

PQ200-PQL Ferromagnetic Wear Analyzer



PRODUCT INTRODUCTION

In terms of detection methods, the current iron content detection mainly includes atomic absorption method and atomic emission method. The atomic absorption spectrometry method is accurate but slow and complicated to operate. Atomic emission spectroscopy (AAS) is widely used, but it is not effective in detecting large wear particles (whether it is rotary electrode or inductive ion coupling). Insensitivity to large particles is sometimes fatal in monitoring diagnosis, because particles of normal wear of the friction pair are generally <math> < 10\mu\text{m}</math>, and metal particles of > 15 μm are produced due to abnormal wear. As far as the detection of iron particles is concerned, the way to make up for it is to increase the iron content monitoring and use the iron meter.

The iron measuring instrument developed by our company is a measuring device based on the principle of electromagnetic induction. A sensitive electromagnetic coil is built into the measuring device. When the oil is put into the magnetic field, the ferromagnetic abrasive particles in the oil will cause changes in the magnetic field intensity, and the electromagnetic induction intensity of the coil has a good correlation with the ferromagnetic abrasive content. It can easily and quickly detect the ferromagnetic metal chip content data in lubricating oil, hydraulic oil and grease 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 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

Project	Data
Power source	AC220V \pm 10%, 50-60Hz
Ambient temperature	10 $^{\circ}$ C \sim 30 $^{\circ}$ C
Display screen	LCD120 \times 90
Repeatability	\pm 4PQ or \pm 1% [maximum value]
Resolution	1PQ
Test time	7s
Measurable minimum	5PQ
Detect the range of abrasive particles	> 1 μm ferromagnetic abrasive particles
Serial port connection	USB female port
Measuring range	0 \sim 15000PQ
Size	370mm*220mm*136mm (length * width * height)
Weight	4.2kg