

FS110 Inspection Microscope



For further information request Catalog No. US1522-378

FS110 Brightfield/DarkField Mask Inspection Microscope

The FS110 Microscope can be configured to fit a wide variety of applications from metallurgy to micro-electronic component inspection. The large stable base accepts all Mitutoyo Ultra Long Working Distance optics that are available, in magnifications from 1X to 200X.

Features

- Reflected light only or transmitted/reflected light stand
- Large stable base and frame that accepts 6" x 6" or 8" x 8" X/Y stages
- Plan apochromat infinity corrected strain free optics
- Ultra long working distance objectives
- Two trinocular body tube designs available
- Accepts (optional) differential interference contrast (DIC) accessories
- Slot in lamphouse mount for various filters
- Several sizes of wafer mask holders
- Selectable power input 120/220/240V AC, 50/60Hz
- Quartz halogen illumination
- Optional Brightfield/Darkfield illumination (reflected light)
- Five year Mitutoyo factory mechanical warranty; one year electrical

Specifications FS-110 Metallurgical Microscopes

| Model No. | FS-110T 378-121A (120V AC) | FS-110 378-122A (120V AC) |
|-------------------------|--|------------------------------|
| Order No. | | |
| Optical tube | Optional | |
| Workstage | Optional | |
| Revolving nosepiece | Optional | |
| Eyepiece | Optional | |
| Objective | Optional | |
| Focusing travel | 30mm | |
| Reflective illuminator | Optional | |
| Transmitted illuminator | Provided (Light source): Halogen bulb (6V, 20W halogen lamp) | Not provided |
| Power supply | 120/220/240V AC, 50/60Hz | |
| Mass | Approx. 34.1 lbs. (15.5kg) | |

Optional Accessories

| Order No. | Description |
|-----------|---|
| 378-856 | 10X eyepiece (Field number: 24), 2pcs./set |
| 378-857 | 15X eyepiece (Field number: 16), 2pcs./set |
| 378-858 | 20X eyepiece (Field number: 12), 2pcs./set |
| 378-851 | Extra-wide 10X eyepiece (Field number: 30)* |
| 378-003 | Trinocular tube, 1X (Erect image) |
| 378-004 | Trinocular tube, 1X (Inverted image) |
| 378-001 | Trinocular tube, 1X/2X switchable (Erect image) |
| 12AAA646 | Color filter (LB80) |
| 12AAA643 | Color filter (ND2) |
| 12AAA644 | Color filter (ND8) |
| 12AAA645 | Color filter (Green) |
| 378-031 | Reflected illumination unit (Bright/dark field) |
| 378-032 | Reflected illumination unit (Bright field) |
| 378-085 | Light source unit** |
| 378-013 | Revolving nosepiece w/4 lens mounts (B/D field) |
| 378-014 | Revolving nosepiece w/4 lens mounts (Bright field) |
| 378-015 | Revolving nosepiece w/5 lens mounts (Bright field) |
| 378-074 | Polarizing unit |
| 378-075 | Bright/dark field switching unit |
| 378-021 | Workstage (6"x 6"), Right-handed type |
| 378-023 | Workstage (8"x 8"), Right-handed type |
| 514024 | Stage glass for 6"x 6" workstage |
| 514025 | Stage glass for 8"x 8" workstage |
| 378-051 | Wafer holder (3"Dia.-6"Dia.) |
| 378-055 | Mask holder (3"x 3") |
| 378-056 | Mask holder (4"x 4") |
| 378-057 | Mask holder (5"x 5") |
| 378-058 | Mask holder (6"x 6") |
| 378-059 | Mask holder (7"x 7") |
| 378-076 | Differential interference contrast unit (100X, SL80, SL50X) |
| 378-078 | Differential interference contrast unit (50X, SL20X) |
| 378-079 | Differential interference contrast unit (20X) |
| 378-080 | Differential interference contrast unit (10X, 5X) |
| 378-041 | CCD camera mount adapter |
| | FS ULWD Objectives |
| 378-792A | PCA photomicrography unit |

*Can be used with the special trinocular tube (378-001)

**Light source: Halogen bulb (12V, 50W)

Wafer and Mask Holders for IC Chip Inspection



378-051 (ø3" to ø6")



378-055 (3"x 3")

MEASURING INSTRUMENTS

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System Diagram

