

HST--FG8 + HST--X6 Dual Ferrograph

Ferrograph + microscope + Spectrum Management System

The analytical ferrography system consists of three parts: an analytical ferrometer, a ferrographic analysis Microscope, and a ferrography software management system. The analytical ferrometer uses a high-gradient, strong magnetic field to separate ferromagnetic and paramagnetic abrasive particles from machine lubricating oil, which are then deposited onto glass slides in order of particle size to form ferrographic slides. The ferrographic analysis microscope is then used to observe and analyze the morphology, size, composition, and quantity of the abrasive particles on the ferrographic slides. The ferrography software management system allows for the creation of a user ferrography database, facilitating daily management and analysis of the ferrograms.

Advantage:

- By performing ferrography, the operating and wear status of the equipment and the trend of oil changes can be quickly determined; with the help of ferrography analysis software, the location and cause of wear failures can be accurately identified;
- A brand-new high-performance, low-power core with stronger anti-electromagnetic interference capabilities;
- An independent gas supply system ensures that the gas transmission between the two ferrography sets does not interfere with each other, overcoming the problems of gas leakage or blockage when the instrument is stored for a long time, in extreme cold or heat;
- 1-99 level knob speed adjustment combined with button speed adjustment makes the ferrography speed adjustment more convenient and flexible;
- Built-in deceleration mode can effectively improve the success rate of ferrography and the speed value can be adjusted in real time;
- Can produce two ferrography slides simultaneously, improving the ferrography speed.

Parameter	
Oil sample volume	2-3ml
Reagent volume	1-20ml
Reagents used	Cleaning agent
Speed control	0-99 speed adjustable
Adjustment method	Knob micro-adjustment
Spectroscopy preparation time	≤20min
Slide tilt angle	2°~4°
Magnetic field strength	1.5T
Magnetic field gradient	5.0T/cm

Microscope parameter:

Optical System	Infinity-corrected	chromatic	Reflected	24V/100W	halogen	lamp
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	aberration optical system	lighting	(pre-centering), adjustable brightness
Eyepiece	High eyepoint, extra-large field of view eyepiece EW10×122, tube diameter $\phi 30$, field number 22		Köhler illumination system, aspherical condenser
Eyepiece (with ruler)	High eyepoint, extra-large field of view eyepiece EW10X/22, tube diameter $\phi 30$, field number 22		Polarizer, analyzer
Infinity Plane	10×/0.25/00/- (for both bright and dark fields) 10×/0.25/∞0/- (BF/DF)		Polarizer and analyzer synchronization connection plate
	20×/0.4100/0 (for both bright and dark fields) 20×/0.4/00/0 (BF/DF)		Red, blue, green, and yellow filters and frosted glass
	40×/0.6/00/0 (for both bright and dark fields) 40×/0.6/∞0/0 (BF/DF)	Filters	ND25, ND6 (linked to bright and dark field switching to prevent eye damage from strong light)
	100×/0.9/∞0/0 (for bright field) Dry type 100×/0.9/0∞/0 (BF)	focusing system,	Coarse and fine coaxial focusing, fine adjustment increments of 1 μ m, coarse tension adjustment with limit device
Maximum Specimen Height	30mm	converter	Inward-facing five-hole converter
Observation Head	hinged trinocular observation head, 30° tilt, interpupillary distance 48-75mm	stage	Rectangular double-layer movable platform 186×138mm, movement range 74mm×50mm
Transmitted Illumination	24V 100W halogen lamp, adjustable brightness (with green filter)	micrometer,	0.01mm
Light/Dark Field Switching Device	Built-in bright/dark field switch	camera	1/1.8-inch CCD chip, 3.3 million pixels, maximum resolution up to 2048X1536
Condenser	NA 0.9 Abbe condenser with variable aperture	video and photography accessories	Standard Type-C interface 1×, 0.5×