Securing Remote Facilities

CHALLENGE
A Southeastern U.S. company operating rock and asphalt quarries required a reliable, simple, and cost-effective way for truck drivers and dispatchers to communicate — often while in different states.

SOLUTION
IP-based Aiphone IX Series video intercoms provide an instant sight-and-sound connection via the company network.

CASE STUDY
INDUSTRIAL
“The same Aiphone IX Series system intercoms are used to connect the dispatchers to each other, alleviating the need for several telephone lines. Our customer hadn’t even asked for that.”

Rex Free, Owner, Amber Video & Audio Service
The Situation

After loading their trucks at one of 10 Southeastern U.S. rock and asphalt quarries, drivers are required to stop at scales, weigh their loads, and check in with quarry dispatchers. Not all quarries had onsite dispatchers, sometimes the nearest dispatcher might be more than 100 miles away. For years, the quarries used IP-based video cameras to allow dispatchers to record license plate and other truck information and landline telephones to talk with drivers. But some drivers new to a quarry didn’t see the phone and would sit and wait as the lineup to use the scales grew longer.

The almost constant line of trucks also made it difficult for a dispatcher to step away from the desk, even for a few minutes. Noise from the trucks’ diesel engines and nearby quarry operations made communication difficult. And dispatchers required additional phone lines in order to talk with one another.

THE CHALLENGE

Connect truck drivers and dispatchers with an easy-to-use, networked communications system that could stand up to an often harsh, and always noisy environment.

REQUIREMENTS

• An intuitive system simple for all drivers to use, including those making their first visit to a quarry
• The ability to connect drivers with any currently available dispatcher on the company network
• A system able to operate outdoors in extreme heat and cold while delivering powerful, clear audio
“From my standpoint, there is nothing more pleasing than working with a company that supports you. The fact I can pick up the phone and talk to somebody that knows what I do, is great. If it’s an intercom, it’s Aiphone, period.”

Rex Free, Owner, Amber Video & Audio Services

THE SOLUTION

The Aiphone IX Series video intercom provided the necessary communications link. Dispatchers gained additional video information, while accepting or initiating calls to walk drivers through the weigh-in process. Calls from a quarry can now be handled by any dispatcher on the network — no matter how far away. Before leaving their desks, dispatchers can set stations to transfer calls to another office to avoid delays in processing drivers.

HOW THE IX SERIES CUT COSTS

• Extra equipment was eliminated from future installations
• Elimination of several costly telephone lines

As an added plus, the integrator suggested dispatchers use the IX Series intercoms to communicate with one another, resulting in the elimination of several costly telephone lines. The systems have performed so well there are plans to add more locations to handle intercompany communications.

To overcome ambient noise, the quarries’ systems integrator, Amber Video and Audio, added an amplifier and horn speaker to the first installed IX Series intercom. However the extra equipment was eliminated from future installations as the intercoms provided sufficient volume on their own. Also, the stainless steel IX Series models stood up to the rugged environment including limestone dust, extreme temperatures, and even the occasional grazing from a truck sideview mirror.