# **Keyence VHX-5000 Microscope**

# Keyence

Tool Type: Observation / measurement / imaging

**Location:** Elings 3430

**Description:** Microscope/camera **Manufacturer:** Keyence

### **About**

The Keyence microscope is a semi computer controlled microscope that is capable of taking precision measurements from large depth of field images under high magnification. This microscope features both backlighting and top lighting, and has a computer controlled movable stage which can be used to pan across the object you are viewing. This microscope has a motorized objective which can be used to image parts with a large depth of field to create a single in focus image with depth mapping data. The motorized stage also allows for the stitching of several images to create larger high magnification pictures.

## **Safety Concerns**

- Do not leave lighting elements on
- Do not crash the objectives
- If replacing the bulb in the MI-150 wear gloves to avoid getting oil on the halogen lamp bulb

### **Training Documentation**

**Keyence SOP** 

# **Detailed Specifications**

- 17 mm/s Z travel
- Objective rotation up to 90 degree angle from normal stage axis
- Image stitching up to 20,000 x 20,000 pixels
- Optical zoom from o to 1000x
- 50 FPS max framerate

### **Reference Documentation**

STL Converter Manual

**Brochure** 

Field of View and Pixel Size Chart

Intermediate Quick Start Guide

**Quick Start Guide** 

Exporting Keyence 3D data to STL

CSV to STL project documentation

(Matlab script to come)

**VHX** lenses

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