Testing your Oils will Never be the Same.

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COQG/New Orleans, LA
Arizona Instrument LLC
Presentation Schedule

- Company History
- Introduction
- Principles of Operation
- General Operation
- Conclusion
History of Arizona Instrument

- 1981
  - Company formed to design, manufacture and market Computrac moisture analyzers
- 1986
  - Acquired Jerome Instrument Corp (JIC)
  - Mercury and H$_2$S analyzers
- 1997
  - Water specific analyzer
  - Alternative to Karl Fischer
- 2002
  - Introduced Vapor Pro line of moisture analyzers
Introduction

- No toxic reagents (buying/disposal/ownership)
- Correlates to Karl Fischer in precision and accuracy without displaying known bias high/low readings (ex. mercaptans, H₂S, ketones, and aldehydes)
- Sensor based technology
- Detects below 10 ppm
- Simple to operate
- No glassware so it can be used on the production floor, in a lab environment, and out in the field
- Manufactured in our facility (Fully supported)
Additional Features

- Heating range of 25°C to 200°C
- Memory settings for up to 8 sets of sample parameters
- Retains data from last 30 tests
- Real-time graphing
- Data can be sent to external printer or personal computer
- Self-diagnostic, alerts user if a problem is detected
The Computrac Vapor Pro FX utilizes a controlled sample injection system, a coiled tube heater, a nitrogen flow system and a moisture specific sensor.
**Principles of Operation**

- Volatiles from the sample are carried by a dry carrier gas (Argon, N\(_2\)) through the sensor block containing the moisture-specific polymer capacitance sensor.

- The instrument then displays real-time test results in:
  - Parts per Million (PPM)
  - Micrograms (ug)
  - Percentage (%)
  - Graphs

- Test parameters such as temperature, ending criteria, and time can be changed to optimize test speed and accuracy.
Specifications

Dimensions: 15cm x 38cm x 37cm
14.5” l x 15” w x 5.75 h

Weight: 8.6 kg or 19 lbs

Power: 100-120V~, 50/60hz, 8 amps
220-240V~, 50/60hz, 4 amps

Heating: 25°C to 200°C

Resolution: 0.1 ppm

I/O ports: Parallel printer port
9 pin RS-232
9 pin balance communication
PC keyboard DIN socket

Repeatability: Typically CV’s <10%

Moisture Range: 100% to less than 10 ppm

Sample Size: 1 to 5 cc
General Operation

- Running a Test

1. Insert the syringe into the instrument’s transport assembly.

2. Lower the loading lever all the way down to fully insert the syringe’s needle into the heated coil.

3. Close the transport access cover.

4. Press [START].
Conclusion

- **ASTM/API**
  - We are currently in the process of becoming ASTM/API certified for D02.02 committee

- **Samples**
  - We invite you to send in samples to our laboratory to develop parameters and trial the instrument in your facility at no cost

- **Thank you**

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