

Announcement

04/08/2014

Joy Global Releases the Next Generation of SmartZone Proximity Detection for Continuous Miners in the US.

Joy Global has released the next generation of the SmartZone Proximity System® (“SmartZone 2.0”) for use on both new and rebuilt Joy Global mobile equipment in the United States. While SmartZone 2.0 is immediately available only for continuous miners, shortly SmartZone 2.0 is expected to be available for haulage vehicles and feeder breakers, allowing for a full section proximity detection solution. Joy Global is working on certification approvals in both China and South Africa.

Both SmartZone 1.0 and SmartZone 2.0 are wireless, electromagnetic and radio signal-based operator awareness systems for use in underground mines. These proximity detection systems alarm, both visually and audibly, when a worker enters a restricted area around the continuous miner (the “yellow zone”), and automatically disable the continuous miner when a worker enters a danger zone (the “red zone”). The SmartZone Proximity System was developed as a training aid to teach continuous miner operators to stay out of danger zones when working in the vicinity of a continuous miner, but it is expected that MSHA will soon require all continuous miners to be equipped with proximity detection systems.

One of the significant differences between SmartZone 1.0 and SmartZone 2.0 is that the transmitters and receivers have changed places. In both generations of the SmartZone Proximity System, mine personnel are equipped with a personal wearable device (PWD). The SmartZone 1.0 PWD is a transmitter which sends radio signals to receivers located on the continuous miner indicating that the person wearing the PWD is too close to the continuous miner. However, the SmartZone 2.0 transmitters are located on the continuous miner and the SmartZone 2.0 PWD functions as the receiver rather than the transmitter. Reversing the locations of the transmitter and receiver results in increased sensing ranges and system stability, along with quicker reaction times. SmartZone 2.0 has three times the sensing range of SmartZone 1.0 and is designed to work with both slow moving equipment and fast moving equipment.

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SmartZone 2.0 also provides many key differential advantages over other commercially available proximity detection systems. These advantages include dynamic compensation for environmental changes, mechanical and structural integration of Prox 2.0 into the continuous miner for optimal durability and dynamic red zones and yellow zones based on active machine functions. SmartZone Proximity System users can also obtain Proximity Detection System diagnostic information via Joy Global's FACEBOSS control platform.

Additional detailed information and sales tools are available for the SmartZone Proximity System through the product launch library which you can reach by clicking [here](#).

You can also contact:

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