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IMPRESSORS
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Dead Sea alive with mining activity

More than 400 meters below sea level lie the calm waters of the Dead Sea. The saltiest major water body on Earth, the Dead Sea stands between Israel and Jordan. Its shores are the lowest point of dry land on Earth. Nearly ten times as salty as the world's oceans, the Dead Sea is proving to be a rich source of minerals. As a result of having no outlet, existing minerals and those flowing into the sea from the Jordan river are trapped in the Dead Sea. With evaporation, the dissolved minerals are left behind, leading to high concentrations of potassium, sodium, calcium, bromine, and magnesium salts.

Making use of the high level of mineral deposits in the dead sea the Jordan, Israel and Palestine mining industries extract more than 4 million tons of potash annually.

The early method of producing Potash, known as leaching, is to run water slowly through the ashes of burned wood. The solution is then boiled in huge pots, leaving behind a mass of white solid known as Potash salt.

Later, potash became the term widely applied to naturally occurring potassium salts. The natural potash from the Dead Sea is mined through specific drilling and piling systems which necessitate the use of drill rigs and air compressors. The mining is done in the southern part of the sea as the water depth there is less.

Compressed air is the main form of drive for drills used in Dead Sea mining. Three numbers of Elgi's portable skid compressors are being used in this activity, to bore 70 m deep holes. When the bored hole has reached its full depth, the steel piles of 2.5 m diameter are constructed. The compressor provides air power at 300 psi for driving piles, before the pipes are laid. Other than drilling and piling, compressed air is essential for flushing. After laying the pipes, they are flushed and cuttings are carried out to clean the holes. Water is then pumped out through the pipes to artificial ponds on the shore in order to evaporate water and get concentrated minerals. It follows that the compressors employed in this mining process need to deliver high performance over extended periods, reliable and economical running being absolutely critical.

Jordan Government through its Contractor Sener Arda Construction Co., has succeesfully laid 170 pipes in the Dead Sea for potash mining with the help of Elgi's DS 1100-300 skid compressors. The compressors are powered by engines with international warranty. Rated with a flow output of 1100 cfm, the compressors have allowed the customer to drill faster and thereby increasing customer's productivity and profitability. Elgi, with its wide range of diesel-powered screw compressors, has been increasing its share in the multinational- dominated drilling and mining industry.