# SCHEMATIC AUTO SAMPLING SYSTEM - PRESSURE (ASSPTM) 



## SCHEMATIC'S PATENTED ASSP ${ }^{\text {TM }}$ ALLOWS THE SAFE,

 EASY \& PRECISE AUTOMATIC REACTOR SAMPLING UNDER PRESSURE.Schematic's patented ASSP ${ }^{\text {TM }}$ allows the safe, easy and precise automatic reactor sampling in pressurized vessel environments. The $A S S P^{M}$ is mounted on the flange of the reactor dip pipe. In operation, the dip pipe ball valve is opened and the operator activates the ASSP ${ }^{\text {M }}$. Nitrogen ( N 2 ) is automatically purged into the system to flush out any stagnant process media contained inside the dip pipe.

When N2 stops, process media from the vessel rises in the dip pipe and collects in systems PTFE ball. The PTFE ball automatically rotates to dispense the process media in the collection pot. This process is repeated until the required sample volume is reached. Once the collection cycle is complete, N 2 is purged into the system to drain the excess sample liquid from the dip pipe. Then operator closes the dip pipe ball valve and takes the sample for processing.

ASSPTM OPERATION


Secure the ASSP ${ }^{\text {TM }}$ to the reactor dip pipe flange and start.


N2 purges the dip-pipe


A vacuum then pulls process media into the collect pot


The dip-pipe is N2 flushed to drain the system

## SMART \& INNOVATIVE SOLUTIONS

>Closed sampling protects the operator enabling sampling even when the reactor is at temperature. Temperature range is from $-40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right)$ to $200^{\circ} \mathrm{C}\left(392^{\circ} \mathrm{F}\right)$.
》 The optical fill level sensor can extract random samples from 10 ml to 100 ml .
> N2 purging and flushing ensures the system is always clean and free from stagnant process media.

D Dip pipe N 2 flushing ensures true random sampling.
The ASSP ${ }^{\text {TM }}$ is offered in SS316 and Hastelloy C22, for operation in extreme corrosive applications.


