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**ECADEMY**

BASIC HYDRAULICS AND PUMP PERFORMANCE

# **UNDERSTANDING FRICTION LOSS**

# Friction loss

Friction loss refers to the pressure lost by liquid as a result of contact between moving liquid and the enclosure that it is moving in. Friction loss in the piping system is an important parameter that you need to consider when dealing with the installation and operation of pumps.

Friction losses occur the most in water pipes and other parts of the piping system such as elbows, T joints and valves. You can determine the total friction loss by calculating the sum of friction losses from all components in a piping system.

## **Friction loss is dependent on the velocity of the fluid**

Friction loss is also dependent on the length and the surface of the pipe. All pipe manufacturers have their own pipe loss or friction loss tables and you can usually obtain the friction loss data from the manufacturer of the equipment. The manufacturers of elbows, T joints and other components can also submit friction loss data for their components.





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