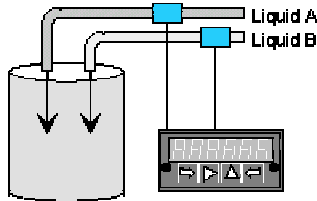


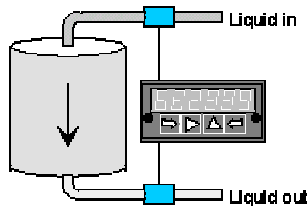
**Question: What are some of the applications for Dual Input Counters?**

### Controlling the Mixing Ratio of Two Fluids



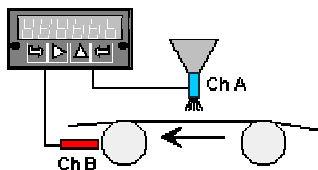
Displaying and alarming the input flow rate ratio of two fluids (gas or liquid) allows these to be mixed in a predetermined ratio in continuous processes. The sensing element is normally a turbine flowmeter, which outputs pulses at a frequency proportional to flow rate. The A/B ratio can also be displayed for totalized rate (or delivered volume). Any of these parameters can be alarmed using the dual relay board and be transmitted via 4-20 mA, RS-232 or RS-485.

### Comparing Fluid Inflow & Outflow



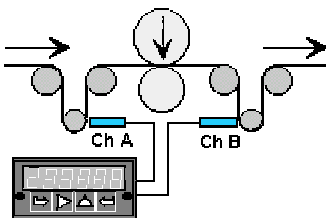
The ratio of the inflow and outflow rates of a tank is a measure of the relative filling or emptying rate. The same meter can also be programmed to display the net inflow or outflow rate in flow units, or to display totalized inflow or outflow in volume units. Any of these parameters can be alarmed using the dual relay board and be transmitted via 4-20 mA, RS-232 or RS-485.

### Controlling Coating Thickness on a Film



In this application, Channel A measures the rate at which a coating material is applied, as measured by a flow meter, while Channel B measures the speed of the film based on pulses from a proximity switch. Displaying and alarming the A/B ratio assures that an even thickness of coating material is applied as the speed of the film is varies. The 4 - 20 mA output may be used as an input to a controller.

### Measuring Draw for Elongation



Draw ( $\text{Ch A} / \text{Ch B} - 1$ ) can be used to display the elongation of films compressed between rollers, the shrinkage films, and the RPM difference of rollers whose speed is varied to maintain tension. The six-digit resolution of the Laureate dual channel counter / rate meter is ideal for comparison of rates that are close to each other. The 4 - 20 mA output may be used as an input for desired elongation.

**Typical Pricing: Basic Dual Channel Counter...\$ 220 Alarm Relay Out...\$ 80 4 - 20 mA Out...\$ 90**

Additional A.I.S. Applications Notes: [www.AdvIndSys.com/ApplicationsNotes.htm](http://www.AdvIndSys.com/ApplicationsNotes.htm)

**PO Box 470 Harrods Creek, KY 40027**  
**(502) 292-0213 1-800-532-2477 FAX - (502) 228-0127**  
 E-Mail: [Sales@AdvIndSys.com](mailto:Sales@AdvIndSys.com) Website: [www.AdvIndSys.com](http://www.AdvIndSys.com)