

Centre Universitaire Mila

Département des Sciences et Techniques

Spécialité: Hydraulique Urbaine

Module : Anglais technique et terminologie

Lecture 05

What is hydraulics?

The basic aim of hydraulics is to understand, and control for the benefit of society, the occurrence, movement and use of water, whether in its lakes, rivers, pipes, drains, percolating through soils or pounding the coastline as destructive waves, to modify the behaviour of water calls inevitably for a large investment of time, resources and effort. Thus hydraulic engineering has only appeared once a society is centralized under an organized government.

Hydraulics is often confused with the allied science of fluid mechanics. Good reason for this exists, since a considerable overlap occurs between the two studies. However, fluid mechanics deals with gases, as well as the common liquids, and to most civil engineers a study of gas behaviour is irrelevant to their professional needs.

Thus the modern definition of hydraulics limits the subject to the study of water and those other liquids which a civil engineer is called upon to store, convey or pump.

Why do we study hydraulics?

All organized societies need adequate water supplies, drainage to dispose of waste or excess water, as well as the protection from uncontrolled water. Thus an obvious necessity for a study of hydraulics exists.

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