Go With The Flow

Many industries heavily rely on accurate flow monitoring, and the applications for flow measurement are huge! Not every application is the same, and therefore not every flow meter is the same.

Trimec Flow Products manufacture a range of the worlds most accurate and reliable positive displacement flow meters, lets take a look at two of their different models:

The Rotary Piston Flow Meter.
The Multi-Pulse Rotary Piston has long been established as a simple but reliable metering principle providing high levels of accuracy & repeatability for a wide range of liquids.

How it operates:
Liquid enters into a precision machined chamber which contains an oscillating piston. The position of the piston divides the chamber into compartments containing an exact volume. The liquid pressure causes the piston to oscillate and rotate its centre hub. The movements of the hub are sensed through the meter wall by a series of magnets. Each revolution of the piston hub is equivalent to a fixed volume of liquid, which is indicated as flow by an indicator or totaliser. Close clearances between the piston and the chamber ensure minimum slippage of the liquid for highly accurate and repeatable measurement of each volume cycle.

The Rotary Piston Flow Meter is the Ideal choice for extremely viscous lubricants (thick and sticky).
Applications include alcohols, acetic acid, caustic soda, ethanol, fuels, grease, glucose, ink, insecticides, latex emulsions, liquid sugar, margarine, mayonnaise, molasses, resin, tallow, urethane, water, xylene & liquid yeast.

**The Oval Gear Flowmeter**

The Dimak Micropulse Oval Positive Displacement flowmeters offer a high level of accuracy turndown & repeatability. These precision meters are used for flow rate measurement in flow monitoring & control application and for totalizing in dispensing and batching.

How it operates:

The Oval Gear Flowmeter uses two fine-toothed meshed gears that are oval in shape and engage each other in a precision machined body. This fluid is transferred sequentially from the inlet to the outlet and one or two pulses are transmitted for each revolution of the gear. Embedded within the gear, a pair of chemically resistant magnets provide the external signals. Detection of the rotation uses either a reed switch or a Hall effect sensor on the outside of the fluid housing. A choice of materials allows the meters to be used in a variety of corrosive applications.

The Oval Gear Flowmeters are compact & light weight in construction, making it ideal when used in mobile installations or within confined spaces. Common applications are fuels, oils, solvents, alcohols along with the blending of Bio-fuels & ethanol fuels either pumped or gravity fed.

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**Fluidwell F130-P**

**Batch Controller**

**Features**

- Large 17mm (0.67“) digit selection for flow rate or total.
- Selectable on-screen engineering units.
- Ability to process all types of flow meter signals.
- Auto backup of settings and running totals.
- Operational temperature -40°C up to +80°C (-40°F up to 176°F).

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**LPI-F Flowmeter 4~20mA Transmitter**

**Features**

- Field Programmable Input Ranges.
- Isolated Input to Output 2.0kV.
- Impedance Matching on Input.
- Crystal Locked F-V.
- Selectable Damping.
- High Accuracy 0.1%.

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**Contrec 202A Flow Rate & Totaliser**

- Programmable span cutoffs and conversion factors
- High and low flow rate alarm or pulse output and flow rate alarm
- Pulse output can be scaled
- Non-volatile memory stores all set up parameters and totals.

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**Happy Mother’s Day to Supermums Everywhere**

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Intech Instruments Ltd:
- Very compact design for panel mount, wall mount or field mount applications.
- Rugged aluminium field mount enclosure IP67/NEMA4X.
- Intrinsically Safe - ATEX, IECEx, FM and CSA approval for gas and dust applications.
- Explosion/flame proof II 2 GD EEEx d IIB T5.
- Easy configuration with clear alphanumerical display.
- LED backlight option.
- Loop or battery powered, 8~24Vac/dc or 115~230Vac power supply.