

## Objective Lenses for Material Science

This is a series of objective lenses designed for metallurgical microscopes. The user can choose any of the lenses according to the observation method or application specific to chromatic aberration, flatness, etc.

### 1) **MPLAPON**

This is a Plan Apochromat objective lens series for bright field observation with chromatic aberration corrected at the highest level. This series guarantees optical performance (Wavefront Aberration Correction) at a Strehl ratio of 95% or more and is also compatible with the AF unit (Olympus U-AFA2M).



[Plan Apochromat](#)

### 2) **MPLN**

This is a Plan Achromat objective lens series that has attained excellent flatness up to a field number of 22.



[Plan Achromat](#)

### 3) **MPLN-BD**

This is a Plan Achromat objective lens series for bright field and dark field observations that has attained excellent flatness up to a field number of 22.



[Brightfield/Darkfield Plan Achromat](#)

#### 4) **MPLFLN**

This is a universal objective lens series of a semi-apochromat design with chromatic aberration corrected at a high level. This series provides excellent performance not only in bright field, but also in fluorescence, differential interference contrast, and simple polarized observations.



[Plan Semi-Apochromat](#)

#### 5) **MPLFLN-BD**

This is a universal bright field/dark field objective lens series of a semi-apochromat design with chromatic aberration corrected at a high level. This series provides excellent performance not only in bright field and dark field, but also in fluorescence, differential interference contrast, and simple polarized observations.



[Brightfield/Darkfield Plan Semi-Apochromat](#)

#### 6) **MPLFLN-BDP**

This is a universal objective lens series that provides high optical performance particularly in polarized, differential interference contrast observations.



[Reflected/Polarized Plan Semi-Apochromat](#)

#### 7) **LMPLFLN**

This is a Long Working Distance Plan Semi-Apochromat objective lens series with chromatic aberration corrected at a high level. A long working distance to a specimen in this series is effective for preventing the lens from interfering with a step or protrusion on the specimen.



[Long WD Plan Semi-Apochromat](#)

**8) LMPLFLN-BD**

This is a Long Working Distance Plan Semi-Apochromat objective lens series for brightfield/darkfield observation with chromatic aberration corrected at a high level. A long working distance to a specimen in this series is effective for preventing the lens from interfering with a step or protrusion on the specimen.



[Brightfield/Darkfield Long WD Plan Semi-Apochromat](#)

**9) SLMPLN**

This series Plan Achromat objective lens with a super long working distance reduces the risk of causing damage to specimens due to interference. This series offers high-contrast observation images with no color blur, enabling the user to observe even the width of a fine line.



[Super Long WD Plan Achromat](#)

**10) LCPLFLN-LCD**

This is an objective lens series optimal for observing specimens through glass substrates such as LCD panels. The adoption of optical correction rings allows aberration correction according to glass thickness.



[Long WD Plan Semi-Apochromat](#)

**11) LMPLN-IR/LCPLN-IR**

This is a Plan Achromat objective lens series with optical aberration corrected from visible light to near-infrared region. LCPLN-IR series has correction collar for aberration dependent on thickness of silicon or glass substrate.



[IR Long WD M Plan Achromat/IR M Plan Achromat](#)