

**BROCHURE** 

# Raman for Downstream Applications





### **Expediting QA with Raman**

A refinery's onsite quality assurance lab constantly analyzes samples and verifies the quality of their products prior to distribution. Throughput is a main challenge for these labs as the speed samples can be processed is dictated by the lab's measurement technology.

Traditional methods, such as a knock engine, vapor pressure analyzer, and gas chromatographer, require several hours to provide results.

Raman spectroscopy can analyze 180 samples in the time it takes an octane analyzer to analyze a single sample. Raman is also flexible - labs can run multiple analysis methods simultaneously.



A solid-state Raman system, the All-In-One has no moving parts, making it ideal for continuous process monitoring, including inline, at line, or offline, and routine laboratory analysis.

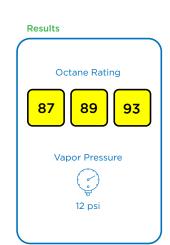
# Measuring Octane Numbers

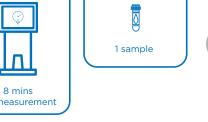










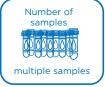




MarqMetrix All-In-One



under 15 seconds on average for measurement









### MarqMetrix All-In-One

#### Benefits

- Small footprint: move in the All-In-One without moving other equipment out
- Complementary analysis to your existing technology: knock engine, vapor pressure tester and gas chromatographer
- Data you can use: All-In-One measurements are correlated to the relevant ASTM standard



With a small footprint and no moving parts, the All-In-One makes Raman analysis portable and puts decision-makers at the point of measurement.

# **Industry Uses**



A US-based refinery is using the AIO to certify rack batches while the knock engine is running in the background to produce the custody transfer documentation. By doing this, the refinery is bringing gasoline to the market faster.

Read more (→)



# Selected Applications for Refineries

MargMetrix's core models offering allows refineries to:



Certify gasoline blends



Analyze Naphtha pretreats



Identify sulfur peaks



Analyze CO, CO, and oxygen level concentrations



Simulate distillation





# **Specialty Probes**

#### Lab Applications

Proximal BallProbe & Vial Holder



- Non-contact probe
- Accommodates a 20ml scintillation vial

#### Lab & Process Applications

FlowCell



- Measure volatile fluids inline
- Quick connection to pressurized cylinders

#### **Process Applications**

Process BallProbe



- Measure fluids in the process piping
- Wide range of chemical compatibility and resistance to high temperatures



#### Additional Accessories

Hazardous location enclosures for additional protection







