

# Volumetric Metering Chamber

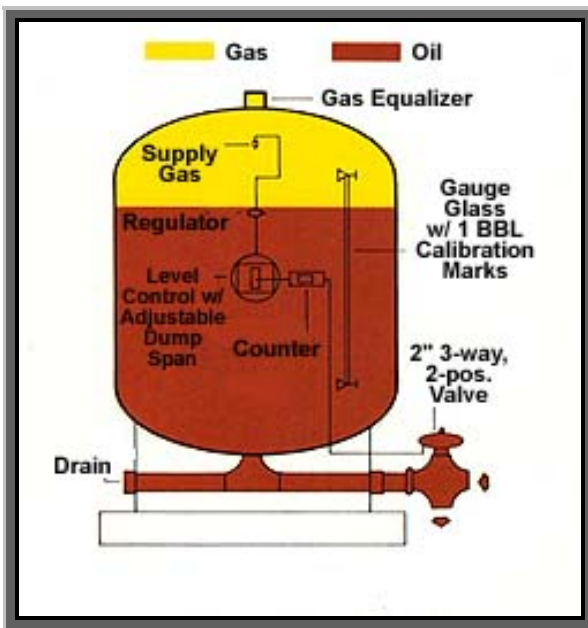


The VMC or "dump pot" is utilized to dump a measured 1 bbl volume of oil or water from a treater or separator. Each dump cycle is counted, thus a treater or separator can be utilized as a test vessel.

For example, the oil outlet of a treater is piped to the three-way valve on the metering chamber. The pressure on the VMC is equalized with the treater pressure so there is no gravity flow from the treater to the VMC. Then the VMC is empty, the float is in the down position which opens the bottom port of the three-way dump/fill valve. As oil spills over the treater outlet, the VMC fill to a top calibration mark and switches the three-way valve closing off the fill port and opening the dump port. As the oil is dumped from the chamber to storage, the level drops to a low calibration point which switches the three-way valve from dump back to the fill cycle. Each dump cycle is registered on a pneumatic counter to give an accurate record of barrels produced during a given time.

One advantage of the volumetric dump meter over a positive displacement meter or turbine is that it can be spot checked by watching a dump cycle and checking the level against the calibration marks on the vessel. With a PD or turbine meter, the only check is by installing a master meter tied in through a prover loop or by gauging a separate storage tank over a period of time.

The VMC is less susceptible to problems caused by trash or solids in the liquid which can plug off a rotary meter or damage the rotor. Also, gas breakthrough caused by level control or valve failure will cause expensive damage to a rotary type meter.



## Standard Accessories

- 4" grv. level control - adj. span
- Pneumatic counter - reset or non-reset
- gauge glass assembly w/ calibration marks
- 2" grv. 3-way, 2-pos. liquid valve
- 1/4" supply gas regulator
- tubing and fittings
- concrete block