

Industrial Flow Measurement: Post-Test

1. Describe the following as they apply to flow measurement:

Reynolds Number –

High Accuracy –

Applicable Range -

Ideal Flowmeter –

Cavitation –

2. Which is superior, flowmeter A which has an accuracy of 1/2 percent of full scale or flowmeter B which has an accuracy of 1 percent of rate?

3. How are the following flowmeters affected by density and viscosity?

| Flowmeter | Density | Viscosity |
|-----------------------|---------|-----------|
| Orifice Plate | | |
| Vortex Shedder | | |
| Magnetic | | |
| Thermal | | |
| Positive Displacement | | |
| Mass | | |

4. List possible causes of the following symptoms.

| Symptom | Possible Causes |
|--|-----------------|
| Low flow measurement Control valve wide open | |
| Orifice plate Bouncy analog signal | |
| Vortex shedder Max. flow confirmed Analog signal at 0% | |

5. In your opinion, what percentage of flowmeter users are knowledgeable of the compromises necessary for flowmeter selection?

6. What color is the sky?

7. List some advantages of a mass flowmeter over the following:

Orifice Plate –

Vortex Shedder –

Magnetic Flowmeter -

Thermal Flowmeter -

Positive Displacement –

8. List some advantages of the following over a mass flowmeter:

Orifice Plate -

Vortex Shedder -

Magnetic Flowmeter -

Thermal Flowmeter -

Positive Displacement -

9. Why would a user purchase a mass flowmeter over another flowmeter?

10. Why would a user purchase a flowmeter other than a mass flowmeter?

11. Which flowmeter does a user buy?