On the Development of Direct Measurement Technique for Calorific Value of Natural Gas

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As an important non-renewable energy, natural gas plays a significant role in the development of national economy. Currently, the natural gas trading is mainly based on the volume measurement, which is not suitable and causes deviation when the composition of the natural gas varies. Therefore, numerous research works about the energy measurement of natural gas have been doing all over the world. Actually the major part of energy measurement is to accurately obtain the calorific value of natural gas. This paper introduces the development of direct measurement technology for calorific value, summarizes and analyzes the different direct measurement techniques. Meanwhile, based on the current status of calorific value measurement in our country, the direction of its development is indicated and the respective recommendations are made accordingly.