

# HST-PL-5 Portable Ferromagnetic Scraping Measuring Instrument



The HST-PL-5 portable ferromagnetic abrasive particle measuring instrument utilizes the principle of electromagnetic induction. It measures the abrasive particle content by detecting changes in the magnetic field of a sensor coil caused by ferromagnetic abrasive particles in an oil sample. The instrument exhibits a strong linear relationship with the iron content and particle size of the oil sample. It boasts high sensitivity, accuracy, and repeatability. No sample pretreatment or organic solvents are required. It can accurately measure the content of ferromagnetic metal abrasive particles in various oil samples within seconds, with results directly expressed as actual concentration values (mg/L or ppm), facilitating data interpretation and analysis. It is widely used in defense, aerospace, shipbuilding, power, petrochemical, metallurgy, mining, and road transportation industries.

## Feature:

- Rapid quantitative determination of the total amount of large-size ferromagnetic particles in oil samples
- High sensitivity, resolution up to 1 ppm
- No sample pretreatment or organic solvents required
- Fast detection speed, one data point every 5 seconds
- Can analyze the iron content in lubricating oil and grease samples

## Technical Parameter:

|              |                              |
|--------------|------------------------------|
| Functions    | Parameters                   |
| Applications | Lubricating Oils and Greases |

|                      |                                                                            |
|----------------------|----------------------------------------------------------------------------|
| Outputs              | Total Ferromagnetic Particle Content, Ferromagnetic Particle Concentration |
| Detection Method     | ASTM D8120                                                                 |
| Detection Range      | 0-5500ppm                                                                  |
| Resolution           | 1ppm                                                                       |
| Detection Accuracy   | ±3%                                                                        |
| Sampling Volume      | 2mL                                                                        |
| Detection Speed      | < 5 seconds                                                                |
| Measurement Accuracy | ±3%                                                                        |
| Display              | 7-inch Touchscreen                                                         |
| Storage Space        | 32G                                                                        |
| Battery Capacity     | 3400mAh                                                                    |