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天然气管网吸附调峰可行性的模拟研究

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摘要 A load-leveling method through adsorption was presented to adjust the supply quantity according to the consumption rate of natural gas with time. An experimental simulation set up was designed and used to test the load-leveling function for a real pipeline system. A storage tank filled with activated carbon together with a filter constitutes the major part of the load-leveling facility. Pressure and temperature of the system, as well as the real gas output of the storage tank were recorded. It is proven that load-leveling by adsorption is technically feasible even for low pipeline pressure of natural gas supply system.

关键词 [natural gas supply](#) [load-leveling](#) [adsorption](#) [experiment](#)

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An Experimental Simulation of Load-Leveling Through Adsorption for Natural Gas Pipeline System

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Abstract A load-leveling method through adsorption was presented to adjust the supply quantity according to the consumption rate of natural gas with time. An experimental simulation set up was designed and used to test the load-leveling function for a real pipeline system. A storage tank filled with activated carbon together with a filter constitutes the major part of the load-leveling facility. Pressure and temperature of the system, as well as the real gas output of the storage tank were recorded. It is proven that load-leveling by adsorption is technically feasible even for low pipeline pressure of natural gas supply system.

Key words [natural gas supply](#); [load-leveling](#); [adsorption](#); [experiment](#)

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