



- ◆ Portable Microscopes
- ◆ Portable Microscopes with Image Erection
- ◆ PCB Through - Hole Scope
- ◆ Depthscope
- ◆ Brinell Hardness Impression Microscope
- ◆ Cathode Ray Tube Inspector
- ◆ Portable Video Scope
- ◆ Metallurgical Microscope

The Inspecta range of superior portable microscopes are all fitted with high quality precision optics to give the best possible performance. Their robust construction ensures many years of trouble free use.

Portable Microscopes

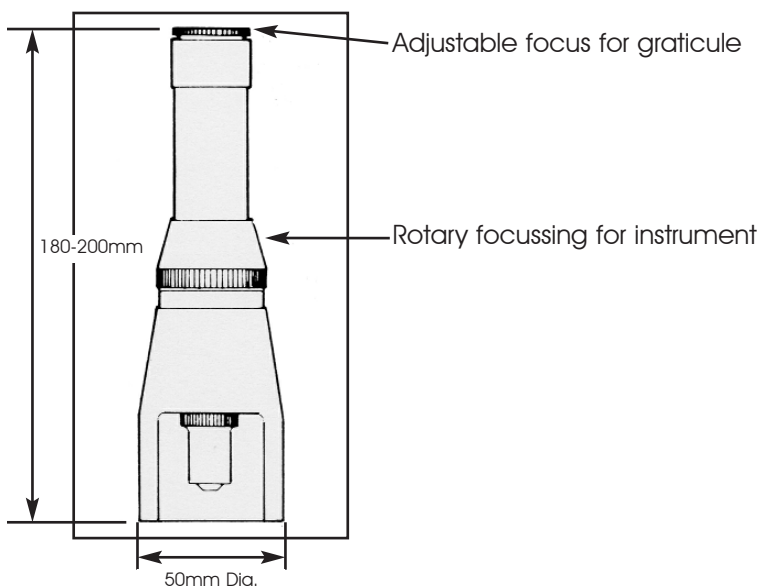
These robust instruments are designed for use both in the field and in the laboratory, to yield results as close as possible to those achieved by full sized microscopes. They are particularly useful for analysis where standard microscopes cannot be used. The results obtainable can relieve the pressure on the standard microscopes in the laboratory itself. In the field, the portable microscope provides a vital tool for the engineer.

High grade optical elements are fitted in the metal body. A rotary knurled sleeve focusses on the specimen, with 20mm adjustment possible. The whole instrument base allows adequate daylight to fall on the specimen for most viewing purposes. Under more difficult lighting conditions, an adjustable torch can be supplied. Alternative lighting systems can be used.

Measurements are made using a graticule (reticle) scale incorporated in the focussing eyepiece. Graticules are calibrated either in metric or inch units and their readings refer directly to the specimen irrespective of size or position.



Microscope shown with torch accessory



Typical Applications

Measurement and inspection of:

- ◆ Artworks
- ◆ Negatives and transparencies
- ◆ PCB tracks and holes
- ◆ Material imperfections
- ◆ Metal finish
- ◆ Slits and apertures
- ◆ Printing and packaging
- ◆ Micro circuits
- ◆ Particles and droplets

Portable Microscopes Specifications

Standard Models

Cat. Ref.	Order Code	Approximate Magnification	Useful Field	Calibration
P821	50E02027	x20	6mm	4mm in 0.02mm
P822	50E02028	x20	0.25"	0.2" in 0.001"
P825	50E02029	x40	2.5mm	2mm in 0.01mm
P826	50E02030	x40	0.1"	0.1" in 0.001"
P827	50E02031	x80	2mm	1mm in 0.01mm
P828	50E02032	x80	0.08"	0.05" in 0.0005"
P830	50E02033	x100	1.3mm	1mm in 0.01"
P831	50E02034	x100	0.05"	0.05" in 0.0005"

Models with Erecting Prism

The following three models have an erecting prism in the optical system so that the image is the right way up to the eye.

Cat. Ref.	Order Code	Approximate Magnification	Useful Field	Calibration
P841	50E02035	x20	6mm	4mm in 0.02mm
P845	50E02036	x40	2.5mm	2mm in 0.01mm
P850	50E02027	x100	1.3mm	1mm in 0.01mm

Magnifications of up to x200 are also available.

Specials

Graticules/Reticles

Standard measuring scales are fitted in all of the microscopes. Pyser-SGI have a wide range of other patterns and have the capability to manufacture custom designs.

Microscopes

Special versions with magnifications up to x200 are available.

Accessories

Torch Illumination

TR4 Torch accessory for illumination of specimen. Battery powered (2 off AAA/R03). Complete with cantilever arm for precise positioning, which attaches to the side of the microscope.

Cat. Ref: **TR4**

Order Code: **50C02065**

Wooden Cases

Polished wooden carrying case for all models

Cat. Ref: **BX1**

Order Code: **50C02060**

CCTV Camera System

Comprises CCTV camera, eyepiece adaptor, monitor and power supply. Fits in place of eyepiece.

	Monocolour Version	Colour Version
--	--------------------	----------------

Cat. Ref:	P920	P921
-----------	------	------

Order Code:	50E02070	50E02071
-------------	----------	----------

PCB Through Hole Scope

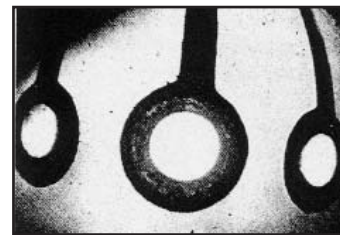


The PCB Through-Hole Microscope is designed for critical inspection of plated-through holes in printed circuit boards. When using this tool the inspector has a view of the complete hole, the image being distorted to a bucket (truncated cone) shape. When used over a light box; voids, drill damage, burrs, obstructions, plating faults can be identified quickly and with certainty.

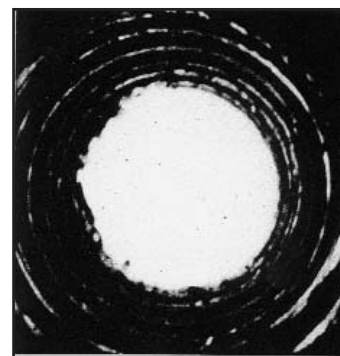
The instrument is supplied ready for use in a wooden carrying case. The standard model is suitable for holes up to 3mm diameter by 3mm deep.

- ◆ Sealed Optics
- ◆ Metal Construction
- ◆ Slide Zoom Grip
- ◆ Hand Grip
- ◆ Clear Acrylic Base

Cat. Ref: **P875**
Order Code: **50E02040**



Distance view of plated-through hole to aid centering (upper zoom position)



Typical close up view of plated-through hole (lower zoom position)

Depthscope

A portable microscope for measuring size and depth of objects. The Depthscope is a versatile tool for use in the workshop, the laboratory or for field studies and is supplied in a polished wooden case.

With the Depthscope you can measure thickness of photographic film, depth of coatings on opaque materials, pits and scratches, depth of blind cavities, cracks in opaque and translucent materials, solder thickness, silk screen ink coating, machined surfaces, surface corrosion, indentations etc.

Built entirely in metal with quality glass optics the microscope is robust and precision engineered to meet the rigours of continuous use in a variety of environments. A battery powered (2 x C type) vertical thru lens illuminator is fitted above the objective lens.

Magnification x200
Direct Reading to 10 micron
Repeatability to 2 micron
(Estimations to 5 microns or better without the use of verniers)

Depth Measurements

In use the microscope is focussed on one surface and the zero datum mark adjusted to coincide with the zero of the depth scale. The focus is then adjusted to the second surface and the separation of the two surfaces or depth is read directly from the scale.

The instrument which has a fixed calibration is focussed by means of the rotating central body system.



Cat. Ref: **P879**
Order Code: **50E02045**

Brinell Hardness Impression Microscope



The special metal base plate allows the modified portable microscope to be placed on small flat specimens. Typically the P890 is used for measurements of hardness impressions. It is supplied complete with the torch accessory.

Magnification: x15
Calibration: 6mm in 0.1mm

Cat. Ref: **P890**
Order Code: **50E02043**

Other calibrations are available.

Cathode Ray Tube Inspector



The shortened base of this microscope, fitted with non-scratch pads allows the inspection of the inside surface of the face of the cathode ray tube, on which it can be focussed.

Magnification: x20
Calibration: 4mm in 0.02mm
Cat. Ref: **P860**
Order Code: **50E02028**

Magnification: x40
Calibration: 2mm in 0.01mm
Cat. Ref: **P861**
Order Code: **50E02039**

Metallurgical Version



This microscope is designed specifically for applications of dark surfaces, or when illumination is difficult. The P878 features a through lens illumination system which is battery powered for maximum portability.

Magnification: x100
Calibration: 1mm in 0.01mm

Cat. Ref: **P878**
Order Code: **50E02046**

Other Products in the Inspecta Range:

- ◆ Magnifiers with Reticles
- ◆ Microscope Components
- ◆ Measuring Scales
- ◆ Video Inspection
- ◆ Depth Scopes
- ◆ Thru Hole Scopes
- ◆ Calibration Products
- ◆ Microscope Systems
- ◆ Co-ordinate Measurement
- ◆ Measuring Microscopes