**Basic Fluid Mechanics Terms from Chapter 2**

These are basic fluid mechanics terms mainly from Chapter 2.

surface force

body force

gage pressure =

absolute pressure or total pressure or actual pressure

vacuum pressure =

manometer = a device that measures pressure through height differences in a manometer fluid.

DIFFERENCE BETWEEN MANOMETER AND BAROMETER

A barometer measures the pressure of the atmosphere.

A manometer measures the pressure of something (most often a gas) inside a container. Some simple manometers actually measure the difference between the pressure inside the container and atmospheric pressure outside.

center-of-pressure = the point where the resultant force acts on the area. It is always BELOW the centroid (y-directionally speaking)

hydrostatic force =

buoyant force =

Archimedes principle =

2nd moment of area about the centroidal x-axis

Also: Advantage of an inclined manometer