



BASIC FERROUS WEAR METER

Basic Ferrous Wear Meter - ToronFWM™ 2500

A Ferrous Wear Meter helps maintenance teams track ferromagnetic wear debris in used oil so abnormal wear trends show up early. Basic Ferrous Wear Meter - ToronFWM™ 2500 is a compact, field-ready meter designed to measure metal particle content (ppm) from a small oil sample, with results shown on-screen in seconds.

ToronFWM™ 2500 is designed to detect metal particles in oil samples taken from cylinder friction oil and similar in-service lubricants. The method uses a standard 5 mL test tube placed into the instrument, then the meter displays the metal content (ppm) in under 2 seconds.

This unit is positioned for onboard or remote use where full lab testing is not practical. It is described as a precision magnetometer for field applications, supporting quick checks during routine sampling rounds.

APPLICATIONS

Basic Ferrous Wear Meter - ToronFWM™ 2500 Application

- Machine system wear monitoring: Use routine ppm readings to trend wear over time. A rising trend can indicate an abnormal wear rate and trigger follow-up diagnostics before damage spreads.
- Evaluation of lubricating oil for machine systems: Support oil condition monitoring programs with a fast ferromagnetic debris indicator. Trending results alongside hours, load, and oil change history helps maintenance planning.
- Evaluation of ferromagnetic debris in gearboxes: Gear and bearing wear can release ferromagnetic particles that respond well to magnetometry-based checks. A spike in results can signal the need for deeper testing such as microscopy or ferrography.
- Residual assessment of bearing lubricating oils: After maintenance or corrective actions, repeated checks help confirm whether debris levels are stabilizing. This supports decisions on inspection timing and return-to-service confidence.



Standards

- ASTM D8120: Quantitative determination of ferrous debris using magnetometer-based measurement.

FEATURES

Basic Ferrous Wear Meter - ToronFWM™ 2500 Key Features

- Fast, simple ppm measurement
 - Insert a 5 mL test tube into the instrument and read the ppm result on-screen in less than 2 seconds.
- Ferromagnetic detection method
 - Uses a ferromagnetic method suitable for screening and trending wear debris in lubricating oil samples.
- Field-ready portability
 - Compact build and low weight support onboard and remote-site testing when lab access is limited.
- Practical resolution for trending
 - 5 ppm display resolution supports trend monitoring where changes over time matter more than single-point readings.
- Repeatability aligned to routine monitoring
 - Repeatability is listed as ± 10 ppm (0-1000 ppm) and ± 20 ppm (>1001 ppm), supporting consistent trend tracking.
- Power adapters for common regions
 - 24 V DC supply is listed with UK, EU, and US power adapters for flexible deployment.

TECHNICAL SPECIFICATIONS

Basic Ferrous Wear Meter - ToronFWM™ 2500 Technical Specification

Specification	Basic Ferrous Wear Meter - ToronFWM™ 2500
Measurement range	0-2500 ppm
Detection method	Ferromagnetic method
Display resolution	5 ppm
Repeatability	±10 ppm (0-1000 ppm); ±20 ppm (>1001 ppm)
Test time	< 3 seconds per sample (ppm display noted < 2 seconds)
Sample container	Standard 5 mL test tube
Operating temperature	5 °C to 40 °C
Power	24 V DC; adapters for UK/EU/US
Dimensions (W × L × H)	220 × 220 × 75 mm
Weight	1.1 kg



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