

Choosing a Flowmeter

Flow metering is one of the most important measurements a utility must have for successful operation. With the increased cost of water production and wastewater treatment comes the need to accurately and fairly collect revenue from the users.

Additionally, new regulations are mandating continuous and more accurate flow measurements—sometimes in places where flow measurement is difficult. The efficiency and smooth operation of any system depends on good comprehensive flow metering.

Choosing the right flowmeter for the job can often be a difficult task. USABlueBook is committed to providing the best and broadest range of flowmeters for our industry, and we have the technical knowledge to help you choose the best product for your application.

When approaching a flow metering application it will help to consider the following questions:









- 1. What kind of water or fluid am I measuring** – clean potable, slightly turbid, dirty or raw sewage?
- 2. What is the nature of the flow** – full pipe pressurized, full pipe gravity or partially full pipe?
- 3. What is the velocity of the flow** – fast, slow or variable?
- 4. What do I need the flowmeter to do** – totalize flow, rate and total, transmit a 4-20 mA signal, be remote or touch-read capable, or continuously record readings?
- 5. How do I want to mount the flowmeter** – directly in the pipeline, insertion-type via a pipe saddle, or non-contact clamp on sensors?
- 6. Where is the best location for the flowmeter** – in the pump house, in a vault, before the pump, after the pump or in a remote location?



- 7. How accurate does the flowmeter need to be** – for billing purposes, process or chemical feed pump control, general reporting or system modeling?

The answers to these questions will quickly narrow the field of appropriate flowmeters for your application and help you decide how and where to install the meter for maximum accuracy and life.

The chart below will give you a general idea where the various types of flowmeters are used. We have so many different kinds of flowmeters to meet the needs of our customers that it would be impossible to list them all in one brief chart. Please call, fax or email our Tech Support staff for help with choosing the best flowmeter for your application—and be ready to answer the questions at left.

Flowmeter Type	Clean water in full, pressurized pipe	Turbid water in full, pressurized pipe	Dirty water in full, pressurized pipe	Clean to turbid water in full, gravity flow pipe	Dirty to raw sewage in full, gravity flow pipe	Clean to turbid water in partially full pipe	Dirty to raw sewage in partially full pipe
 Bronze Waterworks Meters	●						
 Insertion Paddlewheel/Turbine Meters	●	●					
 Insertion Magnetic Meters	●	●		●			
 Spool-type Magnetic Meters	●	●	●	●	●		
 Transit Time Meters	●	●	●	●			
 Doppler Meters		●	●				
 Area Velocity Meters						●	
 Open Channel Meters						●	●