

# STALWART

## Metallurgical Microscope STM-6060



STM-6060

## Introduction

STM-6060 series metallurgical microscopes are developed for research with a number of pioneering design in appearance and functions, with wide field of view, high definition and bright & dark field semi-apochromatic metallurgical objectives, they are born to provide a perfect detection solution and develop a new pattern of industrial field

## Features

- **High eye point wide field plan eyepiece.**

The eyepiece field of view has been upgraded from traditional 22mm to 25mm and 26.5mm, provide more flat field of view and improve working efficiency. With wider diopter adjustment range and foldable rubber eye guard.



- **Viewing head with multi-splitting ratio.**

The viewing head is designed of multiple options for splitting ratio.

1. Trinocular head with erected image is standard, splitting ratio Binocular: Trinocular=100:0 or 0:100. The moving direction of samples is the same as oSTMerved.
2. Trinocular head with inverted image is optional, splitting ratio Binocular: Trinocular=100:0 or 20:80 or 0:100. Except for concentrating 100% light to eyepiece tube or camera tube, there is another option with 20% light to eyepiece tube and 80% to camera tube, so that eyepiece oSTMervation and image output can be available at the same time.



- **Polarization system.**

The polarizer and analyzer in polarization system contribute to eliminate the stray light in semiconductor and PCB detection, image with clear detail is achievable. There are fixed analyzer and rotatable analyzer for option. The sample can be oSTMerved at different polarizing angles with 360° rotatable analyzer. Besides, this polarization system can be upgraded to Nomarski differential interference contrast system after installing a new developed DIC attachment.



## Features

- **Nomarski differential interference contrast system(DIC).**

The weeny asperities on the surface which can not be found in bright field, is able to be detected by using U-DICR attachment to create high contrast stereo relievo effect. It is widely used for testing the electric-conductive particles of LCD, surface scratches of precision disk.



- **Linkage between the neutral density filter and the switch for BF & DF.**

The lever in front of illuminator is used to switch between bright field and dark field, and it is in tandem with a neutral density filter (Nd50). When you switch from DF to BF, the built-in ND50 filter takes the role to reduce the light intensity. More scientific and more comfortable.

- **Multiple choice for Nosepiece.**

The new nosepiece reduces the angle between the optical axis and the rotating axis to 15°, improving the accuracy of the centering and parfocality, and the appearance is more compact.



## Specification

Item	Specification	STM-6060
Optical System	Infinite Color Corrected Optical System	Standard
Viewing Head	Siedentopf trinocular head, Erect image, 30° inclined, interpupillary distance: 50mm~76mm; splitting ratio Eyepiece:Trinocular=100:0 or 0:100	Standard
	Siedentopf trinocular head, Inverted image, inclined at 30°, interpupillary distance: 50mm~76mm; splitting ratio Eyepiece:Trinocular=100:0 or 20:80 or 0:100	Optional
Eyepiece	High eyepoint wide field plan eyepiece PL10X/25mm, diopter adjustable	Standard
	High eyepoint wide field plan eyepiece PL10X/25mm, with reticle, diopter adjustable	Optional
	High eyepoint wide field plan eyepiece PL10X/26.5mm, diopter adjustable	Optional
	High eyepoint wide field plan eyepiece PL10X/26.5mm, with reticle, diopter	Optional
Objective	Bright & Dark Field Semi-Apochromatic Metallurgical Objective 5X, NA=0.15, WD=13.5mm	Standard
	Bright & Dark Field Semi-Apochromatic Metallurgical Objectives 10X, NA=0.30, WD=9mm	Standard
	Bright & Dark Field Semi-Apochromatic Metallurgical Objectives 20X, NA=0.50, WD=2.5mm	Standard
	Bright & Dark Field Semi-Apochromatic Metallurgical Objectives 50X, NA=0.80, WD=1.0mm	Standard
	Bright & Dark Field Semi-Apochromatic Metallurgical Objectives 100X, NA=0.90, WD=1.0mm	Standard
	Bright Field Semi-Apochromatic Metallurgical Objective 5X, NA=0.15, WD=19.5mm	Optional
	Bright Field Semi-Apochromatic Metallurgical Objectives 10X, NA=0.30, WD=10.9mm	Optional
	Bright Field Semi-Apochromatic Metallurgical Objectives 20X, NA=0.50, WD=3.2mm	Optional
	Bright Field Semi-Apochromatic Metallurgical Objectives 50X, NA=0.80, WD=1.2mm	Optional
	Bright Field Semi-Apochromatic Metallurgical Objectives 100X, NA=0.90, WD=1.0mm	Optional

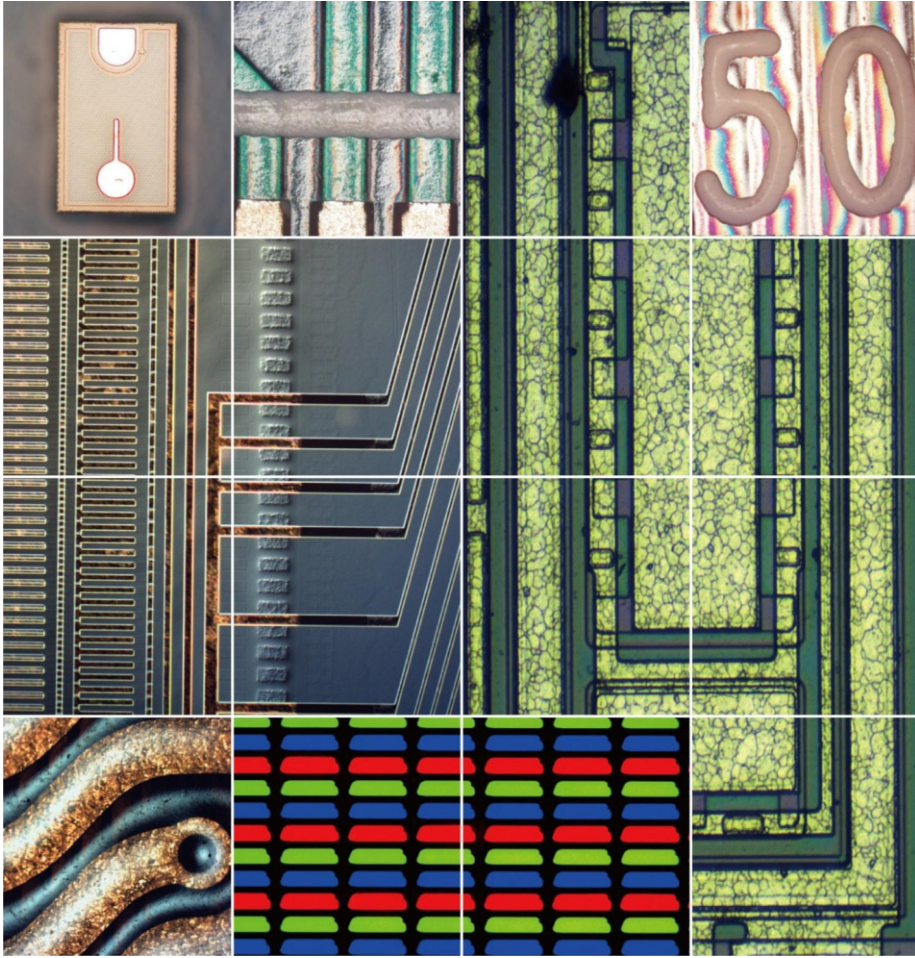
## Specification

Nosepiece (with DIC slot)	Bright & Dark Quintuple Nosepiece	Standard
	Bright & Dark Sextuple Nosepiece	Optional
	Bright Field Sextuple Nosepiece	Optional
	Bright Field Septuple Nosepiece	Optional
Frame	Reflected & Transmitted body, low-position coaxial coarse and fine adjustment, coarse adjustment distance: 25mm; fine precision: 0.001mm. With coarse adjustment stop and tightness adjustment. Built-in 100-240V wide voltage transformer, double way power output; intensity adjustable by digital set and reset; switch for reflection and transmission; built-in transmitted filters LBD/ND6/ND25).	Standard
	Reflected body, coaxial coarse and fine adjustment, coarse adjustment distance: 25mm; fine precision: 0.001mm. With coarse adjustment stop and tightness adjustment.	Optional
Stage	4 inch three layers mechanical stage with glass plate, moving range: 102mm(Y) *105mm(X)	Standard
Condenser	Swing-out type achromatic condenser (N.A.0.9)	Standard
Reflected Illuminator	BD reflected illuminator with iris field diaphragm and aperture diaphragm, central adjustable. With filter slot and polarizing slot. With switch for bright and dark field.	Standard
Lamp House	12V/100W halogen lamp house, center pre-set	Standard
Other Accessories	Camera adapter: 0.5X focusing C-mount	Standard
	Fixed polarizer, fixed analyzer, 360° rotatable analyzer	Optional
	DIC attachment	Optional
	Interference filters for reflected light	Optional
	High precision micrometer, scale value 0.01mm	Optional

## Application

STM-6060 is widely used in institutes and laboratories to oSTMerve and identify the structure of various metal and alloy, it also can be used in electronics, chemical and instrumentation industry, oSTMerve the opaque material and transparent material, such as metal, ceramics, integrated circuits, electronic chips, printed circuit boards, LCD panels, film, powder, toner, wire, fibers, plated coatings, and other non-metallic materials and so on.

## Sample Pictures



## Dimension

