

WSI Analyser SA9000-0

Water Separation Characteristics of Aviation Turbine Fuels

ASTM D8073; IP 624

ASTM D1655, Appendix XI; JIG Bulletin 121; ATA 103 (2019,1)

- Fully automated test procedure reduces operator time and knowledge required
- Consistent sample handling improves repeatability and reproducibility of test
- Patented Ultra Sonic Mixing automates sample mixing to greatly increase the accuracy of test
- Rapid test, no warm up time required
- Internal data storage with USB data output
- Substantial consumable cost and waste saving per test
- Field calibration, no instrument down time



• Aviation •

WSI Analyser

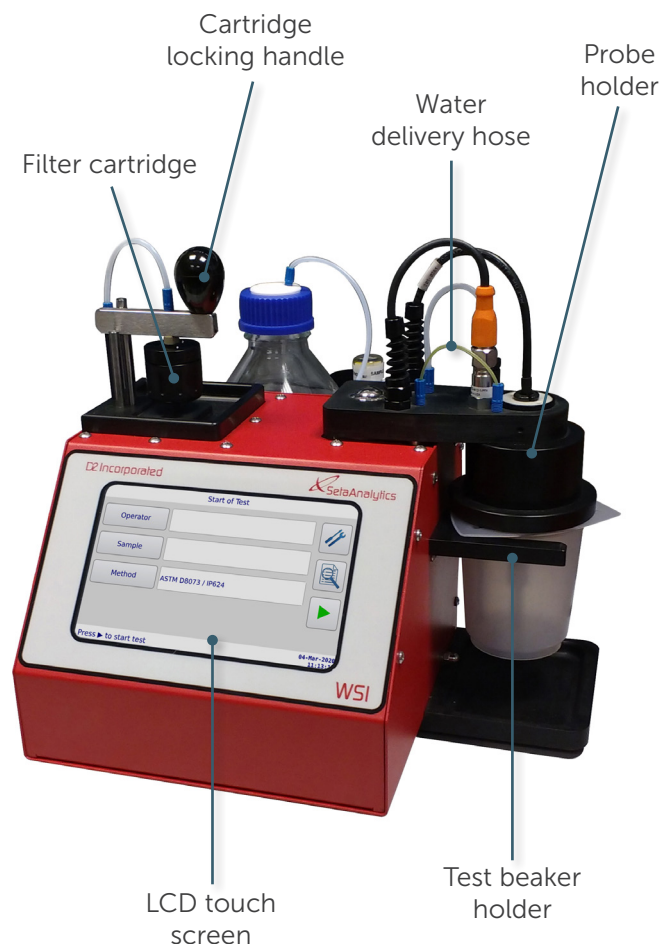
Water Separation Characteristics of Aviation Turbine Fuels

ASTM D8073; IP 642; ASTM D1655; JIG Bulletin 121; ATA 103

Water Separation Instrument

The WSI was developed in conjunction with industry stakeholders to rapidly and precisely measure for the presence of surfactants in jet fuel. The instrument was designed to be easily operated with a minimum of training and its rugged design makes it suitable also for field laboratories. ASTM and EI test methods have been developed and are now approved for use in accordance with ASTM D1655 Appendix XI and JIG Bulletin 121.

The Joint Inspection Group (JIG), published their Product Quality Bulletin number 121 which revises the Protocol for Water Separation Testing Downstream of Point of Manufacture and advises testing can be done using ASTM D8073 (IP 624).



Operator Interface

Start of Test

Operator	<input type="text"/>	
Sample	<input type="text"/>	
Method	ASTM D8073 / IP624	

Press ► to start test

04-Mar-2020 11:13:13

Test Preparation

Add fuel then press Next

04-Mar-2020 11:15:03

End of test

Operator:	OPERATOR	
Sample ID:	SAMPLE	
Filter ID:	1575860726	
Method:	ASTM D8073 / IP624	
Fuel sample temperature:	23.1°C	
Fuel sample conductivity:	N/A	
WSI:	97.9 LW	
Date:	19-03-2020	
Time:	09:20	
Filter error:	Filter already used	

19-Mar-2020 09:28:54

> Enter operator and sample details, press ►

> Add fuel, lock sonicator arm, add new filter, test begins

> Final result displays

For more information please visit: www.stanhope-seta.co.uk

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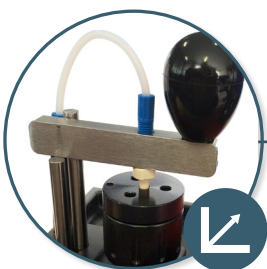
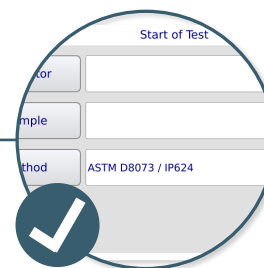


Cost Saving

- No expensive consumables required, just one low cost filter per test for substantial cost saving and reduced waste
- Low operator time (under 3 minutes) due to simplicity of set up and automation, giving operators the option to work on something else and reduce labour costs
- In field calibration eliminates time and costs associated with sending the instrument to a service centre

Ease Of Use

- Features simple user interface with touch screen display
- The fully automated test means minimal operator knowledge is required so no extensive training is needed before using the instrument
- Visual and acoustic alarm signals any errors with test

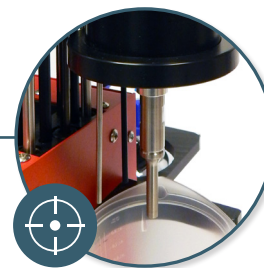


Enhanced Test Throughput

- Bar code reader (optional) to scan sample ID's for quick test set up
- No instrument warm up time required, test can begin immediately
- Automated cleaning and test sequence optimises time taken for each stage of the test
- Place sample in beaker, let test run, results are displayed in 10 minutes

Precision and Accuracy

- Fully automatic test sequence and consistent sample handling ensures test repeatability and reproducibility
- Possible missed steps or operator bias are eliminated for precise results
- A Patented Ultra Sonic Mixer eliminates any variables with water droplet size and ensures the same amount of energy is applied to each sample for accurate test results
- Automatic warning if sample temperature is outside range, helping labs comply with test methods



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Technical Specifications

WSI Analyser SA9000-0	
Measurement range	0-100 Water Separation Index (WSI)
Sample temperature range	18 °C to 29 °C
Sample size	220 ml
Pressure correction	Automatic barometric pressure correction
User interface	Colour LCD touchscreen
Data storage	Internal data storage and USB connection
Connectivity	USB mini for data download USB type A for barcode reader (optional)
Power	Universal, AC 85-265 VAC 42-63 Hertz
Outputs	USB, digital display, .txt compatible files
Size (HxWxD)	38 x 31 x 35 cm
Weight	8 kg

Typical Applications

Pipeline distribution terminals

The WSI is ideal for testing water separability at pipeline distribution terminals due to its simplicity and short test duration ensuring a smooth flowing distribution.

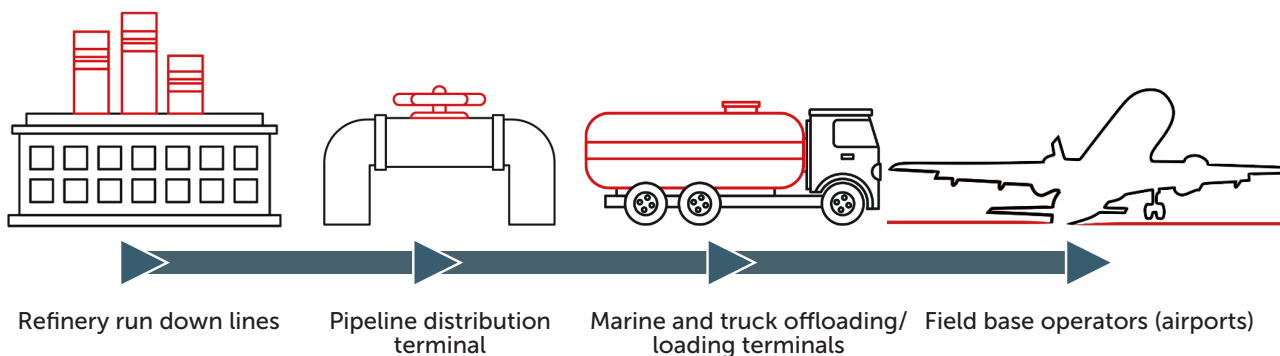
Marine and truck offloading/ loading terminals

Fuel being transferred throughout the distribution line by different modes of transport are often required to meet ASTM D1655 Table 1 specifications. The WSI provides a rapid screening process decreasing waiting time.

Field base operators (airports)

Rapid screening of fuel filterability is an extremely important parameter, as the fuel enters the wing of the aircraft, it must meet ASTM D1655.

From refinery to wing



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