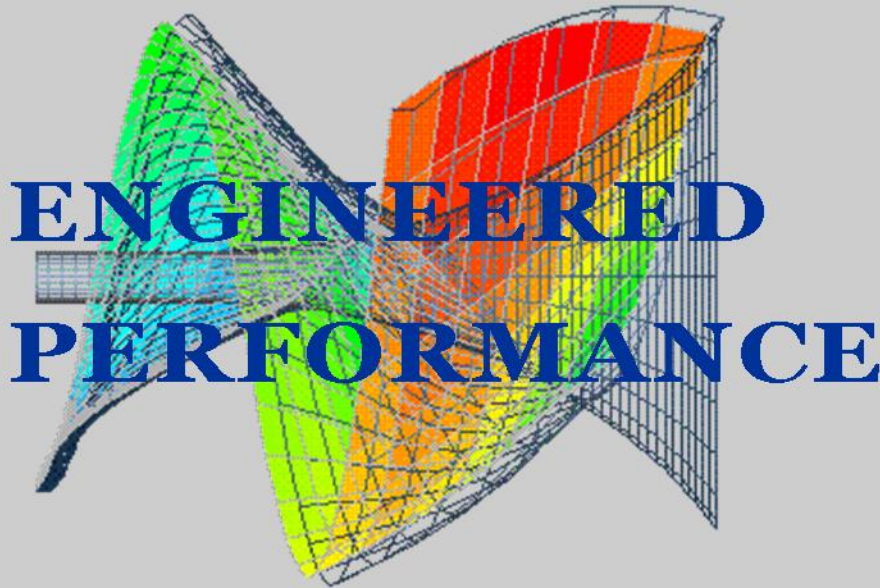


intMPE



International Mineral Processing Equipment



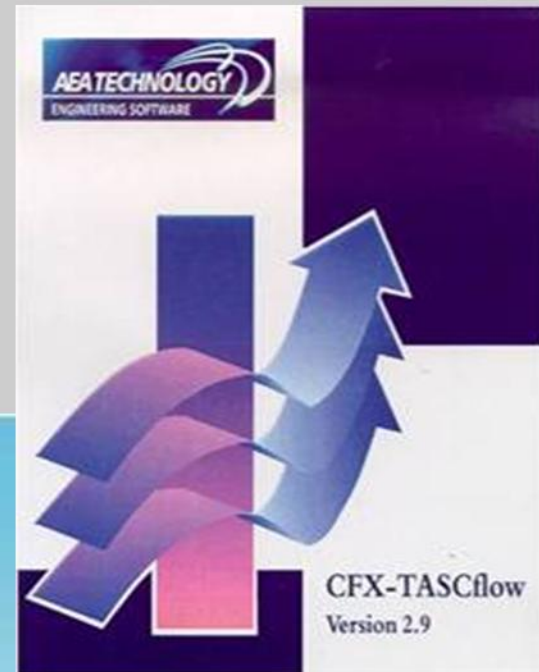
Industrial Series

API-610 & ANSI B73.1M



intMPE

International Mineral Processing Equipment
A Division of Canamera Enterprises Inc.



CFX-TASCflow
Version 2.9

HYDRAULIC FUNDAMENTAL TERMS

Pressure:

The basic definition of pressure is force per unit area. As commonly used in hydraulics, it is expressed in pounds per square inch (PSI).

Atmospheric Pressure:

This is the force exerted on a unit area by the weight of the atmosphere. At sea level, the atmospheric standard pressure is 14.7 pounds per square inch.

Gage Pressure:

Using atmospheric pressure as a zero reference, gage pressure is a measure of the force per unit area exerted by a fluid. Units are PSIG.

Absolute Pressure:

This is the total force per unit area exerted by a fluid. It equals atmospheric pressure plus gage pressure. Units are expressed in PSIA.

Outlet Pressure or Discharge Pressure:

This is the average pressure at the outlet of a pump during operation, usually expressed as gage pressure (psig).

Inlet Pressure:

This is the average pressure measured near the inlet port of a pump during operation. It is expressed either in units of absolute pressure (psig) preferably, or gage pressure (psig).

Differential Pressure:

This is the difference between the outlet pressure and the inlet pressure. Differential pressure is sometimes called Pump Total Differential pressure.

Vacuum or Suction:

These terms in common usage indicate pressures in a pumping system below normal atmospheric pressure, and are often measured as the difference between the measured pressure and atmospheric pressure in units of inches of mercury vacuum, etc. It is more convenient to discuss these in absolute terms; that is from a reference of absolute zero pressure, in units of psia.