SAFEGUARDING WORKERS AT EMO PORT ROTTERDAM

CASE STUDY
EMO PORT

How to install a communications network to operate in a port where salt corrosion, the weather and coal dust constantly challenge equipment? This was the task facing EMO, which operates Europe’s largest dry bulk terminal for the unloading, storage and onward movement of iron ore and coal for the continent’s power and steel industries.

With EMO’s existing two-way radio system at life end, the company opted to install a new TETRA network and equip its users with Motorola Solutions’ new MTP3250 TETRA digital radios. The decision to go with the radio was made by a panel of users after they tested a range of handsets from different manufacturers. The panel was especially impressed by the MTP3250’s audio clarity and power, which the panel found to be superior to competing models. In addition, the team found the radios to be lightweight, comfortable to wear and easy to use, while the robust design – complete with anti-corrosive properties – was deemed ideal for the environment.

EMO’s teams now have access to flexible, durable and clear communications to operate safely and efficiently – even against the loudest background noise at the EMO site, messages are always heard. Users can also access up to 50 talk groups, and the digital technology provides delay-free voice calls. EMO is considering using GPS to locate users calling for assistance, and status messaging to improve work order management to drive even more value from its investment.

CUSTOMER PROFILE

Organisation
EMO

Location
The Netherlands

Industry
Port/logistics

Partner
Flash Services

Motorola Solutions’ products
- 255 MTP3250 two-way radios
- 255 Remote Speaker Microphones (RSM)
- 40 multi-unit chargers
- 45 dual-unit chargers
- 61 MTM800E TETRA mobile radios: 53 models for vehicles with touch-screen control via a PC and 8 desk models

USERS CHOOSE THE MTP3250 TO DELIVER SUPERIOR AUDIO IN A DEMANDING ENVIRONMENT
“We depend on two-way radios to ensure safe and efficient operations. That’s why we chose Motorola Solutions’ MTP3250 TETRA radios. The radios are very durable and provide the peace of mind of continuous communications in extremely harsh conditions. It’s dusty here, open to the elements, and salt corrosion is a concern. And our user panel especially praised the fact that, even in our noisy environment, all messages are heard with a very high level of audio quality.”

Jos de Kluyver, Applications Manager, EMO

CHALLENGE
At EMO’s Rotterdam port, machinery, the world’s biggest bulk shipping vessels, heavy goods vehicles and employees work in close proximity. To ensure team safety, the company relies on two-way radio communications. With its two-way radios coming to end of life, it moved to install new technology. It needed a system that’s very reliable, provides loud and clear audio, can connect talk groups, and can cope with the tough environment — salt corrosion is ever-present.

SOLUTION
EMO elected to work with Flash Services to deploy a TETRA digital radio network following a review of available technologies. Flash Services was appointed due to its track record with similar deployments and its clear understanding of EMO’s requirements. The entire solution is covered by a seven-year rental contract under which Flash Services Netherlands will meet all EMO’s radio communication needs.

TETRA was selected as it can support dedicated talk groups, it’s proven to deliver continuous communications in tough environments, and it offers greater capacity. In addition, although clear voice services were the primary goal of EMO, the company wanted the option of adding more services; TETRA’s data and GPS capabilities give this flexibility.

A core component of the system are the two-way radios used by 255 employees. A panel of users were involved in device selection, testing handsets from different manufacturers against a range of criteria including the clarity and loudness of audio, battery power/speed of charge, build quality and ease of use. EMO was about to select an alternative radio when Flash Services secured a number of Motorola Solutions’ new MTP3250 radios to test. It proved to be a game-changer; the 20-strong group of users unanimously voiced their preference for this radio.

They found that audio was much clearer and louder against the noisy background of the port. Also, they appreciated that the radio’s design — with two control knobs — was familiar to their old analogue radios and that key features were easy to operate even when wearing bulky gloves. Accessories were tested too, with the users impressed by the quality of the optional remote microphone and the rapid release side connector that makes it easy to attach accessories. EMO also concluded that the MTP3250’s durable design and features — such as the corrosion-resistant connectors — would ensure reliable operation.

BUSINESS BENEFITS
Even against EMO’s loud environment, calls are clearly heard to enhance safety and help coordinate efficient operations. Safety is further improved as the radios will support Motorola Solutions’ Call Out feature. With Call Out, messages are sent to users’ screens, and while talk groups and emergency features can be accessed, the message has to be acknowledged before the radio’s other features can be used. It’s an ideal way to check on the status of an individual, communicate fast with large numbers of people, and instigate emergency procedures.

The radio provides users with access to 50 talk groups to enhance collaboration (e.g., with firefighters and maintenance crews). And the extra capacity of the two-channel network means that seven people can broadcast at once. The radios also provide battery power for over eight hours — longer than a typical shift — so users don’t need to return to base to recharge their device.

EMO has total faith that the radios will provide continuous communications despite the demanding operating environment. And the system can be expanded to get more value from it. Using the GPS and data capabilities of both the network and radios, applications such as locating workers and status messaging can be offered — services that will further advance safety and enhance operating efficiencies.

For more information on how Motorola Solutions’ handheld RFID readers can drive efficiencies across logistics operations, visit us at www.motorolasolutions.com/services or access our global contact directory at Motorola.com/Business/XU-EN/Contact_Us

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