

# Analytical Devices Sample Water Recovery System

## Sample Water Recovery System Model SRH-250

Hydro Instruments Sample Water Recovery System is offered as an accessory to analytical devices that do not use reagent chemicals during sampling. The purpose of the system is to return sample water back to the process flow to eliminate wasted water.

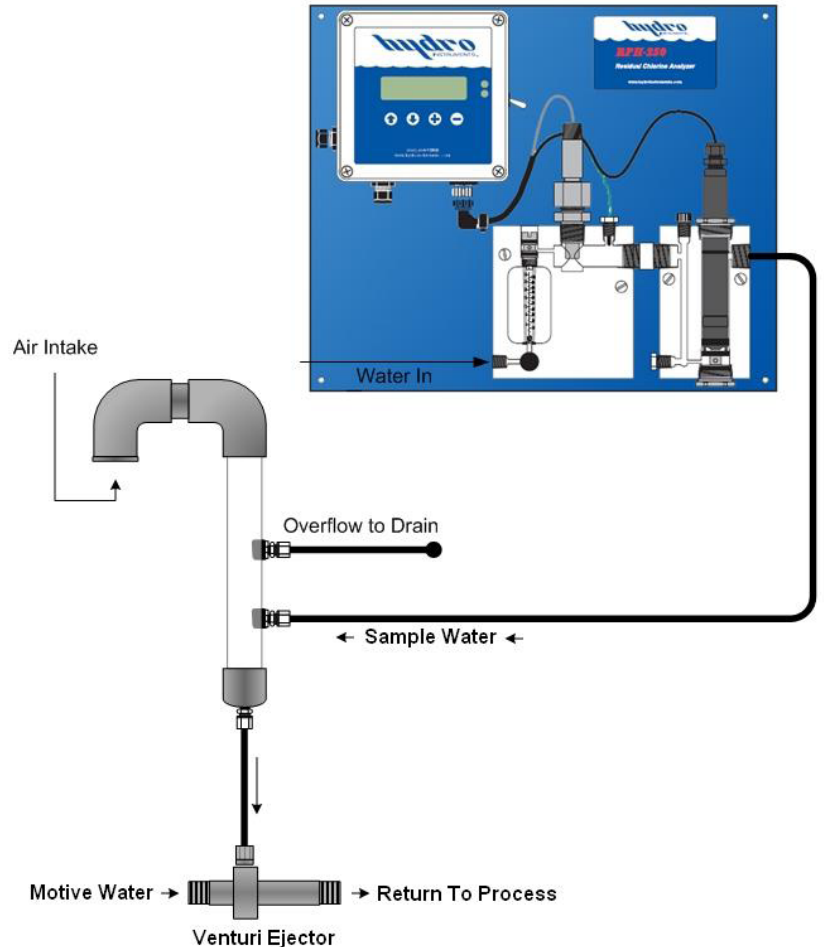
On average an analytical device uses about 10-12 gph of sample water. Over a 12 month period approximately 100,000 gallons of water will be wasted from sampling.

The Sample Water Recovery System uses an ejector to draw the water back into the process flow. The sample water manifold, constructed from clear PVC, provides a visual indication of the flow.

In the event of an ejector failure the Sample Water Recovery System is equipped with an overflow. To ensure that only clean air is introduced, the system incorporates a fine-mesh screened air intake.

The purpose of the air intake is to prevent a vacuum from being drawn on the analytical device's sample discharge, this could result in operational problems on most devices.

NOTE: Hydro Instruments recommends that local and state regulations be consulted before using this system.



# *Analytical Devices* **Sample Water Recovery System**

## **Specifications of the Model SRH-250 Sample Water Recovery System**

### **SAMPLE WATER RECOVERY SYSTEM**

#### **1. General**

The recovery system shall be vacuum operated.

The system shall have a sample water capacity of 20 gallons per hour.

The system shall convey the sample water from the analysis device, through a recovery manifold to the ejector assembly.

The system shall be constructed of materials suitable for the appropriate chemical solution.

#### **2. Sample Water Recovery Manifold**

The recovery manifold shall be equipped with a fine-mesh thermoplastic screened air intake, for the purpose of maintaining internal atmospheric pressure.

The recovery manifold shall include a safety/overflow connection, to provide a means of directing water to a desired drain location in the event of an operational failure of the ejector.

The recovery manifold shall include a transparent body, in order to provide easy visual observation of sample water flow and proper ejector suction.

#### **3. Ejector**

The one (1) ejector shall be water operated venturi nozzle type. The ejector shall provide the operating vacuum for the system.

The ejector shall incorporate a spring loaded, normally closed check valve to prevent the backflow of water into the chemical storage drum.

The check valve shall be suitable for backpressures up to a minimum of 100 psi.

Ejector check valve shall automatically close upon the loss of vacuum in the ejector.

#### **4. Accessories**

25 feet of  $\frac{3}{8}$ " polypropylene sample water shall be provided.

25 feet of  $\frac{1}{2}$ " polypropylene overflow tubing shall be provided.

A screened cap for the overflow tubing shall be provided.

Two wall-mounting clamps shall be provided for the recovery manifold.



**INSTRUMENTS**

