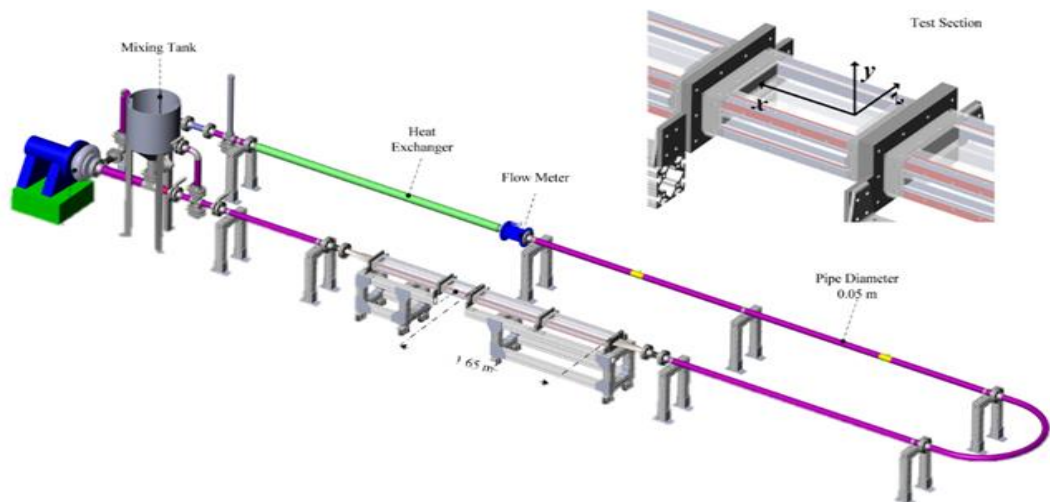




Testing Department

Large-scale flow loop for multiphase turbulent flow experiments



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This slurry loop has been designed for experimental investigation of multiphase flows relevant to slurry transport in the petroleum industry. The loop is equipped with two mixing tanks, a heat exchanger, a Moyno pump (ideal for polymeric solutions), and a centrifugal pump (ideal for particle laden flow). Two fully transparent test sections exist; one with a circular cross section of 50 mm diameter and one with a 15x120 mm rectangular cross section.

CAPACITY

- Enables pressure/temperature measurement at multiple locations as needed
- Equipped with double-pipe heat exchanger
- Equipped with Coriolis flow meter
- The loop utilizes two data acquisition cards

SPECIAL FEATURES

- Enable to circulate dense slurries consisting with 30% sand
- The glass windows enables 2D and 3D PIV measurement
- Reaches maximum Reynolds number of 750,000 for water



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