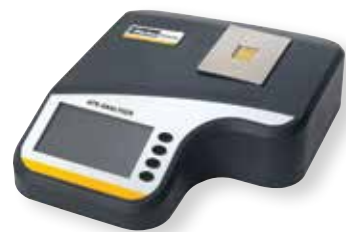


**New product
from
Parker
Kittiwake**



ATR Analyser: Oil and fuel condition monitoring instrument

Bringing the lab to the field



Introducing the future of oil and fuel testing

Monitoring the condition of lubricants and fuels is a key priority for engineers within the marine, mining and other industrial sectors. Contaminated and degraded lubricants and fuels can lead to a whole host of problems, ranging from inefficiencies and costly downtime, to expensive repairs and permanent damage.

While chemical testing may be one of the most common ways of analysing lubricants and fuels, it's a process that involves transporting, using and disposing of hazardous chemicals.

The ATR Analyser from Parker Kittiwake has been specifically developed to eliminate these risks by replacing the need for chemical testing.

A reagentless test analyser, the ATR Analyser is safe and highly cost effective and can be used in a wide range of applications to provide reliable trending analysis of oil and fuel parameters.

**The ATR Analyser can be used
in the following industries:**

Marine

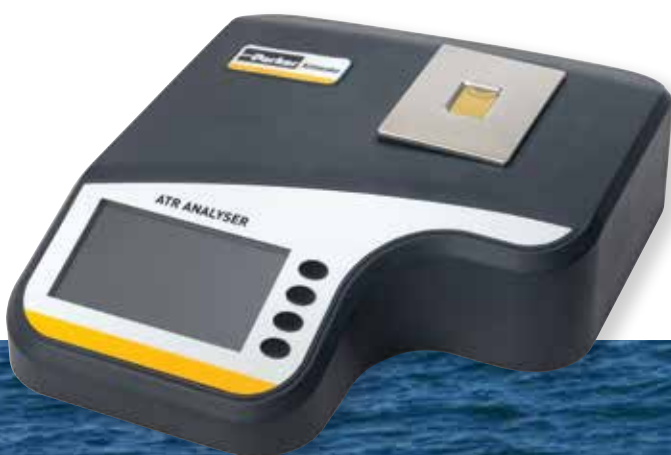
Mining/quarrying

Rail/transport

Power plants

Truck and mobile equipment

Off-shore

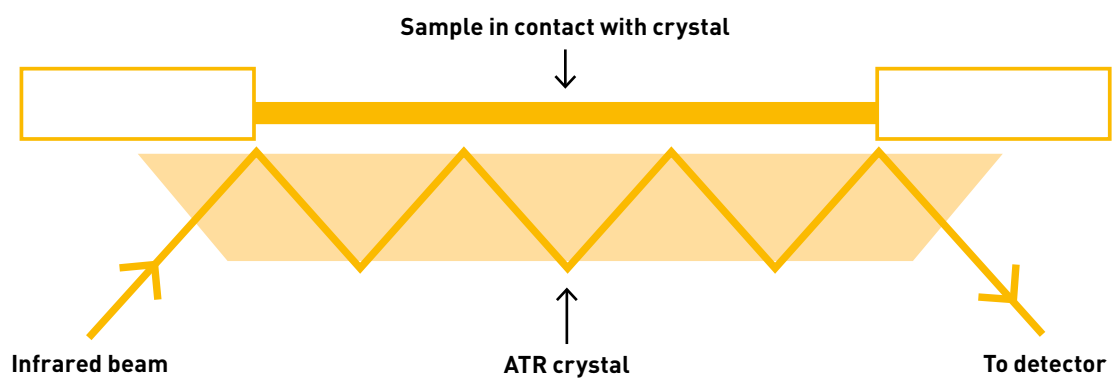




Tried and tested technology

The ATR Analyser from Parker Kittiwake incorporates ATR (Attenuated Total Reflectance) technology, and uses a predictive method of testing from the recorded IR spectrum.

Mid-Infrared (IR) spectroscopy is an extremely reliable and well recognised fingerprinting method, capable of characterising, identifying and quantifying a wide range of substances. The ATR Analyser is fitted with a crystal upon which samples are placed for analysis, as illustrated in the diagram below.





One product,

seven different tests

Easy to use, the Parker Kittiwake ATR Analyser enables multi-parameter testing to be carried out for different types of oil and fuel:

Fluid type	Property	Range	Typical uncertainty ¹	Units
Mineral oil	Water content	0 – 20,000	500	ppm by mass
Mineral oil	Base number (BN)	0 – 150	3.0	mg KOH / g
Mineral oil	Acid number (AN)	0 – 10	0.2	mg KOH / g
Mineral oil	Anti-wear additive ²	0 – 20	2.0	AU per 0.1mm
Mineral oil	Soot loading	0 – 5.0	0.5	% by mass
Mineral oil	Viscosity	5 – 450	10% of reading	cSt ³
Diesel fuel	FAME content	0.1 – 99.9	0.3	% by mass

¹ For a 95% confidence level.

² Calibrated using FTIR trend values measured by ASTM E2412 standard practice.

³ Predicted value in centistokes that would be measured at 40°C.

Condition monitoring excellence

Not only does the ATR Analyser enable multiple tests to be conducted using a single product, it can determine the physical and chemical condition of oil and fuel, as well as detect any traces of contamination.





ATR Analyser benefits - at a glance

Faster testing - all results delivered in <3 minutes

Easy to use - no specialist training required

Low maintenance - simply wipe clean after use

Reagentless - no supply logistics or costs

Option to upgrade - for analysis of additional fluid types



Simple.

Efficient.

Effective.

Whatever the conditions, the ATR Analyser from Parker Kittiwake offers a straightforward method of testing that can be operated by anyone.

Step 1

Turn on and allow home screen to appear.

Step 2

Select oil/fuel type.

Step 3

Follow on-screen instructions.

Step 4

Place oil sample on to the ATR crystal, using supplied pipette.

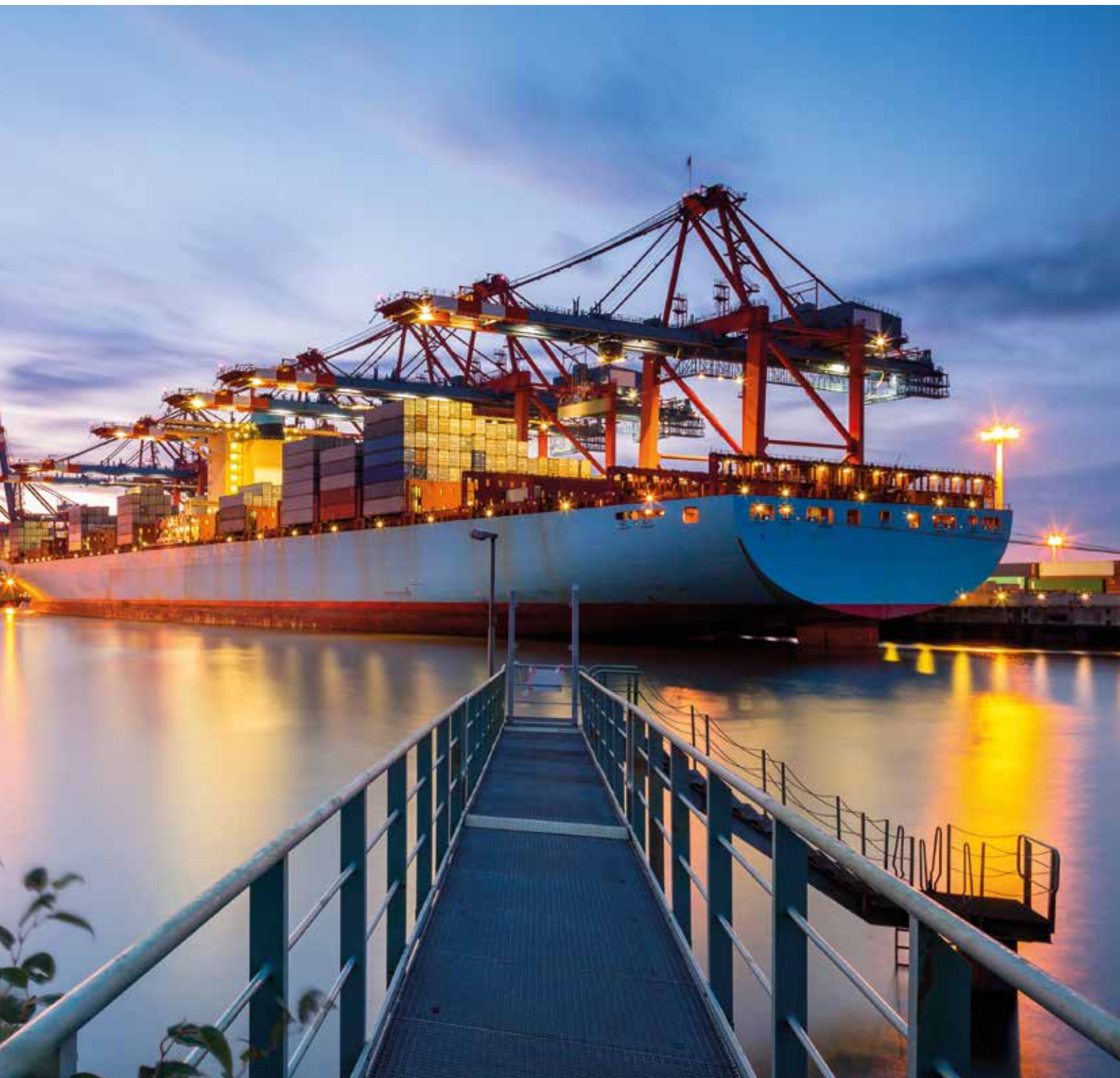
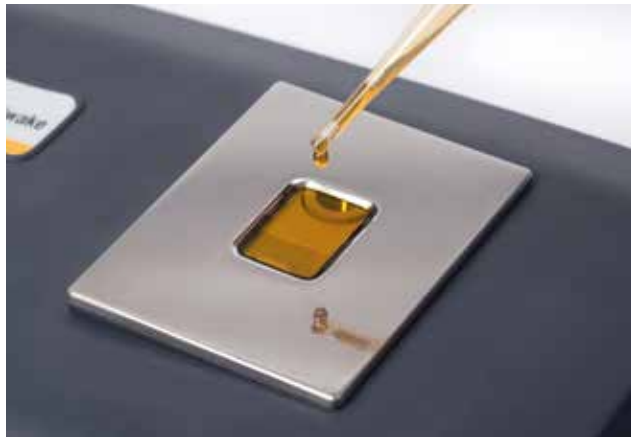
Step 5

Select 'start test'.

Step 6

The measured values are presented on-screen and stored in memory for later retrieval.







Bringing the lab to the field

No re-calibration required as the ATR Analyser does its own internal performance checks, it is incredibly easy to use and requires minimal maintenance. Other key benefits include:

Quick testing and results

Obtain real-time results in a matter of minutes and effortlessly detect any potential issues before major damage is caused.

Easy to use

The ATR Analyser utilises a simple method that can be carried out by anyone, without the need for training.

Multi-parameter

Save time, as well as money, by eliminating the need to carry out separate chemical tests, which can be hazardous and time consuming.

Easy to maintain

Simply wipe the ATR crystal clean after use with supplied cleaning wipes.

Reliable trending

Obtain results that correlate to accepted laboratory methods.

Minimal hassle

Analyse oil and fuel easily and minimise the amount of on-board equipment required to do it. The ATR Analyser is the only piece of equipment that's required.

Tailored analysis

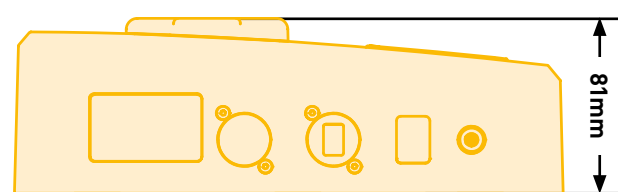
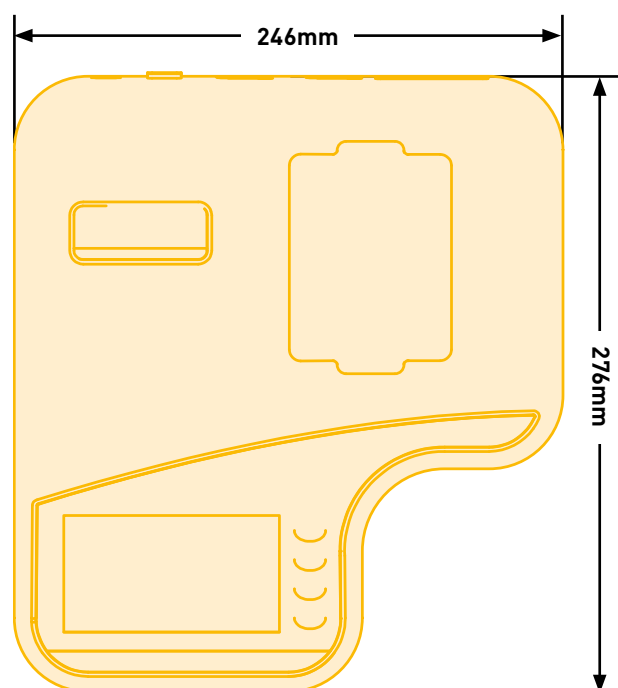
The ATR Analyser can be upgraded to analyse additional types of fluids.





The Parker Kittiwake ATR Analyser specifications:

Rated input voltage	12 V d.c. (regulated power supply)
Rated input current	0.7 A
Operating temperature	10°C to 40°C
IP rating	IP22
Instrument weight	1.6 Kg
Test time	100 seconds
Unit dimensions	246mm wide 276mm deep 81mm high



Note: Predictions made at the extremes of operating temperature can be affected by up to 10%, and uncertainty by 1.5. For best results, operate in temperature stable environments of 15 to 25°C

The Parker Kittiwake ATR Analyser features:



Ordering information for the Parker Kittiwake ATR Analyser:

Product	Option		Measurement range		Future options	Future optional (ie. branding indent)	
Attenuated Total Reflectance	Mineral oil	1	Standard	1	0	Standard	0

Part number	Option	Measurement range	Future range	Future options
ATR	1	1	0	0

Description	Quantity	Part number
ATR Analyser	1	ATR1100
ATR Consumable pack:	1	ACCK05004
Pipette 3ml	100 per pack	
Alcohol wipes	100 per pack	

To discuss how Parker Kittiwake can help you monitor and control the quality and efficiency of your lubricants and fuels, contact our expert consultants:

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PARKER KITTIWAKE WORLDWIDE



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