

8. BS-6012RF/TRF Laboratory Metallurgical Microscope



BS-6012RF/TRF

Introduction

BS-6012RF/TRF metallurgical microscopes are high level professional microscopes which are specially designed for metallurgical analysis and industrial inspections. With excellent optical system, ingenious stand and convenient operation, they will be your best choice.

Feature



1. With the most suitable viewing degree, 30 °inclined head holds everyone in the best working state, less tension and fatigue. You can adjust the interpupillary distance to optimum according to the scale on viewing head.
2. Reflected illuminator with field/aperture diaphragm and oblique light device, as well as slots for polarizing kit and filters, adopts Koehler illumination system.
 - 2.1 Comparing with other LED, single 5W LED with warm white light(3000-3300K) greatly reduces the fatigue on observer's vision.
 - 2.2 With pull-rod devices for adjusting the centers of field and aperture diaphragm, stray light can be eliminated by expanding or shrinking the illumination zone.
 - 2.3 Simple polarizing observation is available with insert polarizer kit. More ideal images are here with different filters.
3. The highest sample can be tested is 28mm with transmitted & reflected frame while 78mm high sample is available with reflected frame, as the stage can be dropped 50mm by loosening the screw in the stage holder.
4. M4 wrench for socket head screws places in the frame, making the best of the available space and improving your working efficiency.
5. Up-limit device is helpful to avoid the damage caused by impact between sample and objective lens.
6. Using the outstanding swing-out condenser system, much more transmitted light can be through with bigger numerical.

Application

BS-6012RF/TRF are widely used in institutes and laboratories to observe and identify the structure of various metal and alloy, they also can be widely used in electronics, chemical and instrumentation industry, observe 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.

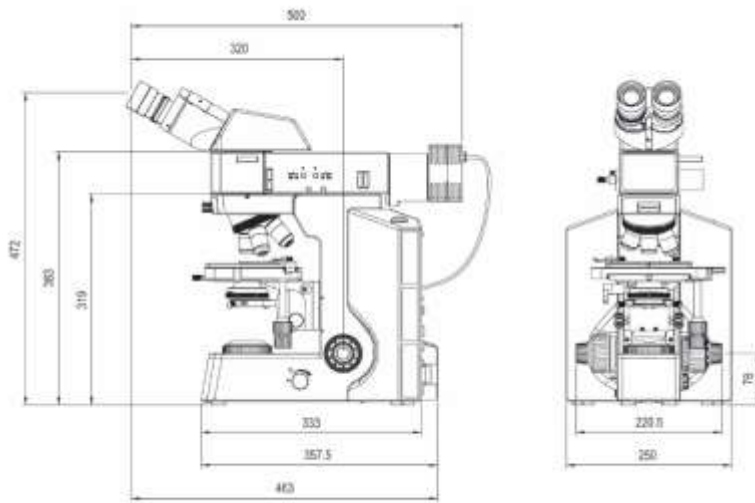
Specification

Item	Specification	BS-6012RF	BS-6012TRF
Optical System	Infinite optical system, Tube length 180mm, parfocal distance 45mm	●	●
Viewing Head	Siedentopf trinocular viewing head, inclined at 30°, interpupillary distance 54mm-75mm, left diopter ±5 adjustable, splitting ratio R:T=100:0 or 50:50, eyepiece tube Φ30mm	●	●
	Siedentopf binocular viewing head, inclined at 30°, interpupillary distance 54mm-75mm, left diopter ±5 adjustable, eyepiece tube Φ30mm	○	○
Eyepiece	High eye-point wide field plan eyepiece PL10×/22mm	●	●
	High eye-point wide field plan eyepiece PL10×/22mm, with reticle	○	○
	High eye-point wide field plan focusing eyepiece PL10×/22mm	○	○
	High eye-point wide field plan eyepiece PL15×/16mm	○	○
Infinite LWD Plan	5×/ 0.15/∞/ 0 (BF) WD 10.80mm	●	●

Achromatic	10×/ 0.30/∞/ 0 (BF) WD 10.0mm	●	●
Metallurgical	20×/ 0.45/∞/ 0 (BF) WD 4.00mm	●	●
Objective	50×/ 0.55/∞/ 0 (BF) WD 7.90mm	●	●
	100×/ 0.80/∞/ 0 (BF) WD 2.10mm	●	●
Nosepiece	Backward quintuple nosepiece	●	●
Maximum	28mm		●
Sample Height	78mm	●	
Frame and Focusing	Transmitted & Reflected frame, coaxial focus system with tension adjustment and up-limited device, moving range: 28mm, fine precision: 0.002mm. Stage can be adjusted up and down, 28mm high sample is available.		●
	Reflected frame, coaxial focus system with tension adjustment and up-limited device, moving range: 28mm, fine precision: 0.002mm. Stage can be adjusted up and down, 78mm high sample is available.	●	
Stage	Double layer mechanical stage with X-Y coaxial adjustment, size: 175mm×145mm, moving range: 76mm×42mm.	●	●
	Metal plate for reflected frame	●	●
	Glass plate for transmitted & reflected frame		●
Reflected Illumination	Wide-range voltage 100V-240V, AC50/60Hz, reflected lamp-house with single 5W LED, warm color. Koehler illuminator with oblique light device, center adjustable field and aperture diaphragm	●	●
Transmitted Illumination	Wide-range voltage 100V-240V, AC50/60Hz, transmitted lamp-house with single 5W LED, warm color.		●
Condenser	N.A.0.9 swing-out achromatic condenser for transmitted frame, with center adjustable aperture iris diaphragm.		●
Polarizing Attachment	Polarizer plate (for reflected illumination, Φ30mm)	○	○
	360° rotatable analyzer plate	○	○
	Polarizer plate (for transmitted illumination, Φ40mm)	○	○
Other Accessories	Yellow/neutral/IF550/LBD filter(Φ45mm) for transmitted light		○
	Digital camera adapter: 1×, 0.67×, 0.5×, 0.35× focusing C-mount adapter	○	○
	3.2X photo eyepiece	○	○
	Photo tube with PK or MD mount for DSLR camera	○	○
	Relay lens	○	○
	Interference filter for reflected light: Blue filter ≤ 480nm; Green filter 520nm~570nm; Red filter 630~750nm; White balance filter	○	○
	High precision micrometer, scale value 0.01mm	○	○

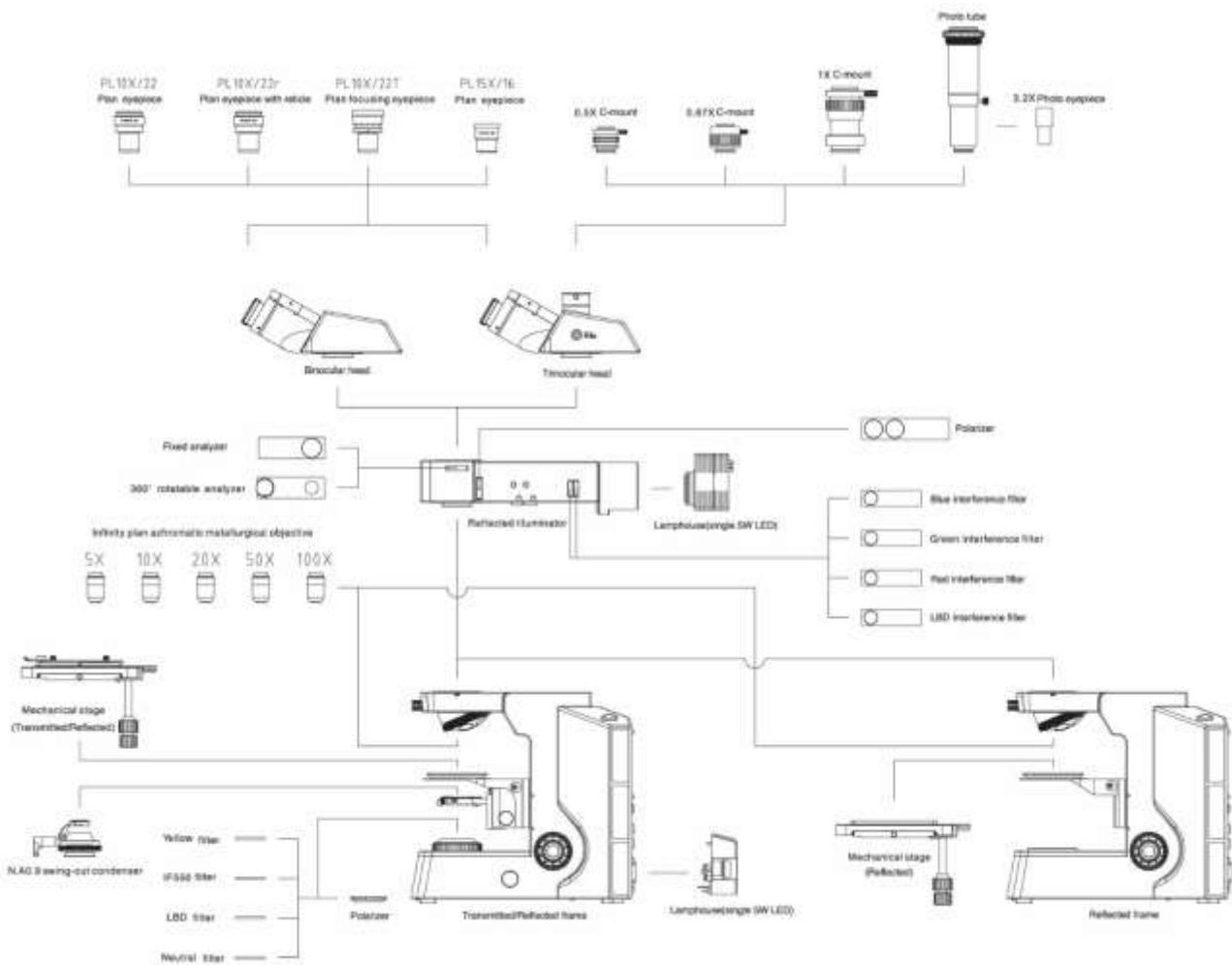
Note: ●Standard Outfit, ○Optional

Dimension

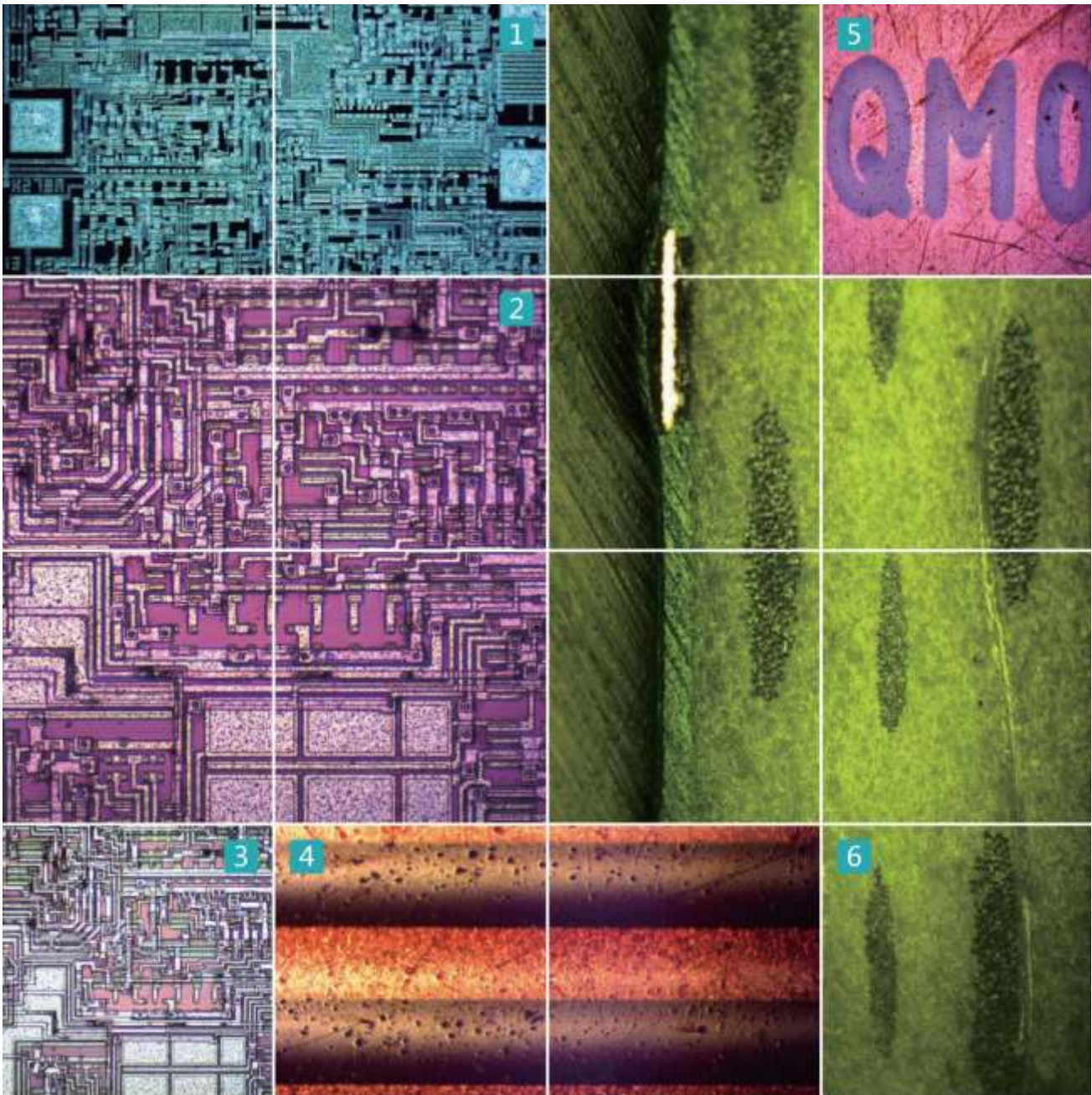


Unit: mm

System Diagram



Sample Image



1,2,3 are Bright field image
 4,5 are Oblique light image
 6 is Simple polarizing image