

PQ300(B)-PQL Ferromagnetic Wear Analyzer



PRODUCT INTRODUCTION

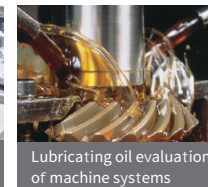
In terms of detection methods, the current detection of iron content mainly includes atomic absorption method and atomic emission method. Although the atomic absorption spectroscopy method is accurate, it is slow and complex to operate. The atomic emission spectroscopy method has been widely applied, but it cannot effectively detect large wear particles (whether by rotating disk electrode or inductively coupled plasma). Its insensitivity to large particles can sometimes be fatal in monitoring and diagnosis, because the particles from normal wear of friction pairs are generally $<10\mu\text{m}$, while metal particles $>15\mu\text{m}$ are generated by abnormal wear.

For the detection of iron particles, the compensatory approach is to increase iron content monitoring by using a ferromagnetic wear analyzer. The ferromagnetic wear analyzer developed by our company is a measuring device based on the principle of electromagnetic induction. The device is equipped with a sensitive electromagnetic coil. When the oil is placed in a magnetic field, the ferromagnetic wear particles in the oil will cause changes in the magnetic field strength. The magnitude of the electromagnetic induction intensity of the coil has a good correlation with the content of ferromagnetic wear particles. It can conveniently and quickly detect the content of ferromagnetic metal debris in lubricating oil, hydraulic oil, and grease, so as to determine the mechanical wear condition.

PERFORMANCE CHARACTERISTICS

- Patented sensor and signal processing circuit, good stability, high sensitivity.
- Oil sample transfer, automatic measurement, 7 seconds to measure a data.
- Supporting PC data management software, measurement data can be directly imported to the computer for data management, trend analysis, curve printing and so on.
- Oil samples do not need to be processed and can be directly injected into the oil bottle for measurement.
- Chinese (English) and graphical interface, easy for users to operate.
- You can enter any number and letters to facilitate the user to name the file.

APPLICATION FIELD



TECHNICAL PARAMETER

	Data
Power source	AC220V to 24V adapter --- PQ300 3A charger + built-in rechargeable lithium battery (3200mA) --- PQ300B
Ambient temperature	$10^{\circ}\text{C} \sim 30^{\circ}\text{C}$
Display screen	7-inch
Repeatability	$\pm 4\text{PQ}$ or $\pm 1\%$ [maximum value]
Resolution	1PQ
Test time	7s
Measurable minimum	5PQ
Detect the range of abrasive particles	$> 1\mu\text{m}$ ferromagnetic abrasive particles
Serial port connection	USB female port
Measuring range	0~15000PQ
Size	430mm*225mm*140mm (length * width * height)
Weight	4.7kg (PQ300)/5.1kg (PQ300B)