

MM Series Measuring Microscopes



Description

This measuring microscope is designed specifically to be used for measuring contamination particles in oil samples on filter membranes. All models include coarse and fine focusing adjustments, as well as both X and Y directional slide table adjustments to make focusing and positioning the subject simple, even at maximum magnification.

There is a rotating lens holder with 3 achromatic objective lenses with magnifications of 4x, 10x, and 20x. The micrometer eyepiece provides an additional 10x magnification resulting in 40x, 100x, and 200x magnifications. The measuring scale on the eyepiece has a scale division of 1 mm in 100 parts, allowing measurement of particles at all three magnifications.

These units come with an integrated plug-in light source that provides sufficient illumination, even at maximum magnification.

The optional CCD digital camera attaches to the eyepiece and transfers images to a PC via a USB connection, making it easy to capture and transmit images from the microscope.

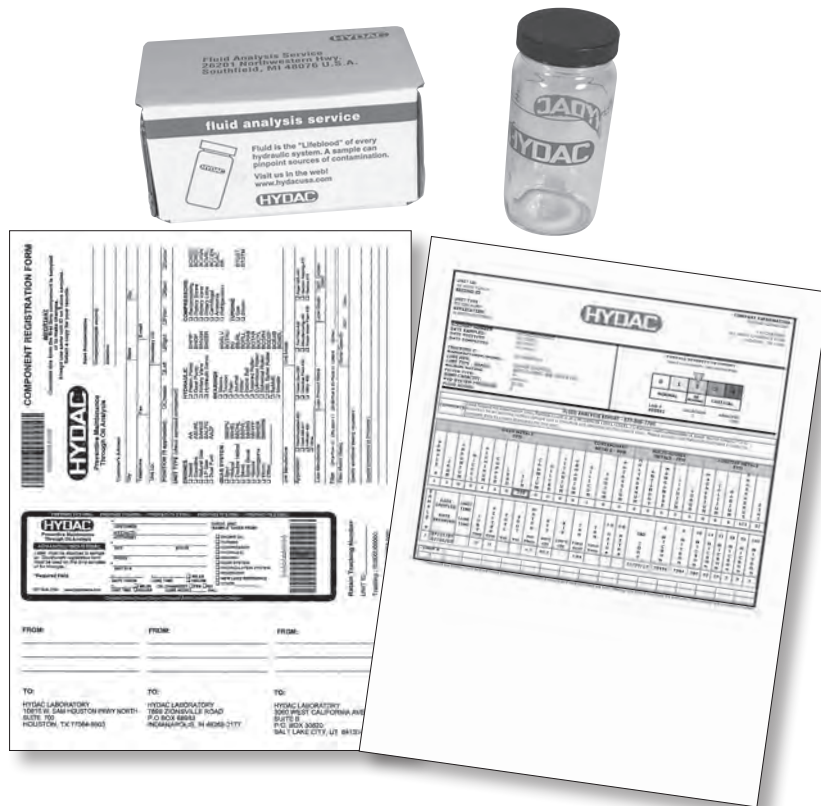
Ordering Information

MM-S5-P	Standard eyepiece 110 V 60 Hz powered light source
MM-S5-P-U	Standard eyepiece 110 V 60 Hz powered light source CCD camera with LPT-1 port for connection to laptop or PC
MM-KKE-P-C-U	Triocular eyepiece 110 V 60 Hz external cold light illumination CCD camera with LPT-1 port for connection to laptop or PC

Technical Details

MM-S5-P, MM-S5-P-U, & MM-KKE-P-C-U	
Huygens Eyepiece	10 x M
Achromatic Lens	4x, 10x, 20x
Magnification	40x, 100x, 200x
Supply Voltage	110 V 60 Hz
MM-S5-P-U & MM-KKE-P-C-U (only)	
Image Digitization	CCD-Camera
Video System	PAL color system
Resolution	horiz. 460 lines vert. 400 lines
Image Processing	Video capture unit
PC interface	LPT 1 port
System Requirements	min. Pentium 100 Mhz., Windows 95

FAS Series Fluid Analysis Service



Premium Oil Sample Testing

Test Kit part number: 02702060 (includes a box of 10 sample bottle kits)

Oil sample analysis for standard mineral hydraulic and lube oil includes the following tests:

- Spectrometals by ICP (24 Metals including Wear, Contaminant, Additive & Multi-Source) – D5185
- Viscosity @ 40C (ASTM D445)
- Water % by Crackle (Karl Fischer if Crackle is Positive)
- Total Acid Number – TAN (ASTM D664)
- Particle Count (as per ISO4406:1999 - 3 digit ISO code 4, 6, 14)

Water Glycol Sample Testing:

Test Kit part number: 02702057 (includes a box of 10 sample bottle kits)

This kit includes specific analysis parameters for the water to oil ratio of the Glycol. Karl Fischer Water is done and pH is tested instead of TAN. If the water concentration is tested out of specification to the identified lubricant, the lab will give the current concentration level and then make a recommendation for the acceptable water concentration percentage range for the stated lubricant. The tests included are as follows:

- Spectrometals (24 Metals by ICP including Wear, Contaminant, Additive & Multi-Source) – D5185
- Viscosity @ 40C – ASTM D445
- Water by Karl Fischer in PPM – ASTM D1744
- pH (If a Standard Mineral Oil is Identified, then TAN is done)
- ISO Particle Count (as per ISO4406:1999 - 3 digit ISO code 4, 6, 14)

Oil Analysis Reports:

Each Fluid Analysis Kit contains:

- Clean Sample Bottle
- Component Registration Form (CRF)
- Packaging for mailing sample
- Prepaid Fluid Analysis Service

Choice of three ISO 17025 A2LA accredited laboratories to send the samples. Addresses are included on the Component Registration Form

- All locations are within 48 hours ground transit from nearly anywhere in the continental United States
- Results returned within 24-48 hours after lab receipt of the test samples
- Fast email or fax notification of high severity results

A Component Registration Form (CRF) is included with each sample bottle kit, but it only needs to be filled-out the first time each piece of equipment is sampled or to make changes. After the initial sample, the CRF information is stored under the Unit ID #.

Sample results will be e-mailed to the e-mail address supplied on the CRF. Additionally, a Username and Password will be emailed to each report recipient who provides an e-mail address on the Component Registration Form (CRF). This feature allows multiple users to view the reports simultaneously. The Username and Password provides the recipient with access to www.eoilreports.com where a personal internet account has been set-up. From this site, the full sample report with the capability of graphing and trending analysis is available online as well as the complete testing history is securely stored.