



Portable, Benchtop Oil Condition Monitoring:

The **FluidInspectIR® BenchPro** is a self-contained, mains-powered oil condition monitoring (OCM) analysis system designed for rapid, reliable on-site fluid assessment.

Using an integrated multi-sensor approach, BenchPro provides comprehensive analysis of lubricants and fluids, enabling users to identify fluid degradation, contamination and wear-related conditions without the need for laboratory-based testing.

Multi-Parameter Fluid Analysis

BenchPro provides fast measurement and classification of key fluid condition parameters, including:

- ☐ **Chemical degradation and additive depletion** — assessment of lubricant condition and changes in chemical properties.
- ☐ **Kinematic viscosity** — measurement output of **KV40 & KV100**.
- ☐ **Particulate contamination** — particle concentration and cleanliness classification in accordance with **ISO 4406**.



Designed for On-Site Operation

- ☐ The compact, self-contained system can be configured for **portable or benchtop use**, providing laboratory-style analysis at the point of need.
- ☐ BenchPro is mains powered and can be operated through an integrated **touchscreen GUI or connected laptop**. It can also connect directly to a **phone or tablet without requiring installation of proprietary software**, simplifying deployment and access to results.
- ☐ An integrated automatic pumping system draws fluid directly from a sample bottle, reducing manual handling and providing a consistent sample introduction process.
- ☐ System has default Oil Library of 15 measurement files for common oils and fluids across most applications (gears, hydraulics, engines, etc). Larger library available on request.

Data Analysis & Trending

Analysis results are displayed directly on screen for immediate assessment. For more advanced data management and condition monitoring, **DataInspectIR®** software provides additional capabilities for Data charting and plotting Historical trend analysis

Technical Specifications and Typical Application Measurement parameters

- Weight - 18 kg
- Dimensions (W×L×D) - Approx 55 × 30 × 15 cm
- Power Supply - 220VAC
- Analysis Time - About 5min per sample
- Sample Volume - Min 100 ml
- Connectivity - Integrated modem & cloud connection (optional)

	Gas Engine (Landfill or LNG)	Turbomachinery	Hydraulic	Gears and Rollers	Marine VLSFO / Diesel Engine	Diesel Engine	Marine Stern Tube / Thruster EAL
Oxidation – abs/cm	x	x	x	x	x	x	x
Nitration – abs/cm	x					x	
Sulphation – abs/cm	x				x	x	
ipH	x						
Water (ppm)	x	x	x	x	x	x	x
TBN – mgKOH/g	x				x	x	
TAN – mgKOH/g	x	x	x	x			x
KV100C – cSt (or mm/s2)	x				x	x	
KV40C – cSt (or mm/s2)		x	x	x			x
Fuel Dilution					x	x	
Amine AO – %		x					
Phenol AO – %		x					
Soot (wt%)					x	x	
ISO 4406 Classification		x	x	x			x

Parameter Equivalency +/- 5% to standard lab measurements

