

Experimental investigation of different regimes of cavitation in a venturi tube

Experimental investigation of cavitation occurring in a venturi tube is presented. A closed loop of fluid flow is used, the test section consists of a cylindrical venturi tube. Cavitation phenomenon is observed at different values of static pressure ranging from above atmospheric to vacuum pressure. Different cavitation regimes are observed and their changing behaviors at different values of cavitation numbers. Cavitation regimes which are visualized include: Sheet cavitation, vortex cavitation and super cavitation. High speed visualization is used to explain the behaviour of re-entring jet in the case of vortex cavitation.