

DEFINITIONS FOR FLUIDS

The DEPTH at a particular location in a fluid is the vertical distance to the highest point in that body of fluid.

A fluid surrounds any object immersed in the fluid.

The TOTAL FORCE on the object by the fluid is called the BUOYANT FORCE. Because pressure in a fluid always increases with depth, the direction of the buoyant force is always upward.

The rate of flow of a fluid through a given area, in m^3/s , is called the VOLUME FLUX (Φ) through that area. The selected area is often the cross-sectional area of a pipe.