

Cellcheck CIL-USB Portable Microscope



How can you get a four square meter workpiece under a metallurgic microscope? The solution to this problem is the Cellcheck CIL mobile USB measuring and inspection microscope. The Cellcheck CIL is always supplied with a stable MST stand which provides secure positioning on flat material as well as on rollers or cylinders. The adjustable stand rollers are coated with silicone-free synthetic material and a knurled bronze screw provides adjustment to ensure the required working distance. The 1600 x 1200 pixel USB 2.0 camera offers perfect images, comparable to those from high quality metallurgic microscopes.



Video Software – Measure, Capture, Annotate

Cellcheck CIL is supplied with **Metric BE** software for image viewing and saving in both still and live video.

Alternatively, upgrade to **KITEC** video measurement software which has the most extensive range of measurement functions, image capture and annotation capability of any measurement software on the market. Combining all this with an easy to use interface and life-time free updates makes Cellcheck an unbeatable package. Two Kitec software versions are available, ECO and PRO. It is possible to upgrade at any time from ECO to PRO at the original price difference. Your old version will keep its value.

KITEC ECO

Basic measuring functions such as distance, radius, diameter, angles and more. Image capture with Jpeg, BMP and TIFF formats. Annotate with text and markers. Export measurements into Excel to create reports. Assign functions to as many as 30 hot keys.

KITEC PRO

Contains all measurement functions that are available: special circular measurements, functions for PCBs, thickness measurements, thread-cutting, milling and drilling measurement functions. Import DXF files for inspection with a DXF overlay. Focus calculation and many other special functions. One click export of measurements and images together into Excel.

Kitec software can be installed on as many computers as desired, and is enabled by connecting the USB camera, allowing the system to be used by a number of employees. **Future updates are free of charge.**

Exchangeable Objectives for 90x – 1200x Magnification



Objective Lenses with magnification factors of 2x, 4x, 6x and 10x are included as standard and can quickly be changed resulting in a magnification range from 90x to 430x on a 24" monitor. 15x, 20x and 30x objective lenses are also available as options taking magnification up to 1200x.



LED Coaxial & Ring Illumination

Cellcheck CIL is supplied with LED illumination in both Coaxial and Ring light format. Coaxial light is directed from a strong white LED to eliminate all undesired reflections which often lead to misinterpretations and erroneous measurements. We also offer Infra-red, green and red LED's upon request. The LED power is supplied directly by the USB camera without the need for additional power cable.

An additional LED ring light is also included. Nine LED's arranged at an angle of 30° offer perfect illumination for all applications requiring diffuse light.

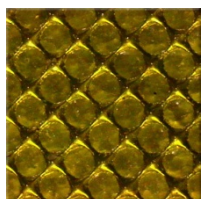
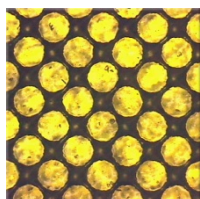
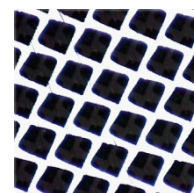
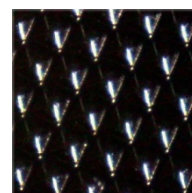


Image examples made with LED ring light and coaxial illumination (polymer printing plate and intaglio printing cylinder).



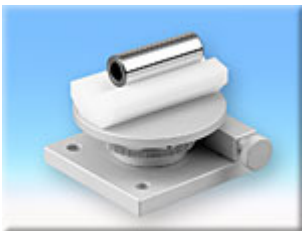
The Cellcheck CIL Video Microscope is delivered in a robust plastic transport case well suited for mobile use in field service.



Accessories



The MST stand can be equipped with rolling stand feet as an option. For example, in the field of solar production, e.g. on solar cells and thin film modules, the measuring points located in a line can be sighted considerably faster and more conveniently. Alternatively, the MST stand can also be supplied with a 5 mm X-axis adjustment. However, a combination of both rolling and x-axis options, is not possible.



An additional stand with **25 x 25 mm cross table** and optional rotation table is available to allow the Cellcheck CIL to be used as a laboratory system (shown with extra z-axis depth measurement equipment in Fig. at bottom right - see model Cellcheck CIL-ZX). This stand is ideal when performing depth measurements on small parts as they can be positioned precisely with the cross table.

Further accessories include the **two V-blocks**, which can be inserted into the rotating table using a fitted pin in the bottom. This allows applications such as quickly and reliably measuring the depth of scratches on round parts without investing a great deal of time. The Cellcheck system is also suitable as a mobile laboratory for measuring polished micrograph sections. In this configuration the Cellcheck CIL system is supplied in a prestigious aluminium case, with recesses for the optional stand.



Typical uses:

- **Electronics industry:** measurements of drill hole diameters, line widths, offsets. Quality of the walls of drilled holes, centricity of drill hole and solder pad.
- **Printing industry:** offset printing plates, prints of every type, rubber print rollers, checking templates for screen printing, holograms, security prints.
- **Timber and plastic industries:** quality of veneered or laminated surfaces.
- **Metal working industry:** embossing rollers, small drills or indexable inserts.
- **Glass industry:** print control on glass panes for the automotive industry.
- **Solar industry:** measurement of solar cells

Optical Matrix for Cellcheck CIL-USB

The field of view is specified in the horizontal direction The magnification factor is based on a 24" screen (measured diagonally). All length dimensions are in mm. The USB 2.0 camera has a resolution of 1600 x 1200 Pixels (1/2" Chip). Divide the visible area in microns by 1600 to determine the pixel size.

Tube length	Objective lens	2x	4x	6x	10x	15x	20x	30x
120 mm.	Working distance in mm	33	18	11	6	9	6	4
	Field of view in mm	2.4	1.2	0.82	0.5	0.33	0.23	0.17
	Magnification	90	170	260	430	640	840	1230

Prices

Order no.	Description	Price excl. VAT.
Cellcheck CIL-BE	Cellcheck CIL-USB with Metric BE software	£3,400.00
Cellcheck CIL-ECO	Cellcheck CIL-USB with KITEC ECO software	£3,830.00
Cellcheck CIL-PRO	Cellcheck CIL-USB with KITEC PRO software	£4,500.00
CV-OM-150	Lense, 15x	£164.00
CV-OM-200	Lense, 20x	£245.00
CV-OM-300	Lense, 30x	£332.00
MST-X	Upgrade with 5mm X adjustment	£575.00
MST-R	Upgrade with rolling stand feet	£270.00
ST-CIL	Stand with cross table 25 x 25 mm	£742.00
ST-CIL-RT-85	Same as ST-CIL but with additional rotation table	£1,080.00
CV-EP-PPOM	Positioning V-blocks with 4 or 10 mm depth	£25.00