

Fleet Management System

FMS is a real time fleet production monitoring and information system. It has been designed for those mines that require accurate production statistics and information on their fleet—trucks, loading equipment, and all auxiliary equipment. The system also incorporates vital signs monitoring and operator fault reporting. The system uses Global Positioning Satellites (GPS) for truck identification and relative loader position, as well tracking the location of the equipment throughout the mine.

Vital operational information is provided to both the truck and loader operators in real time. Information such as “how many tons have been loaded?” and “what is required to correctly load the truck?” is provided to the loader operator during the loading cycle.

A full suite of Windows based reporting and analysis software is provided as part of the system. This software is easy and intuitive to use. Anyone familiar with Microsoft Windows can use the FMS application software with a few hours of on-site training and no specialized courses.

Production Statistics

- Cycle, spot load, dump and travel times
- Weighing while loading to ensure correct load tracking
- Tracking all production delays
- Time and location depended delays (i.e. workshops and fueling)

Material Management

- Volume, type, load and dump points



GPS Based System

- Real-time moving map display of all equipment
- Continuous tracking of equipment
- Speed, distance, location determined by GPS

Truck-Loader Communication

- Transmits weight and load C.O.G. from the truck weighing system to the loader
- Relative position of truck and loader not critical

Interface to Other On-Vehicle Systems

- Weighing, engine, transmission, tires, and wheel motors—CENSE, DDEC, STATEX III, TPMS, VIMS, and others

Operator Display

- LCD touch screen - data entry and display
- Operator ID
- Weight and material information
- Cycle and operating times--last hour and shift
- Delay codes from user defined list
- Voice Synthesizer
- Prompts operators for inputs
- Warn operators of problems

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Telemetry System

- Real time data collection by radio
- Utilizes Windows 2000 based software to manage data and radios
- Common with other Tritronics Monitor Systems
- High speed Spread Spectrum radios
- Email messages to equipment

Maintenance

- Alarms displayed and logged
- Pre-start checks via radio
- Fault reporting via radio
- Engine hours logged and reconciled
- Fuel management screens and reports

Office Report and Analysis Software

- Based on a Microsoft SQL Server database
- Easy to export data to Word, Excel or MS Access
- Seamlessly up-load data into MIMS or SAP mine management software
- No high cost training (Windows driven)
- Full set of reports and graphs are provided as standard
- The mine or Tritronics can generate special reports and graphs as required
- Automatic generation and email transmission/printing of reports
- Modem/email access for upgrades and remote support

Graphical Pit Display

- A real-time pit display is available which shows the location and status of all equipment in the mine

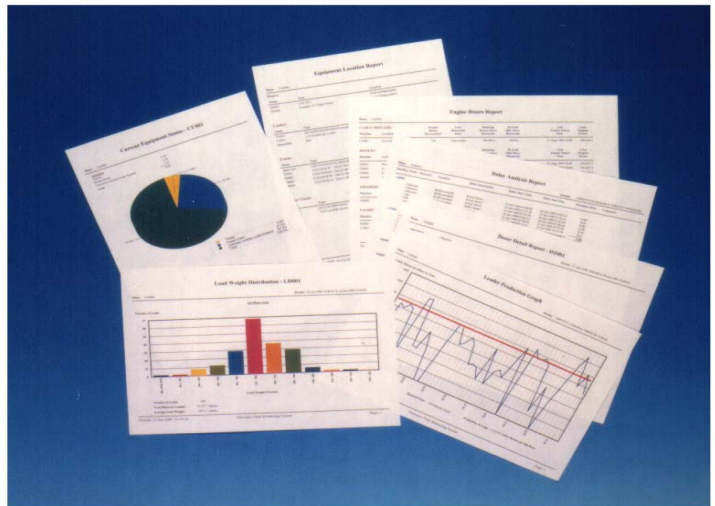
Supervisor's Remote Monitor

- Access to all current data via radio
- Allows supervisor to monitor status, alarms, and productivity of all fleet equipment, draglines and drills while in the field

OPERATOR TOUCH SCREEN



IMS DATABASE REPORTS



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