

Term	Definition
Fluid	Substances that can flow, such as liquids and gases.
Pressure	The force exerted per unit area.
Streamline Flow	A type of fluid flow where every particle follows a smooth path.
Turbulent Flow	A type of fluid flow characterized by chaotic changes in pressure and flow velocity.
Bernoulli's Principle	States that the pressure in a fluid decreases as the fluid's velocity increases.
Viscosity	The property of a fluid that resists the force tending to cause the fluid to flow.
Surface Tension	The elastic tendency of a fluid surface which makes it acquire the least surface area possible.
Laminar Flow	A flow regime characterized by high momentum diffusion and low momentum convection.
Density	The mass per unit volume of a substance.
Reynolds Number	A dimensionless number used to predict flow patterns in different fluid flow situations.
Capillarity	The ability of a liquid to flow in narrow spaces without the assistance of external forces.
Compressibility	The measure of the relative volume change of a fluid as a response to a pressure change.
Fluid Mechanics	The study of fluids and the forces on them.
Pascal's Law	States that a change in pressure at any point in an incompressible fluid is transmitted throughout the fluid.
Boyle's Law	The pressure of a gas is inversely proportional to its volume at a constant temperature.
Ideal Fluid	A hypothetical fluid with no viscosity and no resistance to shear stress.
Viscous Force	The force exerted by a fluid on an object moving through it due to viscosity.
Hydrostatic Pressure	The pressure exerted by a fluid at equilibrium at a given point within the fluid.
Barometer	An instrument measuring atmospheric pressure.
Buoyancy	The force exerted on an object that is partly or wholly immersed in a fluid.
Archimedes' Principle	States that any object fully or partially submerged in a fluid is buoyed up by a force equal to the weight of the fluid displaced by the object.
Adhesion	The tendency of dissimilar particles or surfaces to cling to one another.
Cohesion	The action or property of molecules sticking together, being mutually attractive.
Stokes' Law	A law stating that the force of viscosity on a small sphere moving through a viscous fluid is proportional to the sphere's velocity and radius.
Dynamic Pressure	The pressure of a fluid in motion, associated with its velocity.
Kinematic Viscosity	The ratio of the viscosity of a fluid to its density.
Terminal Velocity	The constant speed that a freely falling object eventually reaches when the resistance prevents further acceleration.
Hydrodynamics	The branch of science concerned with forces acting on or exerted by fluids in motion.

Static Pressure
Pascal (Pa)

The pressure exerted by a fluid at rest.
The SI unit of pressure, equivalent to one newton per square meter.