

APPLYING «COMPRESSOR-NETWORK» ANALYSIS METHOD FOR THE SYSTEM WITH RECIPROCATING COMPRESSOR AND RECIRCULATING LINE

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The subject of research is an opposed reciprocating compressor (RC) providing gas injection into the underground gas storage. Issues concerning implementation of compressor start-up conditions to recirculating line have been considered. As a tool, the compressor-network analysis method is used, which consists in determining the system operating points through matching characteristics of the reciprocating compressor and the network, for which in this case the recirculating line with the control valve is considered. Recommendations have been received to select a control valve type for the reciprocating compressor operating in both single-stage and two-stage modes.

Keywords: reciprocating compressor, underground gas storage, control valve, recirculating line.

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