

Pressure Gradient Prediction of Oil-Water Two Phase Flow through Horizontal Pipe

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Abstract : In this thesis, stratified and stratified wavy flow regimes have been investigated numerically for the oil (1.57 mPa s viscosity and 780 kg/m³ density) and water twophase flow in small and large horizontal steel pipes with a diameter between 0.0254 to 0.508 m by ANSYS Fluent software. Volume of fluid (VOF) with two phases flows using two equations family models (Realizable k-

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