



Compania Minera San Alejandro uses Oreco NitroGen to ensure an inert and safe oil tank cleaning operation

Oreco NitroGen helps Compania Minera San Alejandro S.A. de C.V. (CMSA) in Mexico produce nitrogen on-site in combination with its tank cleaning operations – freeing it from costly third-party suppliers.

CMSA is driven by environmental concerns and one of the primary services of CMSA Mexico is safe and environmental-friendly cleaning of large crude oil tanks and oil recovery. But manually cleaning tanks means cleaning personnel are exposed to potentially explosive, hazardous and extremely unhealthy environments.

To live up to its environmental vision, the company needed an alternative. CMSA chose the BLABO® system from Oreco and became the first company in Latin America to employ the "non-man entry" oil tank cleaning method – a fully automated cleaning system that removes the danger to personnel and risk of explosion.

Nitrogen ensures non-explosive atmosphere during cleaning processes

To completely eliminate the risk of ignition of flammable gasses during the cleaning operation, the tank is blanketed with an inert gas before the cleaning process starts. Tank blanketing with nitrogen gas is a very viable and safe way to prevent costly accidents. During cleaning, the nitrogen is fed into the tank to keep the oxygen percentage below ignition level (8%). This must be maintained through the entire process.



A view inside the nitrogen generator. The unit is fitted into a 20' high cube container for easy transportation.

Nitrogen always on-demand

The problem is that nitrogen is not easily available on the market. Fortunately for CMSA, the BLABO system included two containerised nitrogen generators from Oreco, NitroGen, which have reduced CMSA's reliance on third-party nitrogen suppliers and proved massive time and money savers.



Juan de Dios Saint Martin Zepeda, owner at CMSA, says: "If we don't get nitrogen when we need it, we have to stop the tank cleaning process. But as we now supply our own nitrogen, it's always available. It's

easier and cheaper to have your own nitrogen unit."

The benefits of a mobile system

The NitroGen generators are also mobile, meaning that CMSA can simply move the containerised units to another location when they need to. Juan de Dios Saint Martin Zepeda explains: "There's no installation required. You just plug the electricity in and that's all. It's very easy to operate and very easy to train people to use it. And simple and cheap to maintain."

Much more than cleaning tanks

At CMSA, the NitroGen generators are used for a number of different purposes, including providing low pressure and high safety levels while emptying and cleaning irregular and damaged pipes.

NitroGen generators have helped CMSA reduce costs and save time, and have freed them from reliance on third-party suppliers. In fact, it is proving so useful that CMSA is looking into getting another unit – this time with a higher purity rate for stimulating stopped oil wells.