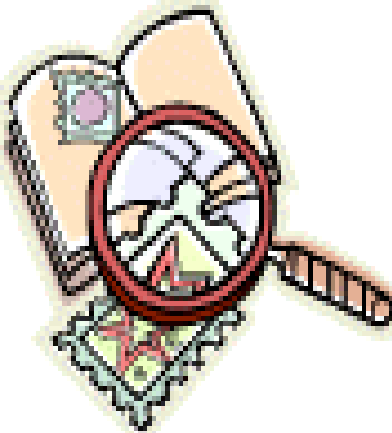


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	Fluid Mechanics

DEFINITION

Fluid Mechanics

- **Fluid Mechanics** is that branch of applied mechanics that is concerned with the statics and dynamics of liquids and gases. The analysis of the behavior of fluids is based upon the fundamental laws of applied mechanics that relate to the conservation of mass, energy and momentum. The subject branches out into sub-disciplines such as aerodynamics, hydraulics, geophysical fluid dynamics and bio-fluid mechanics. (www.eng.uwi.tt/.../lecture2-fundamental%20concepts.doc)
- Fluid mechanics is a branch of physics which concerns the study of fluids and the ways in which they interact with forces. Both liquids and gases are considered to be fluids for the purposes of this branch of science. Often, the field of fluid mechanics is divided into two more specific fields of study. These are fluid statics and fluid dynamics, which concern fluids at rest and fluids in motion, respectively. Fluid mechanics can involve highly complex mathematics, and the aid of modern computers has enhanced this science significantly. (<http://www.wisegeek.com/what-is-fluid-mechanics.htm>)

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Local heat/mass transfer characteristics on a rotating blade with flat tip in a low-speed annular cascade-part II: tip and shroud. Dong-Ho Rhee. Journal of Turbomachinery. 128 (1) : 110-119 Jan '06

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Resolving waterhammer problems in boiler plants : While not as dangerous as condensation-induced waterhammer, column-closure waterhammer sill is a... Wayne Kirsner Pe. HPAC Engineering. 75 (9) : 89-96 Sep '03

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- Annual Review of Fluid Mechanics
- Environmental Fluid Mechanics
- Journal of Fluid Mechanics
- International Journal of Numerical Methods for Heat & Fluid Flow
- Theoretical and Computational Fluid Dynamics

INTERNET RESOURCES

Multimedia/CD-Rom Station and Internet Workstation 2nd and 3rd Floor

Engineering Fundamentals from Efunda.com.

Retrieved on February 14, 2014 from <http://www.efunda.com/formulae/fluids/overview.cfm>

This site presents essential topics on fluid mechanics that include Navier-strokes, Bernoulli, fluid statics, glossary of relevant terms, flowmeter, manometer, draining tank, Orifice flowmeter, Venturi flowmeter, pipe friction, Reynolds number, etc.

The Engineering Toolbox from Engineeringtoolbox.com.

Retrieved on February 14, 2014 from http://www.engineeringtoolbox.com/fluid-mechanics-t_21.html

This site provides useful resources on the following topics: Cavitation number, K_v Diagram Water Valves, absolute or dynamic viscosity online converter, air-altitude, density and specific volume, air-temperature, pressure and density, Bernoulli equation, bulk modulus and fluid elasticity, buoyancy, capillarity, carbon dioxide concentration in rooms, Cauchy number, dynamic pressure, dynamic viscosity of some liquids, fluid flowmeters, Euler number and equation, and other vital and relevant topics.

Fluid Mechanics Problems, Solutions, Notes, Basics, Help, Tutorials from Onesmartclick.com.

Retrieved on February 14, 2014 from <http://www.onesmartclick.com/engineering/fluid-mechanics.html>

This site grants you with various links to different useful resources. Some of these are the following: units and constants, fluid dynamics and engineering resources, thermodynamic properties of gases, metric conversion chart, pipe pressure loss calculator, manometer pressure calculator, exit spout velocity calculator, calculation for orifice flowmeter, calculation for venturi, flowmeter, fluid statics,

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