
煤层气的集输工艺研究

摘要

能源一直是推动工业社会进步不可或缺的一个部分，随着全球变暖以及人们环保意识的增加，天然气的自然储备有限，人们需要去寻找新的替代品，所以煤层气进入了人们的视野，成为了一种全新可以广泛使用的能源。

本文重点对煤层气的集输工艺进行了研究，通过只考虑井场到集气站的工艺，对井场工艺、集输系统以及集气站工艺进行了讨论。提出了不同水质的采出水处理工艺，并围绕增压、脱水、除杂和脱氧等主要工艺以及设备的选择。最后得出结论，选择出煤层气集输推荐工艺与相关设备。

关键词：煤层气；集输技术；管道；压缩

Abstract

Energy has always been an indispensable part of the progress of industrial society. With global warming and people's increasing awareness of environmental protection, natural reserves of natural gas are limited, and people have to find new substitutes. Coal-bed methane has entered people's vision and become a new and widely used energy. In the aspect of gathering and transportation system, the emphasis is on gas gathering and transportation. Finally, the treatment technology of produced water of different quality is put forward.

This paper focuses on the study of coalbed methane gathering and transportation process, and discusses the wellsite process, gathering and transportation system and gas collection station process by considering only the wellsite to gas collection station process. The treatment technology of produced water of different water quality was put forward, and the main technology and equipment were selected, such as pressurization, dehydration, impurity removal and deoxidation. Finally, the recommended process and related equipment for coalbed methane gathering and transportation are selected.

Key words: Coalbed Methane; Gathering technology; Pipeline; The compressor

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