

Airstrip enhancements

Maintenance and costs reduced with nano applications.



Left: An aircraft at the La Vertiente airstrip in Bolivia.

Technology used successfully in the mining and military industry in Africa and United Arab Emirates has been applied to La Vertiente airstrip in Bolivia. The research took an EBS soil stabiliser, which is a nano polymer to identify maintenance and cost reductions. Investigations assessed whether that technology could be applied overseas. Users were contacted to confirm the feasibility of application, pros and cons, and costs before applying the product to La Vertiente airstrip.

Applying the EBS nano technology drastically reduces the cost of investment and maintenance on soil surfaces that require sealed, waterproof and dust suppressed surfaces to enhance the operation of heavy machinery, trucks, pickups, aircraft and helicopters. It also reduces the impact of dust on the surrounding environment.

At La Vertiente plant, the EBS soil stabiliser is a nano polymer solution that was applied to the airstrip. This reduced maintenance costs and allowed the safe operation of jet engine aircraft on a gravel runway with the same results as if it had been done on a paved airstrip. This solution turned the existing model, that jet engine aircraft can only operate on paved runways, on its head.

The applied product is eco-friendly and biodegradable. It also significantly reduces the cost of decommissioning and complying with environmental regulations – emissions for maintenance activities were drastically reduced.

The impact of this innovation was very positive, with an 85% reduction in OPEX costs related to airstrip maintenance. At the same time, it also eliminated the need to invest \$US1.5m in paving to allow jet engine operations at La Vertiente airstrip and reduced emissions related to maintenance.

The application of this product has opened the way to apply the same technologies in other areas of the oil and gas industry, such as road access, onshore well spuds, erosion controls, river cross erosion, helipads and community roads.

PROJECT TITLE

Application of Nano polymers on ground surfaces, the optimum solution in crisis times

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