Flow Through Pipes: An Analytical Study

Mr. Bolij Navnath Kailas

Lecturer, Department of Mechanical Engineering

Santosh N Darade Polytechnic, Yeola, Nashik, Maharashtra, India

Abstract*: The flow of fluids through pipes is a fundamental concept in fluid mechanics, with applications in engineering, industry, and everyday life. This paper explores the theoretical and practical aspects of fluid flow through pipes, covering types of flow, pressure loss, factors affecting flow, and methods for analyzing pipe flow in engineering systems. Emphasis is placed on the study of laminar and turbulent flow, the use of the Darcy-Weisbach equation, and the significance of Reynolds number in determining flow characteristics*

Keywords: Fluid, flow, pipes, pressure, laminar, turbulent