

# Oil Test Equipment

## Contamination Checking Kit

Run contaminated oil through a 'Patch Test' to visually assess levels of contamination for further action.



Contamination level which can damage equipment (10 mg / 100 mL)



Contamination level which requires immediate cleaning (4 mg / 100 mL)



Contamination level to which oil can be cleaned to (1 mg / 100 mL)



Contamination level which requires immediate cleaning (2 mg / 100 mL)



Contamination level to which oil can be cleaned to (0.5 mg / 100 mL)

Request a 'patch test' report, at your plant, in your presence.

## S120-LCD

### DIGITAL IMAGING PARTICLE COUNTER

#### A CLEAR PICTURE OF YOUR OIL

The S120 digital imaging particle counter is a revolutionary sensor capable of counting a broad spectrum of particles, recognising shapes and eliminating air bubbles from the counts. Digital imaging particle counting provides you with a deeper insight into your oils.

The sensor has the ability to measure a broad spectrum from 4 to >100µ recognising different shapes of particles which can be grouped into fatigue wear, sliding wear and cutting wear as well as fibres.

**Principle of operation:** Digital Imaging

#### Features:

- Oil cleanliness codes: ISO 4406, NAS 1638, & SAE AS4059
- Particles are grouped by micron size in seven categories - 4, 6, 14, 21, 38, 70, >100µ
- The S120 counts air and gas bubbles and eliminates them from the counts
- Highly accurate sensor capable of self-calibration
- Full integration with SCADA/PC/PLC which can be controlled via analogue or digital instrumentation
- Wear particle identification as fatigue wear, sliding wear and cutting wear as well as fibres.



Particle Counter with printer

## MOISTURE DETECTOR

An accurate & simple solution to detect moisture in oil.



**Moisture in Oil -**  
Detect it, Measure it, Remove it!

FUNCTION OF CATALYSTS				
Test	Catalysts (Metal)	Water	Time (Hrs)	Acid Value
1	nil	nil	3,500	0.17
2	nil	exists	3,500	0.90
3	iron	nil	6,500	0.65
4	iron	exists	400	8.10
5	copper	nil	3,000	0.89
6	copper	exists	100	11.20

**Note:** 1. Time: hours for reaching a certain level of acid value.  
2. Test oil is of 32cSt/100°F (40°C)  
3. Tested oil temperature is 200°F (93°C)

Acid value indicates formation of "Sludge" and sticky resinous matter which forms hard deposits on valves, pipes.

Moisture in oil is the biggest enemy of hydraulic & lubricating oils ... even bigger than particulate contamination

There is a clear nexus between presence of moisture and acid / sludge formation in oil. Now with the Moisture Detector, users have a quick, accurate & simple solution to measure moisture in oil.

Displays moisture level in ppm or AW (saturation level)

**Principle of operation:** Capacitance

**Interface:** 4~20 mA / Modbus