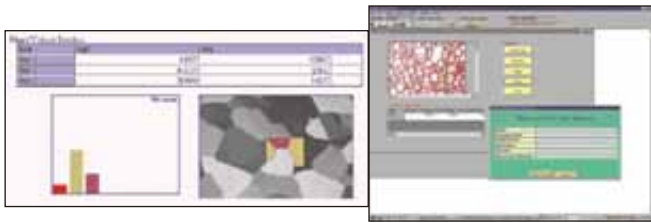


## Versatile Measurement Softwares NS-MHT/NS-SZM/NS-MET



Vaiseshika offers **Measurement Software with Microhardness Tester, Zoom Stereoscopic Microscope and Metallurgical Microscope** which provides multi-faceted capabilities like computer animations, measurement tools and metallurgical metrology. Here is a broad glimpse of various functions:

### (A) COMPUTER ANIMATIONS :

**Show Capture:** We can directly capture images through the software without going outside the software. It has various features. You have to installed only frame grabber card driver We can easily capture images into the computer. We can capture images in .bmp format.

**Report Preview :** This is used for giving detailed reports like Name, Evaluation date, Sample ID No., Application, Operator, Microscope Objective. After filling details, You can see reports in MS-Word and MS-Excel formats, It will generate reports with image, date, various other related information and all. Reports can be generated with the company's logos and its name and address.

**Annotation :** It has various options, you can write text on image, We can mark with arrow. it has different types of arrows. The color of arrows can be changed.

We can use Rubbe, Pencil. We can draw square and rectangle on image. We can change Line color, text color, Font color, Size, Font name, Bold, Italic, Underline. These all can be saved with new file name. It can be refresh if you have made any mistake. The written text can be moved on the image.

**Open Image:** Now we can open image in .bmp and .jpeg, format.

**Open Image & Convert:** Now we can open image in .tiff, .pcx, .rle, and .awd then Convert it into .bmp and .jpeg then use for analysis.

### (B) LINEAR MEASUREMENT TOOLS

**Calibration :** This tool is used for calibrating through calibration scale. This is done only once when we used with microscopes.

**Metrological Measurements :** This software can measure length, curved length, angle, area, radius and perimeter.

**Counting :** This is used automatic counting of cells. It has three intensity range for counting manual by selecting area, Automatic dark objects, Automatic bright objects. It Counts in Total Count, Max Dia, Min Dia, Max Area, Min Area, Percentage. it can cells Label color can be changed. it has five range to search. It may count length, width and Area. Label size can be changed.

### (C) METALLOGRAPHY TOOLS

**Grain Size :** (As per American Standard of Testing Materials- (ASTM Standards). Grain Measurement and Number can be arrived at with direct tabulation method on two methods.

1. Manual and Interception. In manual you can select with mouse. It will measure intercept, Diameter, Grain No., Avg. Grain Area (mm) and measures to ASTM E 112 method.
2. In Interception method it is automatic. It will measure Mean Intercept, Diameter, Grain No. Avg. Grain Area in (mm). Avg. Grain Area in (mm)

**Phase : ASTM E 566 1245** This is used to estimate the area percentage of different phases composition of material. Phase analysis thresholding can be done by different colors. Number of phases ca be drawn. Preview can be seen. It will calculate Area% and Area of selected Phase in different colors.

**Coating Thickness : ASTM B 487** It will give results in Min Length, Max length, Average length, Min height, Max height and Average height.

**Inclusion : ASTM 454 E 1245** Non-Metallic Inclusion rating can be done by ASTM & DIN standards. It will give in Min, Max, Length, Width, Ap. Ratio., Type, Severity level. It will give results for Type in **A Thin, A Thick, B Thin, B Thick, C Thin, C Thick, D Thin, D Thick**. For severity level it starts from .5, 1, 1.5, 2, 2.5, to 5. Results in %

**Particle Measurement :** This is used for measuring particles by simple clicking on it. It will give results in Sr. No., Length, Width, Area and Ap. Ratio.

**Hardness Testing:** Micro-Hardness analysis can also be done. We can obtain knob, Vickers or Brinell. Hardness measurement from indentation image. This will give result of Hardness testing in Vickers and Brinell values like d0, d1, Hv.

## Travelling Microscope



7007

### FEATURES

- Stable and durable
- Rugged
- Impressive ergonomomy
- Measurement of critical physical parameters with precision.
- High resolution capability
- Coarse and fine focussing with 0.01 mm resolution.
- Useful for field work.

### DESCRIPTION

VAISESHIKA introduces Travelling Microscope Type 7007. This new versatile microscope is having multipurpose examination facility. This travelling microscope is specifically designed for industrial samples (viz. mechanical components, electrical parts, electronics components or circuits, textile fibers etc.) and can be used in hospitals and biological laboratories also.

It consists of two vernier rack and pinion systems which can move the microscope vertically and horizontally. It travels 20 cms horizontally and 16 cms vertically with a resolution of 0.01 mm. Scales are divided on high class dividing engines. The base is fitted with levelling screws with top machined over which slides a metal carriage. A levelling meter is also provided for the balancing of the microscope. The vertical and horizontal carriage of the microscope can be clamped at any position by means of a screw provided at the top of the pillar. Fine adjustment for a final reading is done with a micrometer screw. The microscope with rack and pinion is fitted on the horizontal or vertical position of the microscope. Fitted with high quality achromatic lenses.

### TECHNICAL SPECIFICATION

Magnification	: 30x with 10x eye-piece & 3x objective
Focussing	: Coarse focus with pillar clamp
	: Fine focussing with sensitive rack and pinion motion through a large knob provided at the top of the pillar.
Stand	: Base stable, serving as stage also.