



## Chemtec Smart Sampling System-v3 PATENT PENDING

### General Description

Chemtec has developed a revolutionary Smart Sampling System that accurately extracts, monitors, and records the entire sampling process from start to finish. Additionally, it provides instant alarm notification upon a sampling failure. Utilizing a high-resolution positive displacement flowmeter, the Smart Sampling System is extremely accurate and dependable. The Smart Sampling System was designed to meet the new API 8.2 standards. Data points such as **number of samples taken**, **volume of each sample collected**, and **accumulated sample volume** can now be monitored in real-time.

The Smart Sampling System provides the user with access to all pertinent data including the metered volume of the pertinent stream, metered volume of the sample stream, number of samples taken, and the metered volume of each sample. Temperature and BS&W averaging data is also collected. The collected data is recorded on a local USB flash drive, and it can also be transmitted to an external system via Ethernet or cellular modem.

Designed to meet new  
API 8.2 standards

Chemtec is a leader in the field of precision metering. Chemtec developed the Smart Sampling System utilizing technology derived from our additive injection systems. These additive systems demand accurate metering, alarm monitoring and data reporting. These same demands can now be met with the Smart Sampling System.

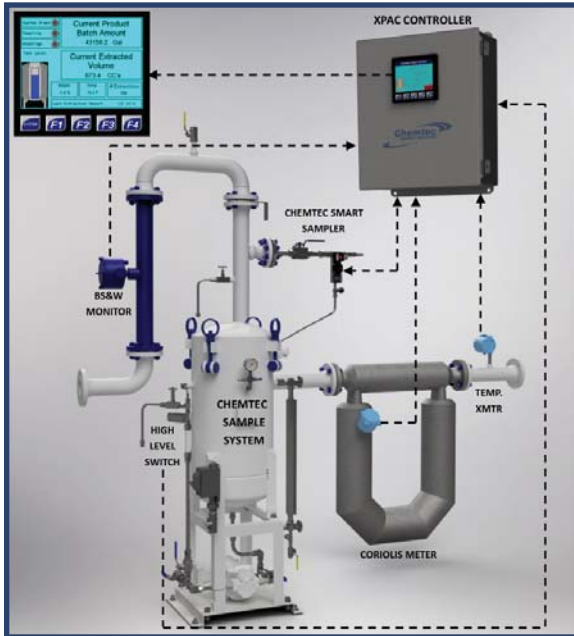
High quality, competitive pricing, and quick delivery...  
Chemtec delivers it all.



### Features & Benefits

- Instant Alarm Notification
- Simple design & setup
- Inline & fast loop installations
- Verifies sampling accuracy
- Adjustable extraction volume: 0.25 - 100+ cc samples
- Up to 100 samples per minute
- Easy to clean & repair in field
- Easy to heat trace
- Remote monitoring
- Detailed batch & performance reports
- BS&W Monitoring
- Temperature averaging
- Instant email or text notifications for alarms (optional)
- Modbus Interface (optional)

# Chemtec Smart Sampling System PATENT PENDING



Power Input	Smart Sampler (solenoid) - 120 VAC XPAC - 120 VAC
Solenoid	ASCO, 2-way, direct acting, normally closed
Meter Sensor	Hall-effect type, non-intrusive, 3-wire, 5-30VDVC
Mechanical	304 SS block with 316 SS gears and 410 SS pins
Display	3.5" TFT transmissive color display, 320x240, 16-bit, LED
Serial COM	(1) RS-232 & (1) RS-485
Connectivity	Ethernet 10/100 MB, Modbus, 32 GB MicroSD card included, support for >32 GB
Programming	Via touchscreen keypad
Event Log	10,000,000+ transactions
I/O	12 DC inputs, 6 relay outputs, and 4 analog inputs
Electrical Classification	Smart Sampler - Class I, Div. 1 XPAC Sampler Controller - Class I, Div. 2
Temperature Rating	Ambient operating range: -10 C to +100 C
Pressure Rating	10-1480 PSI

## Performance Data

The Smart Sampler captures detailed information throughout a batch. The information to the right shows transaction data from the start to the end of the batch including:

- Date/Time Stamp
- Location ID
- Sample Count
- Target Sample Size
- Actual Sample Size

This data is provided in .CSV format which is easily imported into Excel.

Date	Time	LocationID	Current Product (BBL)	Sample Setpoint (cc)	Extracted (cc)
4/11/2019	7:13:23	CES Crude	1.00	0.43	0.43
4/11/2019	7:13:25	CES Crude	2.00	0.43	0.43
4/11/2019	7:13:26	CES Crude	3.01	0.43	0.45
4/11/2019	7:13:27	CES Crude	4.01	0.43	0.43
4/11/2019	7:13:28	CES Crude	5.01	0.43	0.43
4/11/2019	7:13:29	CES Crude	6.01	0.43	0.43
4/11/2019	7:13:30	CES Crude	7.01	0.43	0.43
4/11/2019	7:13:31	CES Crude	8.01	0.43	0.43
4/11/2019	7:13:32	CES Crude	9.02	0.43	0.43
4/11/2019	7:13:33	CES Crude	10.02	0.43	0.43
4/11/2019	10:33:37	CES Crude	369.67	0.45	0.45
4/11/2019	10:33:38	CES Crude	370.67	0.45	0.45
4/11/2019	10:33:40	CES Crude	371.68	0.45	0.45
4/11/2019	10:33:42	CES Crude	372.68	0.45	0.45
4/11/2019	10:33:43	CES Crude	373.68	0.45	0.45
4/11/2019	10:33:45	CES Crude	374.68	0.45	0.45
4/11/2019	10:33:47	CES Crude	375.68	0.45	0.45
4/11/2019	10:33:48	CES Crude	376.68	0.45	0.45
4/11/2019	10:33:50	CES Crude	377.68	0.45	0.45
4/11/2019	10:33:52	CES Crude	378.68	0.45	0.45
4/11/2019	10:33:53	CES Crude	379.68	0.45	0.45
4/11/2019	10:33:55	CES Crude	380.68	0.45	0.45
4/11/2019	10:33:57	CES Crude	381.69	0.45	0.45
4/11/2019	10:33:58	CES Crude	382.69	0.45	0.45

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