

# How To Recommend Labomed Inc. Microscope To The Customer

## To recommend a microscope to the customer, you can follow 3 steps:



- **1. Confirm what type of the microscope the customer looks for, such as biological microscope, stereo microscope, polarizing microscope, metallurgical microscope or fluorescent microscope etc.**
- **2. Biological microscopes and Metallurgical microscopes have inverted and upright models. For tissue culture and live cells in biology and big specimen in metallurgy, usually use Inverted type. Otherwise, choose the upright type.**
- **3. After the application confirmed, you can according to the detailed specifications recommend the customer the best model**



**1. Make sure which area the customer needs the microscope, what type of the microscope the customer looks for, such as biological microscope, stereo microscope, polarizing microscope, metallurgical microscope or fluorescent microscope etc.**

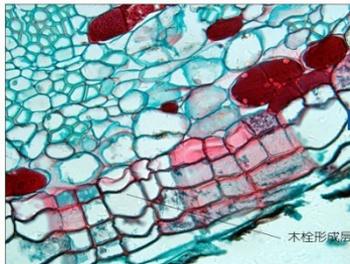
Sometimes, the customer also doesn't know what kind of microscope to choose, you can recommend them proper models according to their specimen and the requirement of the magnification.

-1. For biological slides, pathological analysis, it is better to use Biological microscopes.

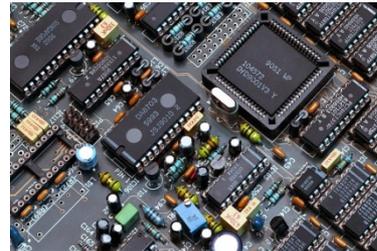
-2. For circuit board, small parts inspection, insect research and areas which does not need high magnification, usually lower than 100x, you can recommend Stereo microscopes to customer.

-3. For mineral stone, pharmaceutical and crystalline material, use Polarizing microscope.

-4. For metal, alloy and similar material, use Metallurgical microscope.



Biological  
Microscope



Stereo  
Microscope



Polarizing  
Microscope



Metallurgical  
Microscope

## **2. Choose Inverted or Upright microscope once confirmed the microscope type.**

- 1. Biological microscopes and Metallurgical microscopes have inverted and upright models. For tissue culture and live cells in biology and big specimen in metallurgy, usually use Inverted type.
- 2. Otherwise, choose the upright type.

## **3. After the application confirmed, you can according to the detailed specifications recommend the customer the best model, such as Optical System, Eyepiece, Objectives, Illumination, Stage, Nosepiece and Condenser etc., as well as the accessories, such as Dark Field, Phase Contrast Kit, Fluorescent Attachment.**

## Useful Tips for Choosing Different Microscopes:

### 1. Biological Microscope:

Recommend models according to Optical System, Eyepiece, Objective, Nosepiece, Stage, Condenser, and Illumination, accessories like Dark Field, Phase Contrast Kit and Fluorescence Attachment. For tissue culture and live cells, we usually use Inverted type.

- **-1. Optical System** has Finite optical system and Infinite optical system. Finite optical system is often used in basic and medium level microscopes, Infinite optical system is for medium and high level microscopes.
- **-2. Eyepiece:** WF10x/18 is usually used for basic and medium level microscopes, WF10x/20 is usually used for medium and high level microscopes, and WF10x/22 is usually used for higher level microscopes.
- **-3. Objectives** are divided into finite and infinite, each kind of finite or infinite objective also includes achromatic objectives, semi-plan achromatic objectives and plan achromatic objectives from low level to high level.

- **-4. Nosepiece** is Quadruple, Quintuple and Sextuple (from low level to high level).
- **-5. Stage:** You can see the level of microscope outfit according to the size and moving range of stage. Usually the larger the size, the bigger the move range, the higher level the microscope.
- **-6. Condenser:** We usually have NA0.9, NA1.2, NA1.25 Condenser, NA1.25 condenser is mostly used for biological microscopes. Swing out condenser is usually for high level microscopes (such as LB-280).
- **-7. Illumination** includes LED lamp, Halogen lamp (20W, 30W and 100W) and Mercury lamp. LED illumination is more and more popular because it saves energy and has long working life. Halogen lamps are similar to natural light, and are still used in the high level microscope and research level microscopes. Mercury lamp is used in fluorescent microscopes.
- **-8.** All the biological microscopes except LB-210 series can be attached with Dark Field, Phase Contrast Kit and Fluorescence attachment.

## Useful Tips for Choosing Different Microscopes:

- **2. Stereo Microscope:** mainly check the eyepiece and zoom ratio, then confirm if accessories needed like universal stand and cold light source.
- **3. Polarizing Microscope:** mainly check illumination: transmitted or reflected. Transmitted illumination is usually for transparent and semi-transparent specimens, while reflected illumination is for non-transparent specimens. Then check optical system, eyepiece, objective, stage, condenser, illumination (20W, 30W, 50W or 100W) and others.
- **4. Metallurgical Microscope:** firstly make sure the type: upright or inverted. Then confirm if dark field needed, and then check the detailed specifications like eyepiece, objectives and illumination to confirm the model.
- **5. Fluorescent Microscope:** firstly make sure the type: inverted or upright. Then check the light source: mercury or LED (only upright fluorescent microscopes have LED fluorescent illumination). Then check filters, usually use Blue and Green filter, U, V are optional.
- **6. Gemological Microscope:** mainly check zoom ratio and illumination.
- **7.** For the details of other microscopes selection, you can refer to the selections of Biological Microscopes.

## Useful Tips for Choosing Different cameras:

### 8. Camera:

The camera can be recommended according to the customer's demand.

- 1. Usually it will need a camera if they want a trinocular microscope. For ordinary usage in Biological, Stereo, Polarizing and Gemological microscopes, 3.0MP or 5.0MP cameras.
- 2. For Fluorescent microscope, it is better to choose CCD cameras (If customer need long time exposure or very high quality image, you can recommend high sensitivity camera with cooling system; if the customer need high resolution, you can recommend 5.0MP, 6.0MP camera to them).
- 3. Metallurgical microscopes usually require high resolution camera, usually recommend 5.0MP or 10.0MP camera.



Thank you for your time. If you have any questions or advice for this article, please don't hesitate to contact us anytime.

Look forward to more prosperities in the coming future!

Have a nice day!

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