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There are many who consider flow meters to be of recent origins. However, the basic prototypes actually date back to the early Roman times where they were used for measuring the flow of water to households. But, it was only in the 17th century did the mathematics of flow theory come into existence.

Types of Flow Meters

Today, you will find a variety of flow meters that include positive displacement, variable area and ultrasonic flow meters apart from the mass flow meter in the market place. Each flow meter has its own features and there is no one flow meter that can fit into all industrial applications. So, which is the most suitable flow meter? Well, the best flow meter is one that is perfectly suited to the application you are using. Though there are many flow meters, let us understand more about the mass flow meter and gas flow meter.

What is a Mass Flow Meter?

Also known as inertial flow meter, the mass flow meter is a device that is used for measuring the mass flow rate of liquids when passing through a tube. The mass flow rate is nothing but the actual mass of liquid moving past a fixed point per second. A point to be noted here is that the mass flow meter does not measure the volume that passes through the device in cubic meters per second but measures the actual mass that flows through the device in kilograms per second. In fact the volumetric flow rate is nothing but the mass flow rate that is divided by the density of the liquid. If the liquid density remains constant, the relationship remains consistent. However, if the fluid density varies, so will the relationship. Now, the fluid density can change for a variety of reasons like composition, pressure or temperature.

Know more about Gas Flow Meters

The Gas flow meter is essentially used for measuring the actual volume of fuel gases like propane or natural gas. These flow meters are very popular and are used predominantly in a variety of commercial, industrial and residential complexes where fuel gas is consumed on a regular basis. When compared with fluids, it is more difficult to measure gases since the measured volumes may get impacted due to pressures and temperatures. In fact the gas flow meter helps in measuring a pre defined volume, irrespective of the quality or the quantity of gas that passes through the device. Today, the gas flow meter is available in different designs. These designs are essentially based on the volumetric flow rate of gas that needs to be measured or the gas type that is to be measured or the anticipated flow range and other such factors.

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Riaz Danish has provided more information about measurement technologies. He has more knowledge about measurement instruments and provides the good information about a Ultrasonic flowmeter, a Turbine flow meter and more. For more info â€“ http://www.smartmeasurement.com

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