
The operation features of the oil-injected screw compressor units working on a heavy gas

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To gather and to transport associated petroleum gas the oil-injected screw compressor units are widely used along with other units. Here the operation features of these units working on a heavy gas in cold climates: the impact of condensation in the compressor working cells on the power consumption and oil circulation irregularity in the oil system during starting up the compressor unit at low temperatures (below -10°C) are considered. It's proved that the increase in the oil temperature from 55°C and the gas temperature from 85°C to 75°C and 105°C , respectively, as well as the replacement of oil by oil with higher viscosity index and heat extraction from the oil separator for air coolers heating enabled to solve these problems.

Keywords: *Associated petroleum gas, heavy gas fractions, gas solubility in oil, gas condensation, IPR curve, capacity, viscosity, liquid heat exchanger, air cooler unit, operation of the compressor unit with a very low inlet pressure.*

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