For the first time, you don't have to compromise safety for productivity

Running a power plant is a day to day safety and environmental challenge. Be excellent in those fields cannot be done at the expense of productivity. SmarTECHS solutions help industries to achieve this goal.

Safety Briefing

It's 4:00 AM. Marcos starts his workday 2 hours ahead of the day shift so he can prepare and schedule their workday. The night skeleton crew is still around in the control room. The first thing that Marcos does is pick up his hardhat, but it's now mounted with SmarTECHS smart glasses. The first order of the day, for anyone starting at any time, is a safety briefing.

Even though Marcos is starting his shift alone, he receives a safety briefing on his heads-up display. The Environment Health and Safety (EHS) safety manager now schedules in advance specific safety briefing topics with rich content consisting of photos, videos, voice reminders, and a couple of short multiple-choice questions. The EHS manager will be able to monitor technician competencies and compliance. This helps Marcos to focus on safety from the very beginning of his workday.

Lone Worker & Geo Fencing

Now Marcos can proceed with his first task of the day, a maintenance inspection round. Before, he needed to bring his walkie-talkie, a flashlight, and a camera. Now everything is integrated in the SmarTECHS solution on his hard hat, freeing his hands to make him much more productive.

When Marcos starts his round, he activates his lone worker tracking with a simple voice command, the falling detection and emergency call options. The night shift supervisor in the control room knows exactly where Marcos is and can engage with him to check on him. If Marcos falls, his SmarTECHS heads-up display will detect it. If Marcos does not respond, an automatic emergency call will be initiated to the supervisor with a prerecorded message showing Mark's name and his location.

Industry:
Electric Power Plant

AR Solution
- SmarTECHS
- Smart Glasses (HMT-1)

Business Cases
- Safety briefing
- Lone worker
- PPE geofencing
- Task allocation
- Remote expert
- Step-by-step instruction
- Incident reports

Results
- Safety briefing at the start of the day for everyone with standardized messages
- Increased safety for lone workers
- Incident report written in less than 10 minutes compared to 45 minutes before, with much greater details (photos, video, etc.) and in real time.
- 40% reduction in the time spent to prepare safety and environmental hazards reports
- 50% reduction in the time to handle a crisis due to step-by-step trainings with rich and interactive content

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Task allocation & PPE Requirements geo fencing

That morning, an alert siren sounded in the control room. One of the wastewater treatment pumps had stopped working. The supervisor assigns Marcos to check on the pump. Marcos receives a task alert with a voice memo that he can listen to hands free. When Marcos enters the wastewater treatment unit, he receives automatically a audio and visual safety warning to remind him that a life jacket is required.

Maintenance Procedure & Remote Expert

When Marcos arrives at the pump, he can access, through voice command, all the documentation related to the pump, including step-by-step trouble shooting procedures to restart the pump. It's the first time he has had to work on the water treatment plant but with the step-by-step procedure and rich and interactive content, it's easy for him.

Unfortunately, the pump will need to be replaced, and so for the moment Marcos needs to contain the growing overflow issue. With a simple "Request Assistance" voice command, Marcos initiates a live call with the site supervisor who guides him on how to locate the shut off valve and deploy the anti-pollution kit. Quickly, the situation is under control. Marcos was glad to remotely access another set of eyes to guide him through this stressful situation.

Environmental Health & Safety Reporting

With a simple set of voice commands, Marcos is now able to document the incident with photo, video, and voice dictation to explain the situation and the action taken to mitigate the issues. Once completed, the report is automatically sent to his supervisor and the site Environment Health & Safety (EH&S) manager.

Benefits

- Improve safety for the lone worker with the ability to have virtual safety briefing, geolocation, man-down detection, emergency call, geo fencing, and the use of PPE in one integrated hands-free solution
- Improved compliance and traceability. Incident reports can be written quicker than before with many more details
- Improved productivity
- Reduced time handling emergency situations with step-by-step procedures always available to the field with accurate information (photos, videos, text, voice, etc.) and remote access to expert assistance via a call
- Increased number of safety and environmental hazard or incident reports because they are done easily in few minutes from the field. It is entirely hands-free, using only voice commands. As a result, reports are now much more detailed than before

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