PetroDigest

Your Petroleum Testing Compass

everlife Chemopharm | everlife Chemoscience

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PAC | PHASE TECHNOLOGY

Introducing you a Fastest and Most Versatile 2 in 1 Analyzer - The OptiMVD

The OptiMVD is a mini viscosity and density analyzer designed by PAC, applicable for petroleum products like diesel and lubricant. It uses ASTM D7945 to measure viscosity between 1mm 2/sec to 2000mm 2/sec at 40°C. For density, it complies with ASTM D7777 and with a measurement range from 0.5g/cm3 to 2g/cm3. The repeatability and reproducibility of the unit have shown that it can meet and exceed the requirement of ASTM D445.

	KV at 40°C	KV at 100°C	Den at 15°C
Accuracy	✓ Meet/exceed D7945 & D445	✓ Meet/exceed D7945 & D445	✓ Meet/exceed D7777
Reproducibility	✓ Meet/exceed D7945 & D445	✓ Meet/exceed D7945 & D445	✓ Meet/exceed D7777
Repeatability	✓ Meet/exceed D7945 & D445	✓ Meet/exceed D7945 & D445	✓ Meet/exceed D7777

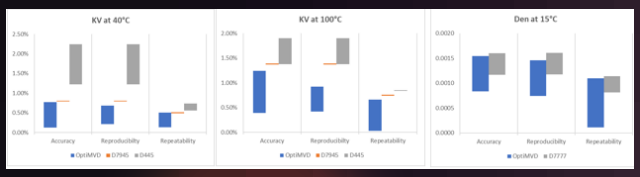

Figure 1: The accuracy, repeatability, and reproducibility of the OptiMVD as compared to ASTM D445 and ASTM D7945

Using only 5ml of the sample, the analyzer provides both viscosity and density results in a single run. Besides that, the dual model can even measure the sample at two different temperatures in a single test, completing the run as fast as 10 minutes.

On April 21st, 2022, a launching event of the OptiMVD was held online for Oil and gas industry customers from Malaysia and Singapore. The seminar was interactive and fruitful with the product presentation and live demonstration by PAC specialists from Canada- Larry Spino and Vivian Yuen. With the integrated 24-position autosampler carousels, the analyzer maximizes the power of automation to perform the auto measure & cleaning process and thus improve the sample throughput. Better repeatability and reproducibility are also achieved with better unit control.

Figure 2: Screenshot of Webinar for the Launching of the OptiMVD

As Chemopharm and Chemoscience are officially the Authorized Distributors for PAC AC Gas Chromatography Solutions, it completed the portfolio for the company to provide a complete solution to our customers locally. With the addition of AC, now Chemopharm and Chemoscience can provide service and support for PAC Physical Properties, Elements Analyzer, and Gas Chromatography range.

PAC Reformulyzer M4
Hydrocarbon Group Type Analysis

AC® ANALYTICAL CONTROLS by PAC

With years of experience in GC, PAC AC is well-known for the Reformulyzer, which provides a complete group type analysis of gasoline and gasoline blend streams using multi-dimensional gas chromatography. Besides that, PAC AC also has the complete solution for Stimulation Distillation (SIMDIS) and Detailed Hydrocarbon Analysis (DHA). Natural Gas Analyzer, LPG & Propylene Analyzer, Refinery Gas Analyzer (RGA), Oxygenate & Aromatic, trace analysis, and customized GC.

Recently, AC has added a system that caters to biodiesel name as All in one biodiesel that provides complete biodiesel analysis in one system without the hazard of modifying the unit. With the synergistic collaboration between PAC, Chemopharm, and Chemoscience, we will give our customers comprehensive coverage from sales to aftersales service and support.

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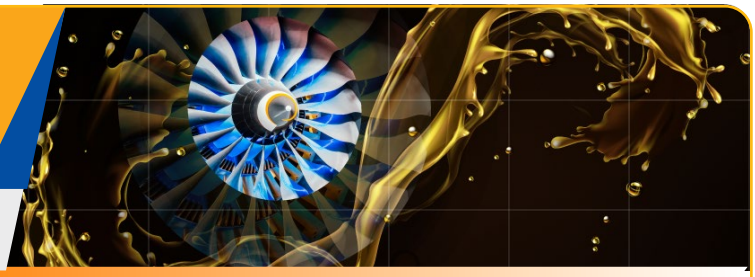
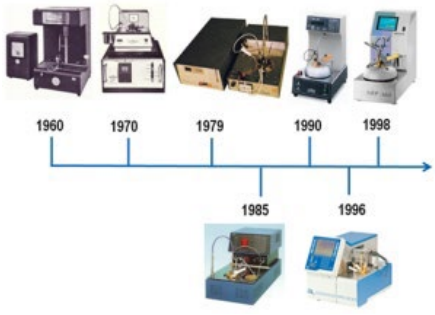


Flash Point Testing

When handling chemicals, especially petroleum products, safety is one of the most critical factors, especially when nature tends to be flammable. The implementation of flash point testing assesses the safety of liquid fuels, liquid lubricants, and other similar products. Flash point has been defined as the lowest temperature at which a flammable material gives off sufficient vapor to ignite in the air if given an ignition source. Although the flame/vapor is usually not enough to sustain at the flash point, it is essential to recognize it because even the very brief ignition of vapor can lead to catastrophic results during transportation or storage.

Flash point is typically measured either in the close cup or open cup method, which attempts to create the condition that may be encountered in the real world. A common close cup scenario is during transportation and storage, where the specimen is stored in a close area. While open cups usually involve cases such as spillage. Usually, open cup test will always give a higher flash point than the closed cup for a given substance as the content of the vapor will evaporate in the open environment.

Over the year, a few methods have been adopted in the ASTM as the testing method for flash point based on the sample type. These methods have utilized unique parameters such as test cup material, test cup dimension, heating rate, stirring rate, sample size, etc. No one test method fits all; for example, a very viscous sample might be better tested in a method with a faster stirring rate. The testing of flash point can be done via manual and automated tester. With the development of the technology, automatic tester has become primarily used as it can detect the flash point automatically without supervision. The revolution of flash point tester in the market has slowly moving toward the fully automate. PAC as the solution provider for petroleum testing has over 70 years of experience in developing the flash point tester. The latest model that available in the market is OptiFlash.



PAC OptiFlash covers both the open cup and closed cup methods.

Do contact the representative to understand more about the latest cool feature of the OptiFlash.

Get to Know Jasper now!

Hello there! My name is Jasper Chan. I joined Chemoscience as the Technical Manager in June 2020. I have over 30 years of experience in GC and GCMS and am happy to share my knowledge with anyone. We, the Oil & Gas Department, are always here for our customer.

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