#### RESEARCH PAPERS

预测气液分层流含气率及压降的模型

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摘要 The time-dependent liquid film thickness and pressure drop were measured by using parallel

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关键词 <u>gas-liquid two-phase flow</u> <u>stratified flow</u> <u>holdup</u> <u>pressure drop</u> <u>model</u> 分类号

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### A Model for Predicting Holdup and Pressure Drop in Gas-Liquid Stratified Flow

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**Abstract** The time-dependent liquid film thickness and pressure drop were measured by using parallel -wire conductance probes and capacitance differential-preesure transducers. Applying the eddy viscosity theory and an appropriate correlation of interfacial sear stress, a new two-dimensional separated model of holdup and pressure drop of turbulent/turbulent gas-liquid stratified flow was presented. Prediction results agreed well with experimental data.

**Key words** gas-liquid two-phase flow; stratified flow; holdup; pressure drop; model

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