

# Micron Depth & Height Measuring Scope - "HL" Type

## Micron Depth & Height Measuring Scope - "HL" Type

- Projection slit light, Reference slit light, and Incident light are changed from tungsten lamp to durable **halogen light source** to ensure optimum illumination on the object surface for fatigue-free, precise measuring work.
- The viewfield of object measuring surface covered by halogen light is widened and precision measuring work is possible by non-technical people without any special training.
- Projection slit, vertical illumination and standard slit illumination are changed to the combination of halogen lamp and fiber optic guide.
- The improvement in illumination and area create a fatigue-free measuring environment.
- A large specimen table for large-sized objects can be installed.



KY-90-HL-TV

## SPECIFICATIONS

- **Optical systems** Erect image, 10× eyepiece 45° inclination (monocular or binocular)
- **Total magnification** 100× Objective lens 10× as Standard (5×, 15×, and 20× as option)
- **Standard slit** Two parallel lines as Standard (Optional Centerless Cross)
- **Projection slit** 10 Micron (darkfield type) as Standard. Half-mirror 10 Micron type as option also, optionally 3 Micron (darkfield type), 30 Micron (darkfield type), and 80 Micron (darkfield type)
- **Illumination** Three halogen illuminators and three fiber optic guides
- **Focusing mechanism** Rough movement : travel of 100mm by main column and screw  
Fine movement : travel of 2.0mm
- **XY Table** 50×50 mm travel, micrometer 10 μm reading, digital 1 μm reading
- **Size of base** 450mm×500mm×50mm ("SB" type base)
- **TV equipment** Monochrome 9 inch or Colour 14 inch
- **Z axis measurement** Digital 1 μm reading

**Other Option :** A video printer for recording can be installed

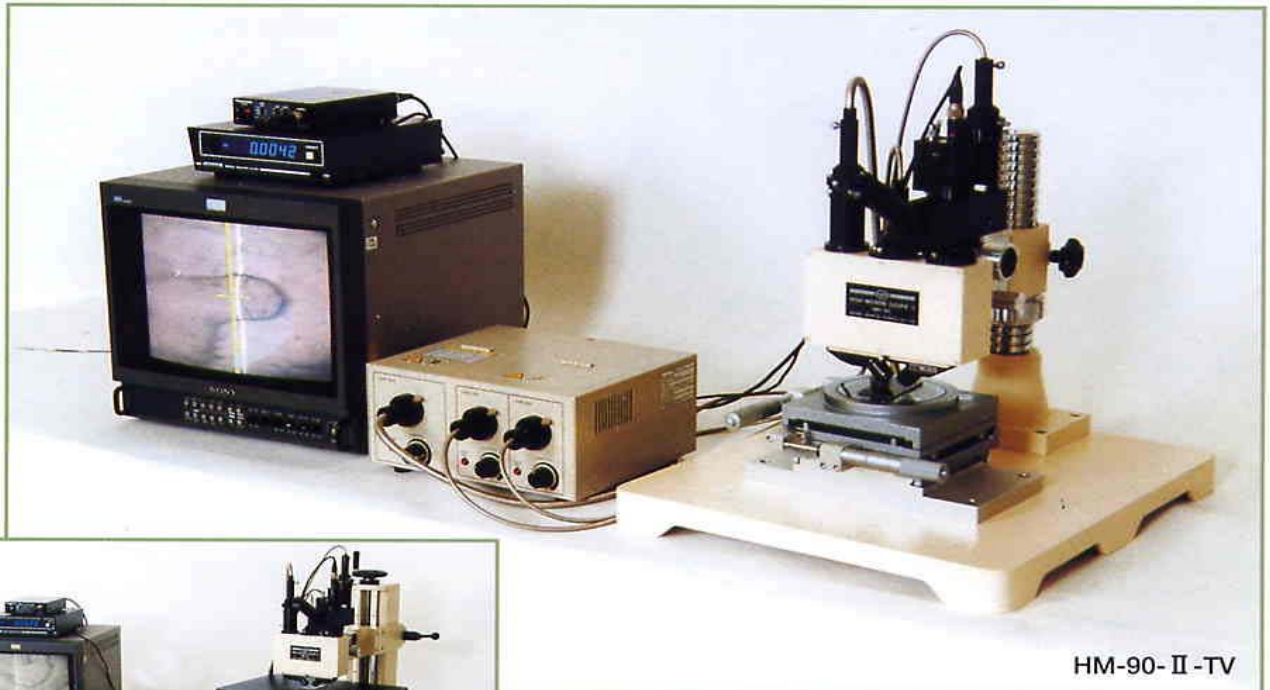
# High Micron Scope, Type 2 (High sensitive type)

## High Micron Scope, Type 2 (High sensitive type)

■High Micron Scope, type 2 (High sensitive type)  $0.1 \mu\text{m}$  reading, has achieved an order of magnitude increase in resolution by improvement of light section method, is now attracting special interest of users as a leading light section microscope.

■Exceptionally suitable for non-contact measurement of fine concave-convex surfaces.

■An anti-vibration device ensures repeatability of reading and measuring operation is available as a standard specification.

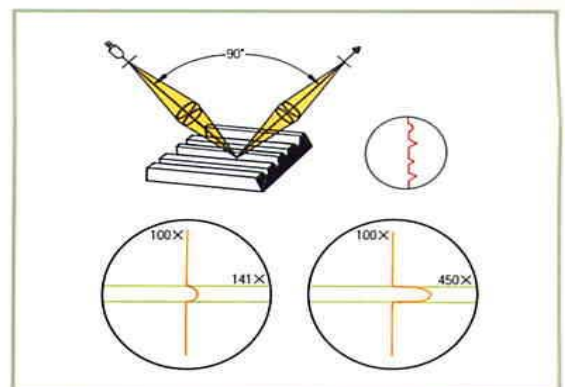


### Standard specifications

|                                                |                             |
|------------------------------------------------|-----------------------------|
| ●Monocular eyepiece                            | 10× (Field of vision=1.5mm) |
| ●Objective lens                                | 10× (HM-90- II type)        |
| ●Working distance                              | 6mm                         |
| ●Total magnification                           | 100×                        |
| ●Horizontal expansion ratio                    | 4.5×                        |
| ●Total horizontal magnification                | 450×                        |
| ●Basic slit (reference slit)                   | "Parallel" type             |
| ●Projection slit                               | 10μ half-mirror             |
| ●Z-axis reading on digital counter             | 1~10mm                      |
| ●Minimum reading                               | 0.1μ                        |
| ●Colour TV system 14" (High resolution camera) |                             |

### Optional accessories

objective lens 20X (t.h.m.=900X/w.d.=6mm)  
 color video printer.  
 binocular eyepiece



A world leading lateral expansion ratio of **4.5 X** (previous industry standard 1.4 X) is achieved with Nissho's new HM-90 type 2 Model

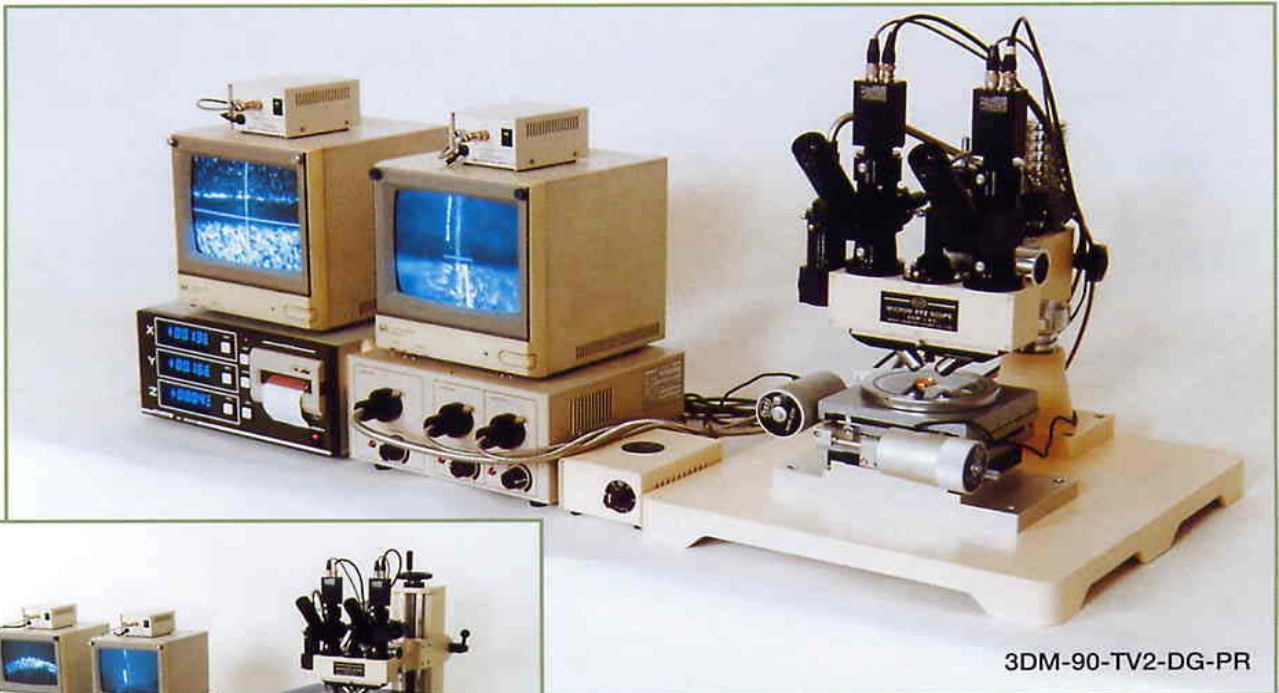
# Micron XYZ Measuring Scope

## Micron XYZ Measuring Scope - with large sliding base.

■ Micron XYZ Measuring Scope is a three-dimensional measuring microscope for a wide range of applications. It provides non-contact measurement of micro depth and height employing light section principle, and, furthermore, adds a new function that vertical and longitudinal measurement and microscopic observation can all be performed.

■ 3DM-90 model is quite useful for quality control of large LCD plate. Precise micro measurement work is possible for "X", "Y", and "Z" axes on the "MB2" type large sliding base. Non-contact 3-dimensional measurement can be carried out without difficulty by non-experienced operator on the TV monitor and XYZ axes electronic readout system.

■ A large specimen table for large-sized measuring objects.



## MECHANISM

- Measurement of X and Y axes and observation of the object surface to be measured.
- The optical system for measuring X and Y axes gives vertical observation of the object and allows accurate understanding of its shape. Therefore, the Model 3DM-90 is particularly applicable for the observation of objects to be measured by a microscope as well as for vertical and longitudinal measurement.

## FEATURES

- Accurate measurements can be performed by coinciding X, Y and Z axes with the measuring position on the built-in reference line.
- The measured value is displayed digitally and units of 1 micron to millimeter can be used.
- Observation of the measured surface can be performed on a TV monitor (erect image).
- The coincidence of measurement and observation makes the instrument easy to operate and the operation extremely effective.
- Various Z axes can be measured because of many kinds of optical slits.
- Non-contact precision optical measuring microscopes for micro linear dimension which provide easy and precise measurement based on "double focusing" system.