

Industrial Inspection Monocular Zoom Microscope

The Model ZMM-1 Industrial Inspection Monocular Zoom Microscope from Titan Tool Supply provides end users with an independent and accurate means of quality control, inspection and visualization during the small parts and materials manufacturing processes. The microscope offers constant focal length, highly favorable depth of field, a large field of view at 15X, and a higher magnification and smaller field of view at 60X as standard, as well as a 1:4 zoom ratio.

In addition, when used with the optional extra 20X eyepiece, the Model ZMM-1 can perform reliable and accurate remote visual inspections of a workpiece over an expanded magnification range of up to 120X without a change of lens.

Typical applications for the Model ZMM-1 include root cause evaluations of mini-component failures, such as pin cracks, casting blow holes, and welding and soldering issues, as well as supporting overall sensors and microelectronics components assembly, welding, soldering, and IC fabrication, assembly, testing and quality inspection. They are also used to support semiconductor wafer manufacturing, photonics and optoelectronics manufacturing, cleanrooms, woven cloth manufacturing, and wearables development.

FEATURES

PILLAR STAND: 5.75" diameter, .750" thick cast plate with .500" diameter post 7.500" long. Extra accessory rods, 5.50", 2.50" and 2.50" respectively.

MONOCULAR EYE TUBE: 7.50" long with +/- 2 diopters.

EYEPIECES: wide field color coated 10X standard, 20X optional

CROSS HAIR EYEPIECES: wide field color coated 10X or 20X is optional.

OBJECTIVE: Zoom type, with a zoom ratio of 1:4, by rotating the knurled ring at the bottom of the objective lens.

MAGNIFICATION: Ranges from 15X to 60X by adjustment of the zoom with the 10X Standard Eyepiece or 30X to 120X with the optional 20X Eyepiece.

RESOLUTION IN LINES PER MILLIMETER:
15X to 60X is 57 to 161 lines per millimeter
30X to 120X is 71.8 to 203 lines per millimeter.

IMAGE: Right side-up optically corrected by the use of a Prism in the Microscope.

WORKING DISTANCE: 2.50"

FIELD OF VIEW: The 10X Eyepiece varies from .680" at 15X to .134" at 60X Magnification. The 20X Eyepiece varies from .530" at 30X to .110" at 120X Magnification.



ZMM-1 shown in the horizontal position.



ZMM-1 shown in the vertical position.



ZMM-1 shown in the horizontal position.

Ordering Information

Model Number	Description
ZMM-1	Monocular Zoom Microscope
MZMEP20XZMM-1	20X Eyepiece for ZMM-1
MZMCHREP10X	10X Cross Hair Eyepiece for ZMM-1
MZMCHREP20X	20X Cross Hair Eyepiece for ZMM-1