FLUITEC

RULERView™

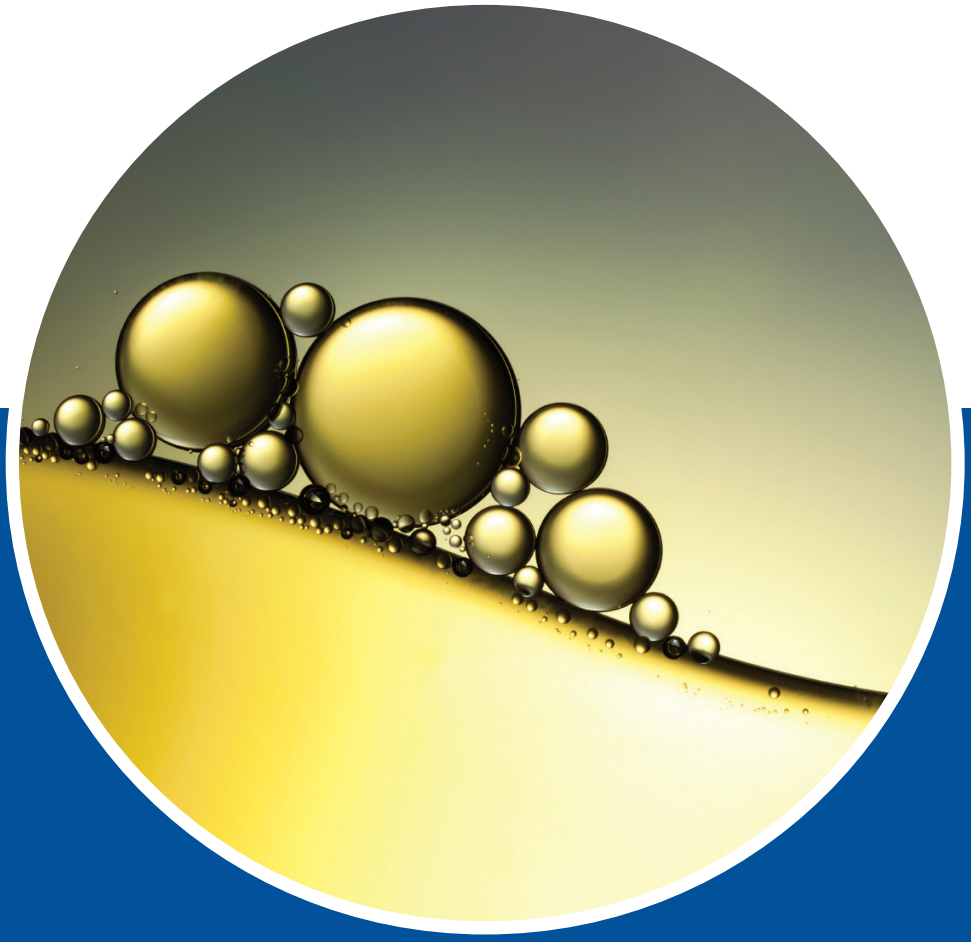
A Window into the Life of your Lubricants

MAXIMIZING ASSET LIFE
THROUGH TECHNOLOGY

Introducing

RULER View™

A Window into the Life of your Lubricants



Oils do more than just lubricate. They are an historical archive, giving you a remarkably accurate documentation of machine events and contaminant ingressions.

Can we access this valuable information?

The RULER View™ provides the full picture of a fluid's antioxidant health – it's a window into the health of your lubricant. This technology is a critical part of an effective condition monitoring program.

Oil Analysis has proven to be a very effective predictive technology in the reliability toolbox.

One of the keys to this success is performing the right test at the right time. This allows one to extract as much actionable information from the sample as possible. The RULER View™ provides critical insight into the health of the lubricant not visible with other testing technologies.

ALL OILS EVENTUALLY FAIL DUE TO OXIDATION.

In many applications such as turbines, hydraulics, compressors and aerospace, oxidation is the primary mode of failure. In these applications, the most important additive components are antioxidants. The patented RULER View™ uses Linear Sweep Voltammetry to quickly and accurately measure active antioxidants in lubricants and easily trend the depletion of these critical additives. With this information, you now know how much longer your fluid may last. We call this the oil's Remaining Useful Life (RUL).

In the past, indirect measurements of the fluid's antioxidants were taken. One common test is RPVOT (ASTM D2272) that examines the oxidative stability of the fluid. This technology has been shown to be less effective in today's complex formulations employing hydro-treated mineral oils and new antioxidant technologies.

Other techniques to directly measure antioxidants such as infrared analysis (FTIR) often cannot provide the full picture. FTIR interpretation is complex and some additive components mask the critical antioxidant region.

Only the RULER View™ provides the full picture of a fluid's antioxidant health and is the optimum window into the health and life of your lubricant. RULERtechnology is a critical part of an effective condition monitoring program. Using the RULER View™ extracts the maximum historical data from your oil allowing your organization to make better decisions in the future.

INDUSTRY SUPPORT

Be comfortable that your RULER View™ investment is supported by industry. The RULER technology has received strong industry support over the last 15 years. There are four ASTM standards written around it (D7590, D6971, D6810 and D7527) as well as industry guidelines (DASTM4378 D6244 and DIN - VGB M416). Major equipment OEMs such as Siemens and GE recommend RULER as part of a condition monitoring program. Furthermore, most oil and additive manufacturers use the RULER technology as both a condition monitoring and research tool to gain further insights into their lubricant formulations.

FEATURES

RUGGED YET REFINED

- Brilliant 7" display works in full sunlight or in the laboratory.
- Elegant design employing magnesium-alloy construction.
- Tough yet beautiful Corning® Gorilla Glass
- IP 67 standards ensuring full protection in dusty environments and in up to a meter of water.

INNOVATIVE FEATURES

- Microphone allows you to dictate relevant sample data rather than having to type it in.
- Built-in 5 megapixel camera can take a picture of your MPC patch (Membrane Patch Colorimetry, ASTM D7843) for measuring varnish potential.
- Built-in report template also provides space for integration of the MPC patch picture and comments.
- All of this elegance and durability, yet it weighs less than 3lbs

RULER View™ Test Solutions

Various engineered RULER View™ Test Solutions allow you to test many different types of oils and applications. Our consistently high quality test solutions ensure high instrument precision and repeatability. The RULER View™ Test solution vials (7ml glass vials filled with 1g of sand and 5ml of the specified electrolyte formula) are pre-packed in a case of 144 units.

QUICK & CONNECTED

- Lightning fast, Windows 7 OS driven by the brand new Intel® Atom™ E660T processor.
- USB 2.0 port, ZigBee® wireless and Bluetooth connectivity allows you to connect the RULER View™ to a wide range of peripherals such as printers, memory sticks or a mouse.
- Integrated RDMS 3.0 software that allows you to do all of the analysis and reporting directly on the RULER™ Tablet.
- WLAN 802.11 a/b/g/n allows internet accessibility with the capability of downloading software updates and other technical support.

The RULER View™ Package

- RULER View™ Instrument with Probe and USB Communication Cable
- Carrying case for optimum protection during field use of instrument
- Integrated RDMS III Software (RULER™ Data Management Software)
- 100-240VAC Power Adapter
- Micropipettor (200-500 microliter) with disposable tips
- Cleaning material: alcohol pads and tissue wipes
- User Manuals for the RULER View™ device and RDMS

Test Solution Types

RED SOLUTION
Turboprops &
Aviation Turbines

GREEN SOLUTION
Hydraulics &
Industrial Lubrication

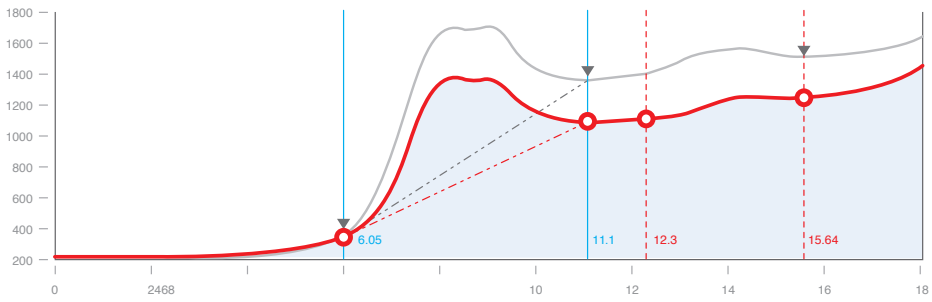
BLUE SOLUTION
Gas & Diesel
Engines

YELLOW SOLUTION
Steam
Turbines

RULER View™ brings another level of predictive maintenance to the plant floor.

RULER™ DATA MANAGEMENT (RDMS)

RDMS III is the latest software release designed to maximize the value of your RULER™ Tablet. The software allows you to handle an unlimited number of samples in a database. In addition, multiple databases and graphs can be open at one time. New functionalities such as floating graphs and copying/pasting between databases and displaying/sorting results provide flexible options for managing your data. A shortcut allows you to easily export graphs or data to create reports in other software. RULER™ results can now be compared regardless of the standard used. You also have the option of reporting the percentage of remaining antioxidant compared to a new lubricant standard or simply reporting the amount of antioxidant remaining.



The RULER™ View generates a voltammogram, identifying the type and quantity of healthy antioxidants in the lubricating oil or grease. This information provides a window into the Remaining Useful Life of your lubricant.

Equipment ID: TG5

- **Area: TG5**
- **Area: Gas Turbine Oil VG 32**
- **Sample: TG5**
- **Standard: Gas Turbine Oil VG 32**

RULER View™ Technical Specifications:

Core System	
Operating System	Windows® Embedded Standard 7
Processor	Intel® AtomTM E660T 1.3 GHz
Memory	1 GB DDR2 SDRAM
Storage	16 GB solid state drive
Display	
	Sunlight viewable hardened touchscreen landscape or portrait orientation passive stylus or finger operation 7-inch WVGA (800x480)
Sensors	
	Light sensor for auto backlight adjustment. Position sensor (accelerometer) for screen orientation
Communication	
WLAN	Summit 802.11 a/b/g/n
Zigbee®	Smart Energy (SE)
Wireless USB Bluetooth®	Video/data/audio v2.1 + EDR Class II (BlueSoleil stack)
Expansion Slots	
	SD card slot (supports up to 32 GB) 2xUSB 2.0, 2xRS-232 1xCAN bus 2.0

Camera	
	5-MP color camera with flash and barcode decoding capabilities
Software	
	Windows® Embedded Standard 7 RDMS 3.0 Tablet
Power	
Primary internal	Li-ion battery, 7.4 V, 3100 mAh
Input	10–20 VDC, 2 A
Dimensions	
	9.0 (L) x 7.3 (W) x 2.3 (H) inches (230 x 185 x 60 mm) 2.96 lb. (1346 g)
Regulatory	
	FCC class B CE RoHS WEEE
Environment	
Operating temp	-22 to +122 °F [-30 to +50 °C
Drop	Multiple 6-foot (1.8-meter) drops to concrete
Sealing	IP67 certified
Humidity	5%–95%, non-condensing
Vibration	MIL-STD-810F

ABOUT US

Fluitec currently has technology deployed in over 50 countries spanning five continents. Fluitec provides our customers and partners leading edge technologies and knowledge to realize optimum reliability and productivity on their plants. Our holistic approach maximizes the life cycle of lubricant systems in an environmentally sustainable way.

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