

Vartector

Varnish Potential Analyzer

ASTM D7843

Vartector Varnish Potential Analyzer detects the risk of turbine oil varnish ASTM D7843 (Standard Test Method for Measurement of Lubricant Generated Insoluble Color Bodies in In-Service Turbine Oils using Membrane Patch Colorimetry).

Potential hazards of turbine oil varnish indicates problems such as turbine bearing vibration and temperature increase, filter clogging, poor temperature control, turbine oil degradation may occur.

Varnish Potential Analyzer diagnoses the potential hazards of varnish and soot in the machinery oil. Device detects CIE delta L value and a and b values as optical colorimetric notation. It is possible to diagnose if the thermal load is created by soot or varnish. Both soot and varnish amounts are measured with risk levels to the machinery . When CIE delta L value is high, it means an increase in soot level and that shows bubbling problem in the system and problem in pump cavitation. If a and b values are high, it means a risk of varnish formation.

Features

- All automatic loading, validating and sampling.
- All automatic detection in 10 seconds.
- Display: Patch image, MPC delta E, delta L, a, b value. Trending per machine to be managed.
- MPC tester for laboratory analyzer that meets ASTM D7843 for the first time in the world.
- Automatic diagnosis of the measured result (normal a, normal b, caution, warning).
- Built-in automatic device validation after power on.
- Perform self-diagnosis of major components such as spectrophotometer and board after power on.
- Set reference values. Keep trending for each asset. Save more than 10,000 tables.



Specifications

Measuring geometry	0°/45°
Measurement condition	CIE 10° Standard Observer
Light source	LED Light
Receiver	Spectrum scan
Detector	Spectrophotometer
Measuring time	3 seconds
Operation Temperature	0°C – 50°C
Output Value	CIE delta E, delta L, a, b
Patch Color Capturing	YES
Control	7" Touch Screen LCD