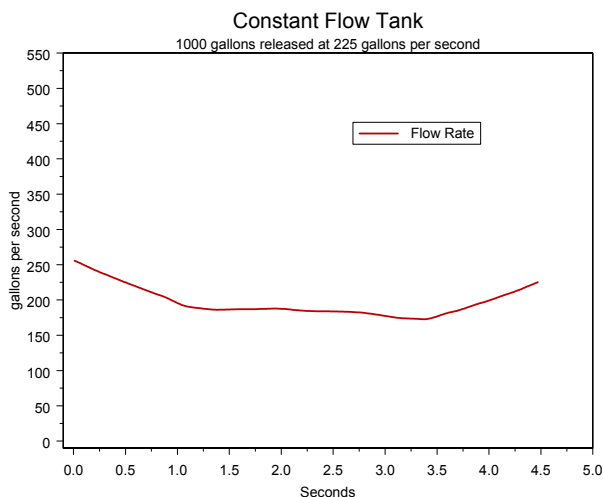




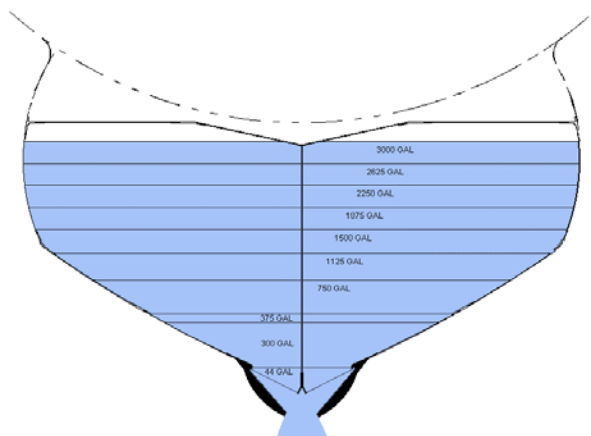
Constant Flow Delivery System

Ann Suter, Wildland Fire Chemical Systems - MTDC



Constant flow systems have door controls that allow the delivery system to behave as a single tank. Once the drop controller establishes the flow rate, the coverage level produced remains constant over the duration of the drop. The effect of changing the volume released will only change the length of the drop, not the flow rate.

The graph to the left shows the flow rate over time of a constant flow tank. The more horizontal this line is the more constant the flow rate is and the more even the coverage will be.



The system achieves constant flow by increasing the door opening as the liquid level falls inside the tank. For drops that require low flow rates, the doors will open a little and gradually widen as the fluid evacuates. For drops that require high flow rates, the doors open wide and have little room for adjustment. The result is the flow rate is not as constant.

