

Frontline Management Program

Just like everything, the mine must have a healthy ecosystem. Operations maintenance and everything associated are an ecosystem and all pieces must be efficient and healthy.

Around the world it does not matter if you have a 20-man surface mining operation or a 4000-man operation, the most key responsibility of a mining company is to train, scratch that, EDUCATE its employees, and for the most part companies do a decent job. Here is the kicker the best of the best companies does not even consider training their new production supervisors, new lead people or even the young engineers. Sure, we send them in front of Human Resources and tell them how to deal with people or what not to say to the workforce and how to make the workforce healthy and safe but what about that 100-million-dollar investment in equipment and the 50,000 ounces of gold in the ground that's going to cost us \$1100 dollars an ounce to retrieve at \$1250 an ounce to sell.

We deplete our profit by not educating our front-end leaders and planners in basic mine site performance and machine application.

Course Outline – General Description (Subject to Course Title)**Base Module****Introduction**

- Mining and the effective supervisor evolution
- Goal of the program.
- Modules included in the program.

Supervisor Fundamentals Human Resources

- Standards to supervise by.
- Mine Production Supervisor Purpose.
- Characteristics of an effective Supervisor.
- Competent Person USA definition.
- Task definition
- What an effective Supervisor needs to know.
- Best management Practices

Production Theory

- Component 1
- Component 2
- Component 3
- Production considerations = power supply roadblocks
- Time and cost savings, Loader's example
- Bench turnover cycle of a work area
- Fundamentals of Earthmoving
- Workplace Inspection
- Planning - Shift setup

Frontline Management Program

- Shift Handover
- Shift Change Planning
- Shift Change Execution
- Park up design

Haul Road and Work Area Management

- Road design
- Super Elevations
- Road design for drainage
- Safe effective road width
- Effective grade considerations
- Rolling resistance positive and negative effects
- Grade consistency
- Grade and the effective braking capacities
- Haul routes and intersections
- Haul Road Maintenance
- Dust Control out of control.

Production analysis

- Tools and techniques

Cost of doing business

- Machine, Operator cost of owning.
- Tires
- Fuel
- Maintenance
- Health event monitoring
- Loss due to not educating.

Independent modules for add on LOADING UNITS**Loading units Excavator**

- Determining loading effectiveness single or split bench
- Single bench preparation and general guidelines
- Floor cleanup and support
- Truck spotting, staging and exchange times.
- Expected cycle times.

Loading unit Hydraulic Shovel

- Grade, Grade, Grade!
- Effective dig face management
- Setups and dig patterns.
- Floor cleanup and support
- Truck spotting, staging and exchange times.
- Expected cycle times.
- Double sided loading

Loading Units Electric Shovel

- Grade, Grade, Grade!
- Effective dig face management
- Setups and dig patterns.
- Floor cleanup and support cable management (management induced tonnage blocker)
- Truck spotting, staging and exchange times.



Productive Minesite and Machine Application

Frontline Management Program

- Expected cycle times.
- Double sided loading

Loading Unit Wheel Loader

- Grade, Grade, Grade!
- Dig face management.
- Truck spotting, staging and exchange times.
- Expected cycle times.

Independent modules for add-on HAULERS choose one.

Mechanical drive

- Application considerations, what to look for.
- Baking Systems
- Payload and Brakes
- Braking duration and considerations
- Machine use and abuse health effects and safety
- Expectations support dumps, crusher, loading unit.

Electric Drive

- Application considerations, what to look for.
- Braking systems
- Payload and Brakes
- Speed and grade considerations
- Machine use and abuse health effects and safety
- Expectations support dumps, crusher, loading unit.

Included

Dozing (standard module not considered an add on)

- Production dozing
- Trap feeding
- Floor and road maintenance
- Ripping
- Dump maintenance setup and productivity
- Shovel cleanup

Example package request:

All base module topics included.

Dozing Included.

Add on Modules

- ☐ Hydraulic Excavator
- ☐ Hydraulic Shovel
- ☐ Electric Shovel
- ☐ Wheel Loader
- ☐ Mechanical Truck
- ☐ Electric Truck