

BMM 100 Series Brightfield Metallographic Microscope System Help  
Manual



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## 1 System principle

Brightfield Metallographic Microscope is mainly composed of three major systems: lighting system, imaging system and mechanical system. It is a precision optical instrument that is widely used in various fields of modern science and technology . A very important detection tool. Especially in some biology, geology, minerals, medicine and other departments, metallographic microscopes play an increasingly important role.

## 2 System parameters

- Standard working distance series / long working distance series objectives (optional);
- Imaging light path: 1X ( Tube lens focal length 180 mm ) , different magnifications can be customized;
- Imaging light path image surface size: 25mm ;
- Imaging light path spectral range: visible light;
- Camera interface: C/M42/M52, etc. optional;
- Lighting method: Critical lighting / Kohler lighting optional;
- Lighting source: 10W white / blue LED lighting optional;

Table 1 Standard working distance objective lens parameters ( 60mm parfocal length )

Order code	Magnification	NA	WD/mm	Focal length(mm)	Resolution(um)	OFOV(mm)	IFOV(mm)	Thread
BF5XA	5X	0.15	23.5	39	2.2	5	25	M26*0.705
BF10XA	10X	0.30	22.8	20	1.1	2.5	25	M26*0.705
BF20XA	20X	0.40	19.2	10	0.8	1.1	25	M26*0.705
BF50XA	50X	0.55	11	4	0.6	0.44	25	M26*0.705

Table 2 Long working distance objective lens parameters ( 95mm parfocal length )

Order code	Magnification	NA	WD/mm	Focal length(mm)	Resolution(um)	OFOV(mm)	IFOV(mm)	Thread
BFL2XA	2X	0.055	33.7	100	6.1	12.5	25	M26*0.705
BFL5XA	5X	0.14	33.6	40	2.2	5	25	M26*0.705
BFL10XA	10X	0.28	33.4	20	1.2	2.5	25	M26*0.705
BFL20XA	20X	0.34	29.5	10	0.8	1.25	25	M26*0.705
BFL50XA	50X	0.5	18.9	4	0.7	0.5	25	M26*0.705

## 3 Dimensions

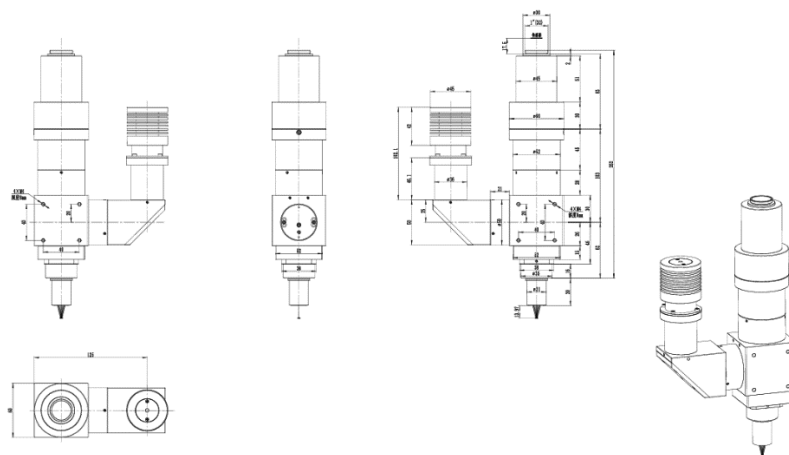


Figure 1 Dimensional diagram of BMM100 series bright field metallographic microscope system

## 4 Application areas

### 4.1 Detection of metal materials and alloy materials

Figure 2 is an image of an LCD screen taken using a BMM100 series bright-field metallographic microscope system.

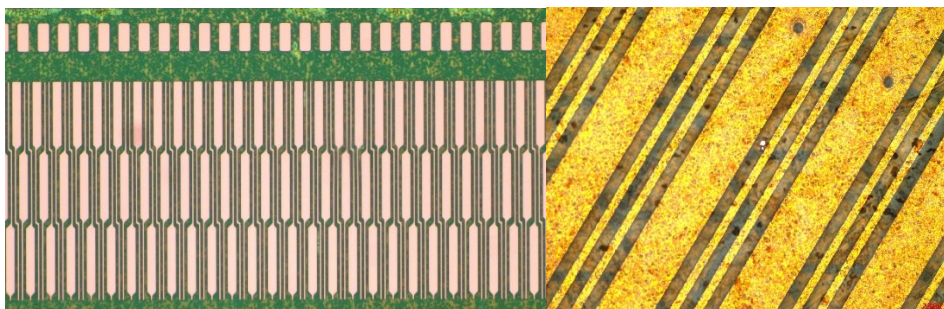


Figure 2 BMM100 series microscope system shoots the LCD screen (left) and LCD screen cable (right)

Figure 3 shows an image of a metal surface taken using a BMM100 series bright-field metallographic microscope system.

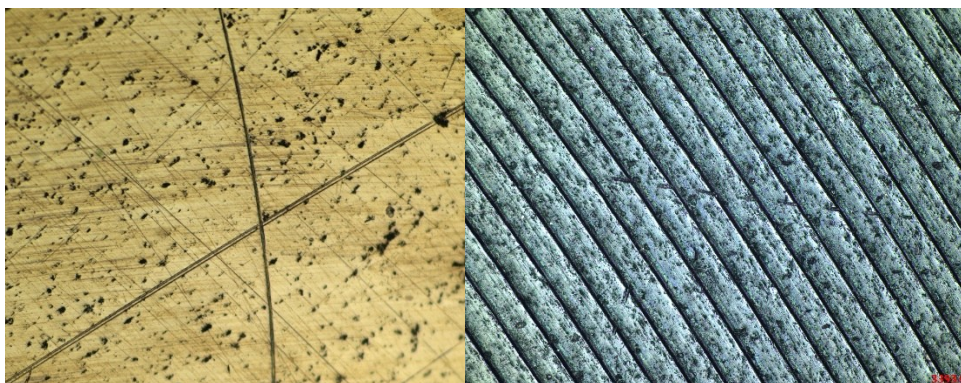


Figure 3 BMM100 series microscope system to photograph metal surfaces





### 4.2 Non-metallic material detection

Figure 4 is to use the BMM100 series bright field microscope system to take plastic surface images.



Figure 4 BMM100 series bright field metallographic microscope system shoots plastic surfaces

## 5 Contact information

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