

SAMPLESENSE OIL

For Agilent™ 5900 ICP-OES

Ultra-high Throughput Oil Analysis System

The SampleSense Oil system for Agilent 5900 ICP-OES provides ultra-high throughput analysis for in-service oil laboratories running ASTM Method D5185. The SampleSense Oil system provides in-service lubricant laboratories an entirely new level of performance. SampleSense Oil combines ultra-high throughput ICPOES analysis, minimizes ICP system maintenance, maximizes profit per sample and provides significantly improved data.

SampleSense Oil is a complete, automated sample introduction system for oil analysis. It combines the DXCi Autocorrecting Autosampler with SampleSense technology to fully automate the sample loading process. After the sample is mixed, the unique SampleSense valve automatically detects the presence of sample as it is loaded rapidly from the autosampler. Once the sample loop fill is confirmed by the sensors, the sample is automatically injected and the ICP-OES analysis is triggered for a tightly timed analytical sequence.



SampleSense Oil Analysis System with Agilent 5900 ICP-OES

Features:

- SampleSense optically monitored sample loading
 - Fully automated sample loading – no timings required
 - Automatically adjusts for samples of varying viscosity
 - Unsensed samples are reported back to software
- DXCi Autocorrecting Autosampler
 - Intelligently autocorrects probe position
 - ▶ *Even if accidentally obstructed*
 - Highest speed probe movement
- Gas infusion mixing option provides rapidly controlled sample homogenization just prior to uptake
- Patent-pending probe design that eliminates sample drips and resulting cross contamination



See it in Action!

Benefits:

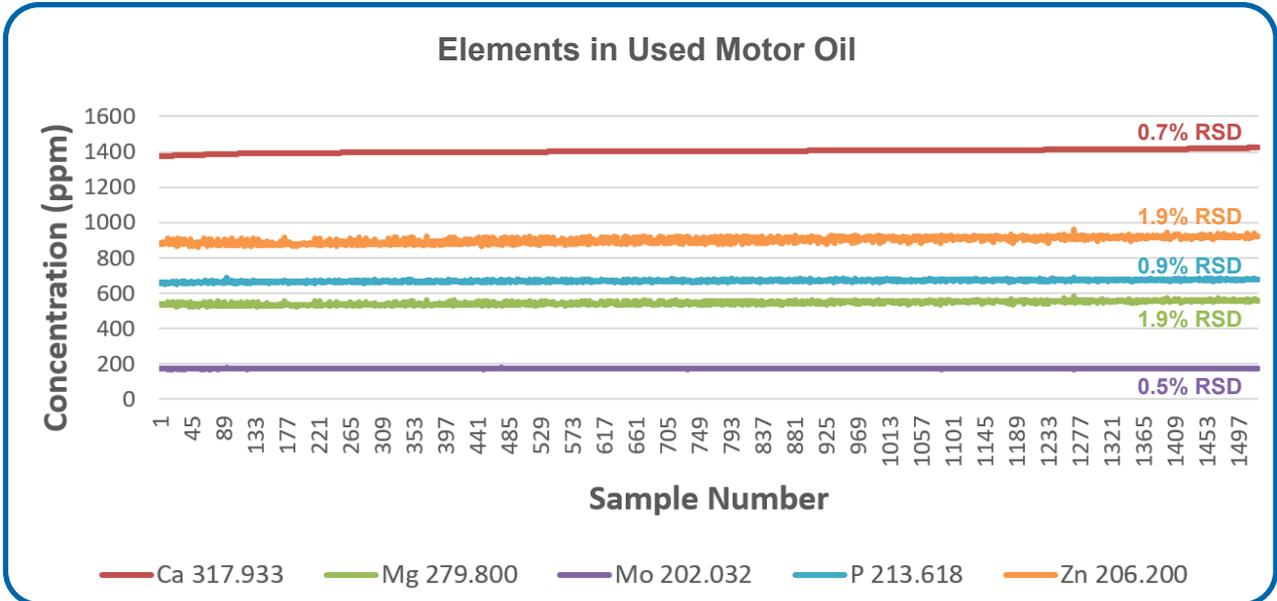
- Reduces carbon buildup on torch
- Maximizes profit per sample
- Eliminates oil drips from sample probe
- Improves stability for longer, more productive runs
- Up to 180 samples per hour



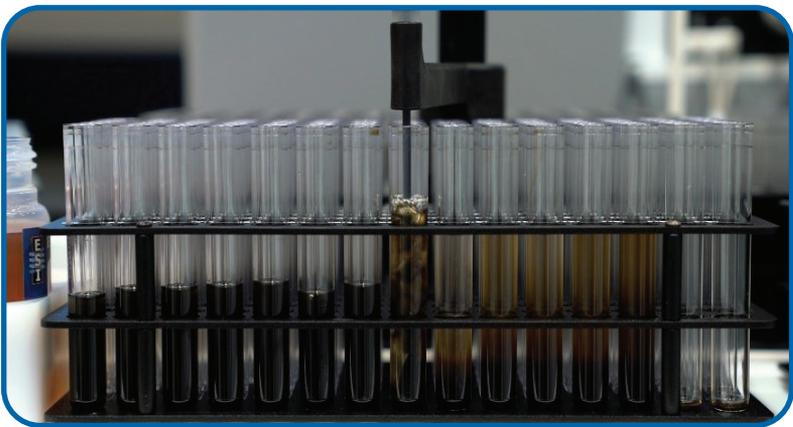
SampleSense SS6 Valve

SampleSense Oil Sample Throughput Performance

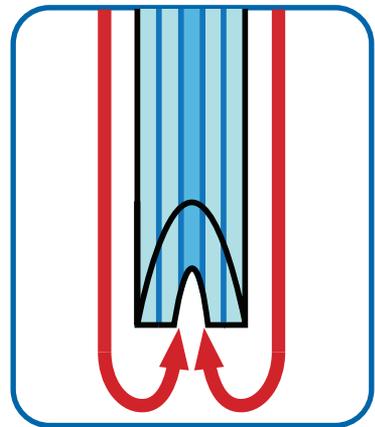
| | 1 Minute | 1 Hour | 8 Hours | 24 Hours |
|----------------------------|----------|--------|---------|----------|
| # Oil Samples Analyzed per | 3 | 180 | 1440 | 4320 |



SampleSense Oil system 9.5 hour stability run on Agilent 5900 for 5 higher concentration elements in used oil



Gas infusion mixing of used oil and solvent with SampleSense Oil system just prior to analysis on Agilent 5900 ICP-OES



Closeup diagram of V-shaped tapered tip probe on SampleSense Oil system. The probe design allows the applied vacuum to efficiently remove sample droplets to eliminate contamination of other samples

| SampleSense Oil System for Agilent 5900 ICP-OES | | |
|---|-----------------------|--------------|
| Description | Total Sample Capacity | Part Number |
| 2DXCi SampleSense Oil for Agilent ICP-OES | 180 | 2F-SSOil-65 |
| 4DXCi SampleSense Oil for Agilent ICP-OES | 360 | 4F-SSOil-65 |
| 8DXCi SampleSense Oil for Agilent ICP-OES | 720 | 8F-SSOil-65 |
| 14DXCi SampleSense Oil for Agilent ICP-OES | 1260 | 14F-SSOil-65 |

