



Multiphase Flow Metering in Oil and Gas Industry

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Abstract: This study summarizes the research work with reference to the multiphase flow metering in oil & gas industry. One of the challenging problems that the Oil & Gas industry has been dealing with for several years is accurate and reliable multiphase flow rate measurement in a three-phase flow. This type of flow is common while producing oil and gas wells. Transporting of crude oil and petroleum products to refineries, storage tanks, and other delivery points, metering of the fluid is essential for determining flow rate, volume, and cost. Crude oil is mixture of oil, gas, seawater and sand. Therefore, two- and three-phase metering systems require for metering. Conventional metering system is expensive and requires cumbersome test separators, high maintenance, and field personnel intervention. These conventional solutions do not lend themselves to continuous metering. Moreover, with diminishing oil resources, oil companies are now frequently confronted with the need to recover oil & gas from marginally economical reservoirs. In order to ensure economic viability of these accumulations, the wells may have to be completed subsea, or crude oil from several wells sent to a common central processing facility.

Keywords: Oil & Gas, Metering, Offshore, Sub-sea.

