wilks
A Spectro Scientific Company

WilksIR.com

InfraCal Soot Meter

- One step measurement-direct readout
- Levels to 15% without dilution
- Rapid analysis—less than 30 seconds
- Field-proven infrared technology
- Compact, portable and rugged



The InfraCal Soot Meter complies with ASTM 7686 method for measuring soot in in-service lubricants. Soot is an important oil and engine condition indicator. More stringent emission requirements as well as saving costs with extended drain times make it more important than ever to routinely check soot levels.

Infrared spectroscopy is a well-established laboratory method for testing used lubricants. The InfraCal Soot Meter measures the amount of suspended carbon (soot) in diesel engine lubricating oils by infrared absorption at a fixed wavelength. The table below shows a comparsion to FTIR and TGA (thermogravimetric analysis). The TGA method requires considerable operator training and is not suitable on-site field use. The Soot Meter is a less expensive option to an FTIR if only repetitive soot measurements are required.

Ideal for:

- Oil & engine test labs
- Fleet maintenance shops
- Construction or mining sites
- On-board ships
- Back-up diesel generators



Comparative soot measurements provided by: Mobil Oil Company, Paulsboro Technical Center

Field Test Samples					Lab Engine Test Samples			
		Soot, % mass				Soot, % mass		
Sample	FT-IR	TGA	Soot Meter 1	Soot Meter 2	Engine Hours	TGA	Soot Meter 1	Soot Meter 2
A1	1.46		1.4	1.4	**Mack T-8**			
B1	1.59		1.6	1.6	0	0.13	0.1	0.0
B2	1.82		1.8	1.9	50	1.76	1.7	1.7
B3	1.94		1.9	2.0	100	3.13	3.2	3.1
B4	2.56		2.5	2.5	150	4.48	4.5	4.4
A2	2.74	2.65	2.6	2.6	175	5.16	5.0	5.0
B5	2.68		2.7	2.7	200	5.80	5.8	5.8
B7	2.82	2.90	2.6	2.7	**DDC Series 60**			
B9		3.21	3.2	3.2	0	0.09	0.0	0.0
B10		3.53	3.3	3.1	24	0.83	0.8	0.8
A3		3.54	3.5	3.6	48	1.40	1.4	1.4
A4		4.05	4.0	4.0	72	1.98	1.9	1.9
A5		4.40	4.3	4.4	96	2.52	2.5	2.5
					120	3.05	3.0	2.9
					144	3.58	3.5	3.5
					168	4.10	4.0	4.1
					192	4.57	4.5	4.6
					216	5.03	4.8	4.9
					240	5.33	5.0	5.0

Ordering information:

Part Number	Analyzer
405-0011	InfraCal Soot Meter

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