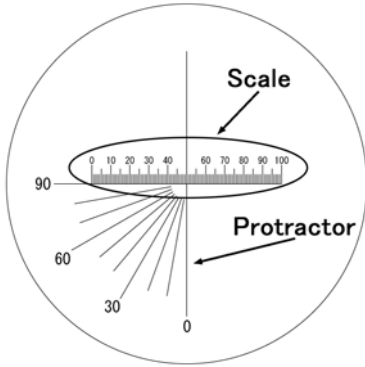


## MICROMETER

The micrometer is found when you look in the microscope on microforges. It is sophisticated-looking, but easy to read. Do you know how to read the micrometer? In this Narishige Web News, we will focus on the micrometer.

### What is the Micrometer?



It is a combined measure with 100-graduation scale and a 90-degree protractor found in the eyepiece which is used to facilitate shaping of a pipette tip.

For instance, it is useful for cutting a pipette tip at a desired point or bending it at a desired angle.

### How to Read the Measure

The protractor is read as it is. We will discuss how to read the scale that you may feel is difficult to work with.

### ***”what does the size of a graduation represent?”***

The answer is **“It depends on the magnification of objective lens!”**

The scale has minimum graduation of  $100\ \mu\text{m}$  in absolute size. When it is used with 10 times objective lens, the graduation is calculated  $100\ \mu\text{m} \div 10 = 10\ \mu\text{m}$ . If 5 times objective lens is used,  $20\ \mu\text{m}$  is calculated. If 35 times objective, about  $2.8\ \mu\text{m}$  is calculated.

### < POINT >

Since the measure is situated inside the eyepiece, it is not magnified with the eyepiece. Thus, changing magnification of eyepiece does not effect minimum graduation.

### < Bit of Knowledge ! >

For those of you who are interested in other magnifications available for the MF-900 Microforge, Narishige sells optional lenses.

model	description	content
MF-OP	Optional Lens for MF-900	MF-OPA + MF-OPB + MF-OPC
MF-OPA	Optional Lens for MF-900	35x objective lens
MF-OPB	Optional Lens for MF-900	15x eyepiece without micrometer
MF-OPC	Optional Lens for MF-900	15x eyepiece with micrometer