

FerroCheck 2000

Ferrous Content Analyzer

ASTM D8120

The FerroCheck 2000 Series of portable ferrous analyzers offer accuracy and convenience for total ferrous measurement of in-service lubricating oil and grease. Fast and easy to use samples are analyzed in less than 30 seconds. Small sample volumes of just 1.5 ml of oil or 0.75 ml of grease are needed to measure ferrous content in part per million (ppm) by weight. The FerroCheck measures the total ferrous content of both small particles from normal machine wear and large abnormal wear particles.

Principle of Operation

The core of the FerroCheck 2000 is a pair of precision rounded coils that when powered, generate magnetic fields. When a small amount of in-service oil is inserted into one of the coils, ferrous particles, such as Iron, Nickel, and Cobalt, interact with the magnetic field and introduce current changes in the coils. The amount of current change is proportional to the amount of Ferrous particles in the oil, calibrated by weight in parts per million (ppm).

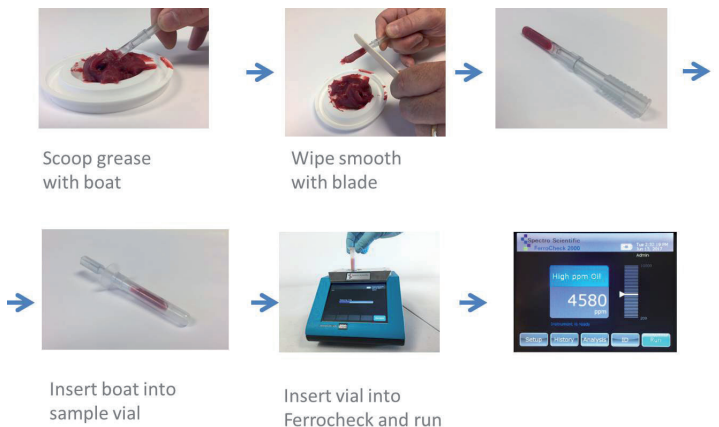
The sample vial that holds the oil or grease sample is designed to optimize the position in the measurement coil. Before the measurement, the coils are automatically balanced electrically, removing the impact on measurement from ambient temperature variation. The result is repeatable and stable measurement regardless of operator and environmental temperature, which is critical for a large service team doing on-site oil and grease analysis in the field.

Measure total ferrous content in part per million by weight

- Measures all ferrous material-normal machine wear and large abnormal wear particles.

Accurate and repeatable

- Low limit of detection.
- Highly repeatable – 3% of reading
- Wide range of measurement
- Validation standard included



Specifications	FerroCheck 2000	FerroCheck 2100
Applications	Lubricant oil	Lubricant oil & grease
Output	Total Ferrous, parts per million by weight	
Standard calibrated ranges	0-2,000 ppm, 2,000-10,000 ppm	• 0-2,000 ppm and 2,000-10,000 ppm for oil • 0-2000 ppm, 2000 ppm-15% for grease
Test time	< 30 s	
Limit of Detection	3 ppm	
Repeatability	3% RSD	
Calibration	Ferrous standards provided	