Know the flow – control the Fire

Flowmeter technology

There are two types of flowmeters to choose from today – advanced electromagnetic meters or the old fashioned paddle-wheel style. If safety is your priority then electromagnetic technology is always going to be the best solution.

Put your team in control

With traditional systems, the pump operator has to rely partly on guesswork to estimate flow rates. This is not ideal. By using an electromagnetic flowmeter you will see the precise flowrate received by each individual branch man. That means the pump operator will always know:

- the amount of water each branch man is receiving
- whether they are receiving enough water even when out of sight or in a high-rise
- the rate of the incoming water supply so you can see whether to add another line or if there is sufficient water left to tackle the fire

With this enhanced level of information the pump operator can make prompt adjustments to meet the needs of each branch man. That means more effective firefighting and above all, enhanced safety.

How it works

Unlike paddle-wheel technology electromagnetic flowmeter technology has no moving parts. That means less maintenance, no breakdowns and no *confusing ghost readings*:

- Each flow gauge provides extra information to the pump operator over and above what is provided by the pump pressure gauges (i.e. low pressure, high pressure and compound gauges).
- b. Pressure gauges tell the pump operator what is happening at the pump.
- c. Flow gauges tell the pump operator what is happening at the branch and with the incoming supply.
- d. The improved information helps the pump operator and the operational incident commander (OIC) manage more stategically and effectively.

100% 99% 99% 99% 99% 99% Accuracy of Flow Reading 98% 94% 90% 90% 88% 87% 88% 89% 87% 87% 84% 84% 83% 80% 78% 79% 77% 70% 0 200 400 600 800 1000 **Flow Rate** ---- Paddlewheel flow meter ---- Electromagnetic flow meter

Comparison of Electromagnetic Vs Paddlewheel Accuracy - 65mm sensor

Master meter has a calibration certificate issued by an INAB approved laboratory. Paddlewheel flow meter had four pipe diameters of straight pipe before and after the sensor.

Comparisons of flow technologies at a glance

Feature	Electromagnetic	Paddlewheel
Enables informed decisions	YES	NO
Incoming water supply known	YES	NO
98% accurate	YES	NO
Can measure all firefighting flow rates	YES	NO
Improves safety	YES	NO
Can be installed anywhere	YES	NO (needs 5 x pipe diameter before and after sensor)
Ghost readings	NO	YES
Moving parts	NO	YES
Affected by debris in water	NO	YES

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