

This invention relates to methods for controlling an airlift plants designed for extracting mineral resources from the sea and ocean bottoms. According to the optimal method for controlling an airlift plant, the ratio between ambient temperatures and the temperature of separated gas is preliminarily specified as follows:

$$\frac{T_n}{T_E} > 1,$$

and in the pulp extraction process, the flow rate of the gas-air mix at the inlet of a compressor is controlled, by varying the sucking pipe resistance, in order to provide a minimal ratio between the mix temperature and pressure. In the pulp extraction process, the above-mentioned current temperature ratio is also controlled, and if the condition corresponding to this ratio is not fulfilled, the separated gas feed into the compressor is terminated. The gas feed device is equipped with inlet and outlet pipes, into which controlled valves, and temperature and pressure sensors are installed, and can be closed by a controlled check valve installed between the inlet and outlet pipes. The invention allows reducing the power consumed during the process, and costs of the extracted product.