00  
 Set time  
 2009-01-23 12:28  
 Latitude / Longitude  
 N 40° 31' 51.85" W 75° 38' 29.18"  
 Country / Region  
 U.S.A, Pennsylvania, Lehigh County, Breinigville  
 Geo-Fencing radius  
 0.4 km

Date	Time	Latitude	Longitude	Country	Region	Alarm
2009-02-18	18:55	N 40° 41' 45.49"	W 75° 37' 57.4"	U.S.A	Pennsylvania, Lehigh County, Newville	0.6 km Boundary Deviation
2009-02-15	13:51	N 40° 31' 45.55"	W 75° 37' 36.53"	U.S.A	Pennsylvania, Lehigh County, Breinigville	1.1 km Boundary Deviation
2009-02-14	17:11	N 40° 31' 48.91"	W 75° 37' 34.14"	U.S.A	Pennsylvania, Lehigh County, Breinigville	1.7 km Boundary Deviation
2009-02-13	14:21	N 40° 32' 2.54"	W 75° 37' 36.77"	U.S.A	Pennsylvania, Lehigh County, Breinigville	2.1 km Boundary Deviation
2009-02-11	10:31	N 40° 31' 58.91"	W 75° 37' 37.34"	U.S.A	Pennsylvania, Lehigh County, Breinigville	2.5 km Boundary Deviation

## Geo-Fencing

Users can program a virtual geo-fence to prevent the machine from leaving a specified geographic area. Once Geo-Fencing is set, a red circle is visible around the machine icon on the map. If the machine is moved outside the Geo-fence boundary, an alarm is triggered and submitted to Hi-mate, notifying the user of the time and date of occurrence.



## Fleet Monitoring

For multiple machine owners, a fleet monitoring system provides real-time monitoring of machines plotted on a digital map. Current service status and machine location is represented by color coding and geographic location. If the machine icon is blue, then the machine is operating normally. If the machine icon is red, then the machine has logged an alarm. By simply clicking on the individual machine icon a user can view more detail regarding current status.

Hi-mate Management Information - Working Hour (Daily)

Working Hour (Daily)

Model	Serial No.	Delivery date	Service start date	Service end date	Country	Dealer
R210LC-9	9999	2008-07-01	2009-03-13	2011-03-13	U.S.A	JSP

Date: 2009-01-25 - 2009-02-17

Date	History of Engine operation	Hourmeter	Engine operation	Actual working	Traveling	Fuel level
2009-02-17	[Bar chart]	1155	9h 20m	5h 53m	1h 2m	5
2009-02-16	[Bar chart]	1156	9h 8m	5h 47m	1h 12m	9
2009-02-15	[Bar chart]	1147	6h 25m	4h 4m	0h 34m	8
2009-02-14	[Bar chart]	1140	7h 2m	4h 26m	0h 50m	8
2009-02-13	[Bar chart]	1133	9h 8m	6h 0m	0h 55m	5
2009-02-12	[Bar chart]	1124	9h 8m	5h 55m	0h 52m	10
2009-02-11	[Bar chart]	1115	9h 52m	6h 11m	0h 30m	5
2009-02-10	[Bar chart]	1106	9h 0m	6h 18m	0h 25m	10
2009-02-09	[Bar chart]	1097	9h 10m	6h 27m	0h 32m	7
2009-02-08	[Bar chart]	1088	6h 19m	4h 25m	0h 14m	5
2009-02-07	[Bar chart]	1081	7h 9m	4h 20m	0h 42m	7

## Working Hour Summary

Daily working hour history is displayed in a color-shaded graph and sorted by date. Each day displays engine hours logged at 30 minute intervals, hourmeter, actual working hours, machine travel hours, and fuel level information.

Hi-mate Management Information - Working Hour (Mode)

Working Hour (Mode)

Model	Serial No.	Delivery date	Service start date	Service end date	Country	Dealer
R210LC-9	9999	2008-07-01	2009-03-13	2011-03-13	U.S.A	JSP

Date: 2008-12-01 - 2008-12-31

Working Hours Summary

Engine operations	Actual working	Breaker	Crusher	Traveling	Idling
24h 32m	12h 49m	0h 4m		5h 55m	63h 4m

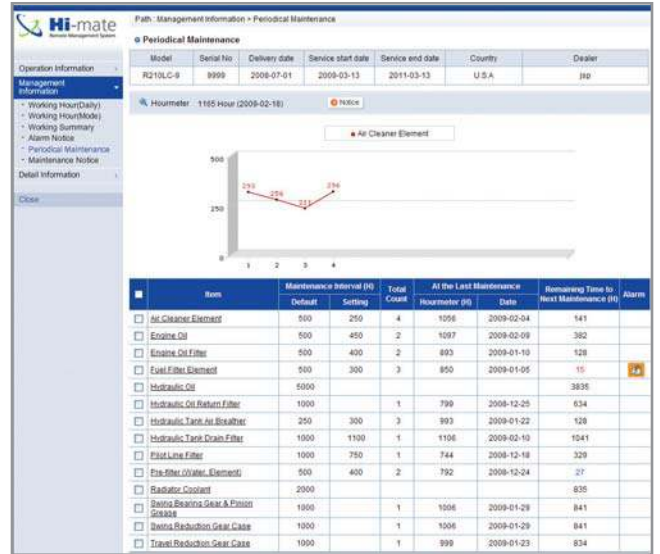
Mode (STANDARD) Summary

Used mode	Actual working or traveling	Remark
Econo	24h 27m	
Standard	9h 49m	
Power	130h 24m	

## Working Hour (Mode)

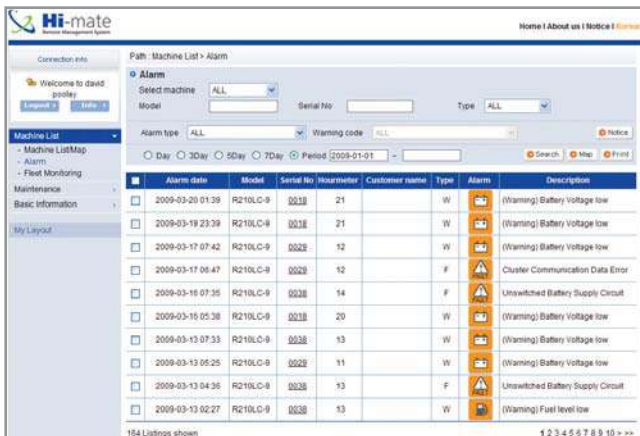
By accessing the working hour (Mode) section, users can view the following detailed operating information:

- total working hours
- engine operating hours
- actual working hours
- machine traveling hours
- engine idling hours
- auxiliary attachment work hours (breaker or crusher)
- actual hours of most commonly used work mode



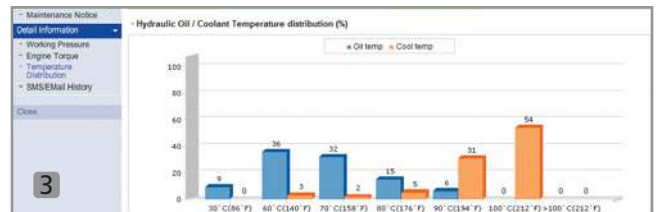
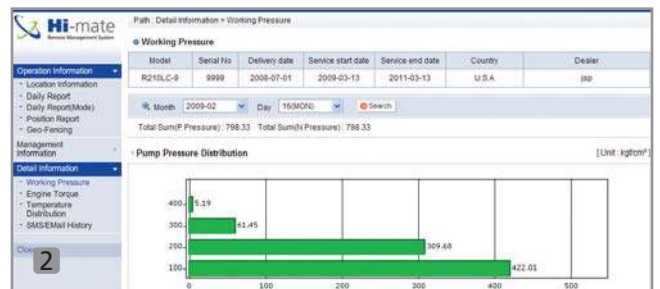
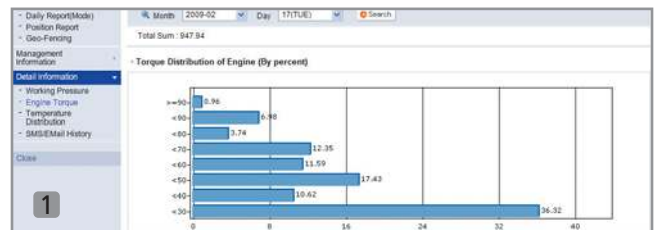
## Periodical Maintenance

Users can monitor machine service and maintenance history. Information available includes maintenance interval, corresponding hourmeter and maintenance item replacement date. A replacement information chart facilitates easy tracking of maintenance history. Each item is represented by a two-color system: - Blue indicates less than 30 hours until next maintenance interval. - Red indicates scheduled maintenance interval is past due.



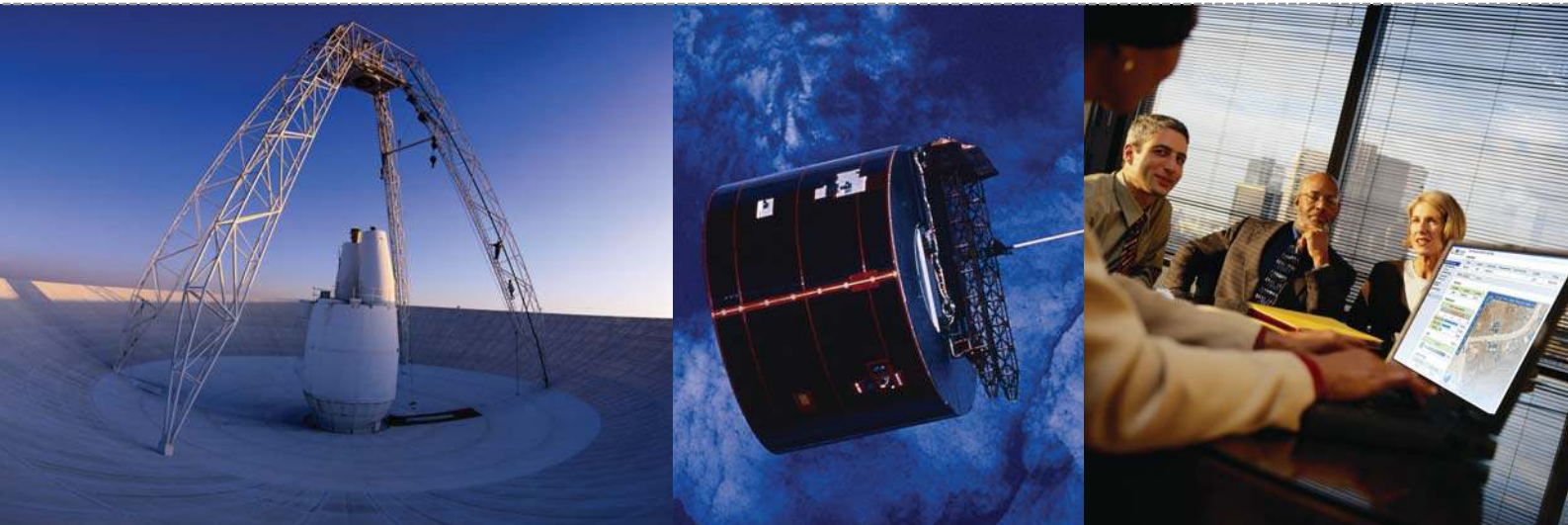
## Alarm Information

All machine failures and corresponding alarm history are stored on the system and sorted by date and description. Machine location can be identified through digital mapping technology. Users can also send SMS (Text) messages or emails to customers or dealers. All machine failure and alarm information can be downloaded for further analysis.



## Detailed Information

- 1 Detailed information for engine torque distribution.
- 2 Pump pressure distribution.
- 3 Hydraulic oil temperature and coolant temperature distribution.



## System requirements

### Hardware

- IBM PC/AT compatible
- CPU: Intel Pentium 300 MHz or above (recommended)
- Memory: 256 MB or above (recommended)
- HDD: 1 GB usable hard disk space (recommended)
- Display: 16-bit, 1024 x 768 or higher (recommended)

### Software

- OS: Windows Vista/Windows XP/Windows 2000
  - Browser: Internet Explorer 6.0 SP1, Firefox 3.0, Safari 3.2 or above
  - Electronic authentication not required for customers.
- Required for distributors and HHI users.

### Network Connection

Connection to Internet or Hi-mate Intranet is required.

Contact your local Hyundai Distributor for additional information.

PLEASE CONTACT



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