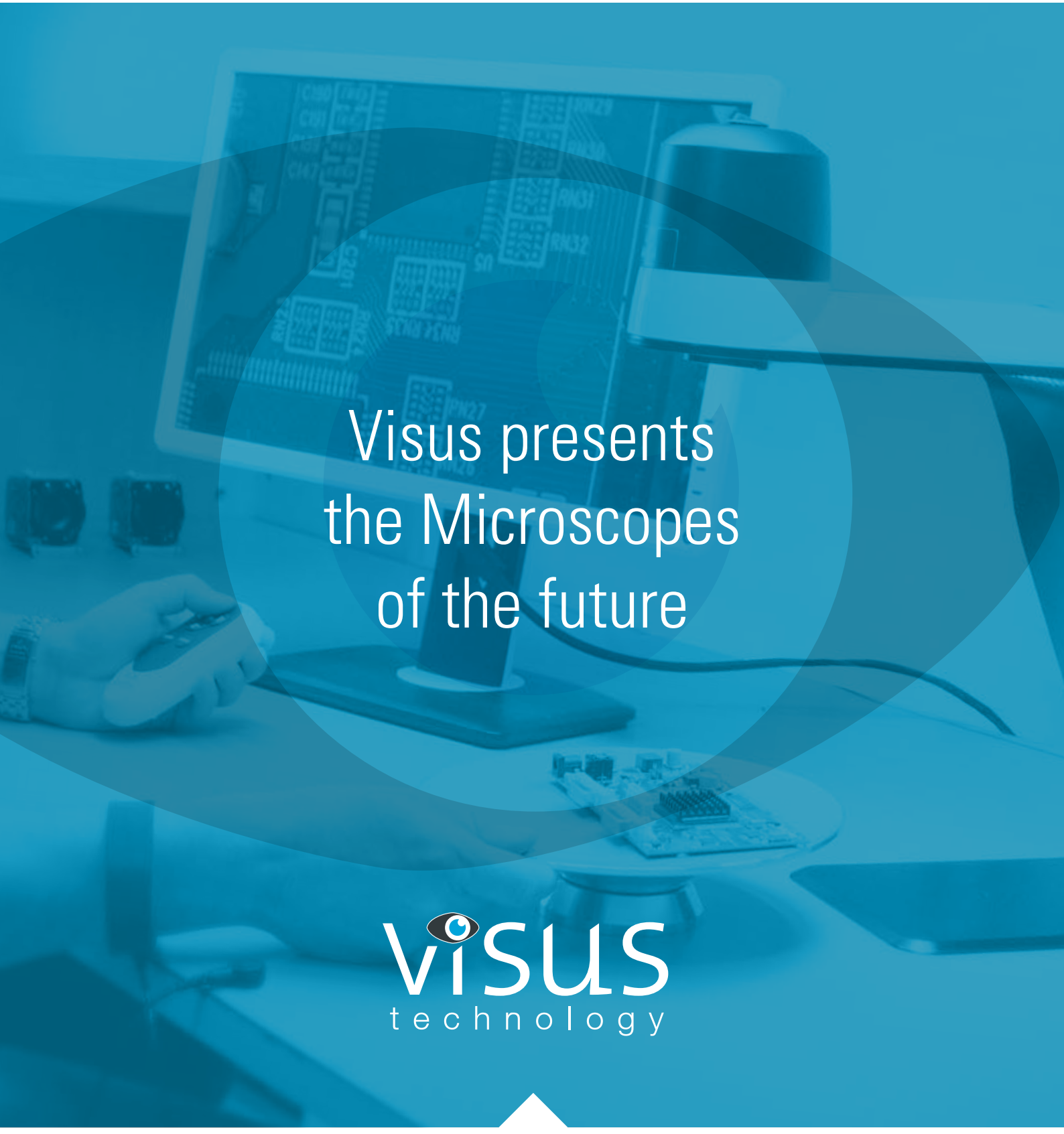
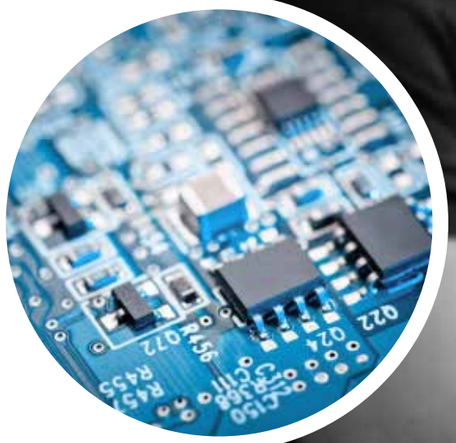


Visus presents the Microscopes of the future

visus
technology

Digital Microscopy



Introduction of affordable digital microscopes are transforming production practices across a host of industry.

Microscopes are required across many aspects of industry for inspection purposes. Products coming off electronic, agricultural, medical and automotive production lines need to be carefully scrutinised. Passports need to be manually looked at, PCB and IC's need to be checked for integrity. And while machine vision can automate the rapid inspection of an ever-expanding spectrum of products, many aspects of this process, the majority in fact, still rely on a look-see from a real human.

Until very recently this meant an operative in, say, an electronics assembly line, looking through an analogue, optic microscope and making a visual judgement on the integrity of the product. This remains the way in which 90% of inspection requiring medium magnification is carried out in the world today because it is affordable and reliable. Operators hunched over into stressful positions, squinting into little holes. This results, inevitably in bad posture and reduced productivity.

The other end of the magnified inspection market involves Advanced Optic Inspection (AOI) machines. These are excellent digital systems in use on automotive production lines and PCB inspections. They capture a magnified image and display that on a screen for indexed inspection and analysis. The one drawback is that AOIs typically cost upwards of 100,000 euros and are not viable for the majority of industrial inspection in which a trained human may suffice.

Now, due to advances in digital camera technology there is a solution from Visus Technology which has created potentially huge market.

"Visus cameras increase your productivity true faster inspection work"

Business areas and industries there Digital Microscopy is suited for use

- ELECTRONICS visual inspection of printed circuit boards, rework and mounting.
- AGRICULTURAL analysis of seeds and grains.
- AUTOMOTIVE control, rework.
- ENGINEERING inspection of metal parts, cutting tools.
- MEDICAL lab purposes
- PHARMACEUTICALS lab purposes.
- AVIATION control, rework.
- SECURITY passports control.
- FORENSICS
- CLINICAL
- And several more areas

Cmore for quality control in agriculture industries

With a Visus digital microscope using sufficient magnification levels, you can view your seed and grain in high magnification with extremely high image quality.

Thereby you can quickly perform processes such as seed germination testing and purity determination of a seed or grain test with wheat, barley or rye seeds, making it very easy to identify foreign varieties, mites or fungal diseases in your sample.

Taking a picture requires only a single click and you will have the image documentation of the purity of your seed and grain test samples readily at hand. When working with our systems, the image from the camera is shown on a screen, relieving your operators of unnecessary neck and shoulder pains, enabling them to work more efficiently.

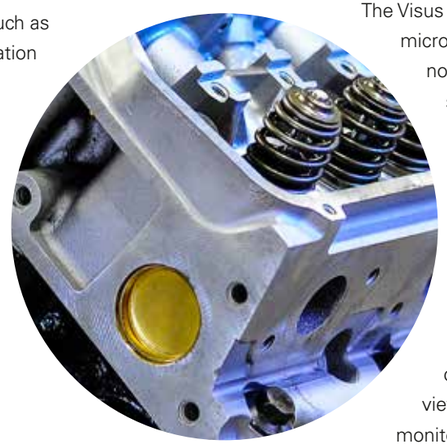
With Visus you have a partner for optimization of your quality processes. We offer you higher quality , higher productivity and equipment suitable for your staff

You can use your Visus system for many different tasks as variety identification and purity determination.

Cmore for automotive industry

The assembly process for automotive parts involves both inspection for defects and verification of measurements.

To handle the wide variety of parts in the automobile assembly process, visual inspection tools must have a wide magnification range. They should be able to focus on an extremely small area and magnify it while retaining sharpness and depth, all without distortion. They must also be able to look at all sides of each piece, preferably without moving the piece. The best inspection tools must be able to aim the magnifying element and the lights at a highly targeted area to minimize the effect of shadows on the inspection process. This means the tool should ideally be able to view components on their horizontal as well as vertical axes. This can increase inspection throughput without reduction in efficiency and accuracy.

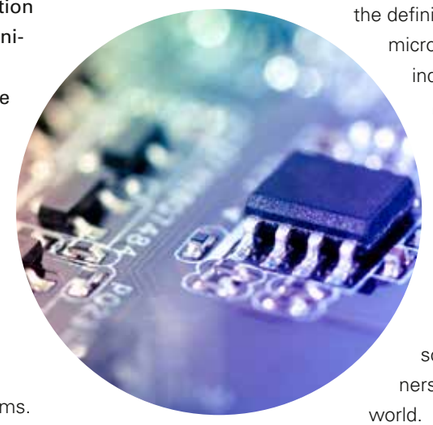


The Visus Cmore digital microscope are ergonomically designed so operators do not have to hunch over a microscope or push their eyes into awkward and uncomfortable eyepieces. Users can sit comfortably and view results on large monitors, minimizing fatigue and reducing the chance of errors due to tiredness.

This way of inspect also allows collaboration: Operators can share results on the screen, or can freeze and capture images.

Cmore for manual visual inspection in the electronics sector

Visus video microscopes are used for many tasks as for example visual inspection of printed circuit boards, using high-definition cameras and high-definition monitors combined with easy to use interfaces, to get excellent image quality and an incredible ease of use.



Experience magnification with outstanding live image quality without distortion and with a large field of view, manual and auto-focus. Viewing images on a monitor also gives you a great range of ergonomic advantages, avoiding neck and shoulder problems.

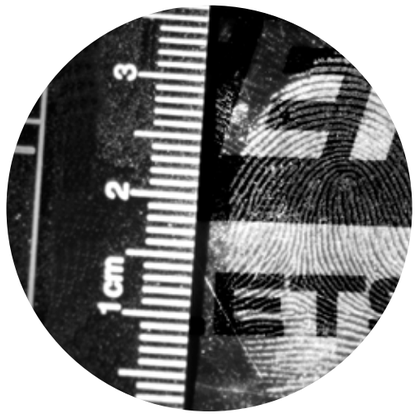
Visus video microscopes also allows you, as standard configuration, to capture images on a PC.

Cmore from Visus enables you to use measurement software which providing you with a unique measurement capabilitity, and chances to taking measurements by easy point and click software. The measurement software also enables you to measure basic geometric figures.

The broad magnification range, the superb high definiton image quality, the great ergonomics and the flexibility of multiple individual adjustments are the defining features of the Visus video microscope, used in electronic industries worldwide.

Characteristics for our solutions is the superb image quality featuring HD and FULL HD qualities and a great included measurement software which are just some of the features that make the digital microscopes from Visus strong partners all through the electronics world.

Visus technologys Cmore is ideal for a variety of application areas within the electronics industries. Cmore is for example used for quality control, documentation, measurement, training, rework and repair of printed circuit boards.



Cmore for forensic business

Forensic science gathers and examines information about the past. Technicians inspect fingerprints, signatures, crime scene details, hair samples, and other physical pieces of evidence.

They also inspect currency to assess potential for counterfeiting. Most forensics is done in a lab in highly rigid environments. Inspections must be detailed and consistent, to avoid having evidence compromised or dismissed. The Cmore from Visus can be used to identify many types of evidence.

Digital camera microscopes are replacing traditional optical microscopes around the globe

Advantages over Traditional Ocular Microscopes

- Less tiring than looking under binocular based cameras / ocular microscopes
- Longer working distances no risk of board contact. Crucial for efficient assembly, reparation and rework
- Auto focus optics ‘frees up’ the hands and allows quick inspection of objects at different heights and magnifications
- Larger depth of field for easier and quicker work
- Powerful optical zoom 1x to 30x produces large field to high magnification images
- Remote control of magnification, focus, brightness, etc

> "The digital revolution in microscopy have now gone in to fase were the digital video system is a natural choice."

Compared to a Stereo Microscope

	Cmore FHD	Stereo Microscope
Ergonomic Inspection	Excellent	Poor
Large Working Distance	Excellent	Good
Large Depth of Focus	Excellent	Good
Large Field Of View	Excellent	Good

Visus technology and the Cmore Digital Microscopy

Visus technology from Sweden has turned its eye to this burgeoning field in the form of the Cmore Full HD.

Visus technology from Sweden has turned its eye to this burgeoning field in the form of the Cmore Full HD. The Cmore is a easy to use stand alone inspection system that allows the user to view on a monitor a precise live picture at 30x zoom of what is currently under the camera, without any distortion, delay or interference. The product comes with built-in LED lighting, auto and manual focus, measurement and drawing software as well as frame grabbing software. Visus technology aim to be the benchmark when it comes to visual inspection systems for industrial environment. Our research and development team have made great efforts with the construction of the Cmore digital microscopy. The Cmore is an all in one product No complicated settings or adjustments is needed. Just plug and play.

This application of new camera technology has dramatic implications in terms of productivity and efficiency to a whole range of industrial sectors. We offer you free testing of your samples so you can get a feeling of what the system can do for your business. When you have a Visus system you are always welcome to take contact with us to discuss how you can get most out of your system.

Christer Gustavsson of Visus technology, explained:
"We saw a need in the market for simple inspection equipment within the electronics industry. The simplicity of the system, with only one button and the easy to handle remote control, enable Cmore FHD to be operated without any training."

He added, *"We have clients across automotive, agricultural, engineering, medical, security, forensics and clinical fields. We now have distributors across Europe and also in the US."*

"Visus develops the microscopy of the future"

Visus Cmore FHD

The Cmore Full HD (FHD) magnification system from Visus technology combines the FHD technology´s supremely sharp images and the microscopes ability to magnify.

"Visus Products are truly designed for precision work"

Cmore FHD also give the opportunity to a correct work posture with a safe ergonomic and flexible magnification system.

With Cmore FHD you can use the monitor as a precise reference. What you can see in the monitor is an exact live picture of what you have put under the camera without any distortion, delay or interference.

With Cmore FHD you can just connect it to your PC and save images with the included software.

You handle the Cmore FHD with the wireless remote control or the software.

User friendly

Cmore FHD is a very user friendly system. The simplicity of the system with only one button and the easy to handle remote control enable you to operate the Cmore FHD without any training. And you need almost no time to adjust to using it.

Developed with operator in mind

Visus Cmore system was developed with the operator in mind. It combines advanced digital microscope technology with comfort and ease of use. View crystal clear 1080p images on your HD monitor, reducing the eye strain and neck fatigue associated with frequent use of traditional microscopes. Connect the Cmore to your computer to take advantage of the exclusive imaging and measurement software. Capture images and videos, make annotations and measurements with ease.

Suitable for visual inspection of circuit boards, analysis of seeds and grains, automotive rework, inspection of metal parts and cutting tools, pharmaceutical lab work, forensics and clinical applications and more.

High magnification, exceptional clarity

The Cmore features an auto focus HD camera with optical magnification of up to 30x and digital up to 300x. Produces stunning high quality HD images without any distortion or delay with excellent depth of field.

Featuring both USB and HDMI outputs, the Cmore is the most versatile digital microscope system in it's class. View sharp images on your HD monitor, or use the USB output to connect a PC to utilize Cmore´s imaging and measurement software.

Built-in LED lighting provides even, shadow-free illumination. Featuring a working distance of 28 cm, the Cmore is capable of inspecting objects large and small.

Capture images, record videos, annotate, perform measurements, and share your documents with your team. These files can be viewed, replayed and analyzed.

The Cmore remote control features clearly labeled buttons for easy access to the system functions. ZOOM in and out, turn AUTOFOCUS on/off, adjust BRIGHTNESS, turn GRID MODE on, and more.

Made in Sweden, The Cmore are made only from high quality materials and surface treatments for a long lasting product which requires no maintainance.

Visus Cmore FHD

ESD Safe

Cmore FHD is tested according to the principles of ESD.

Lighting

In Cmore FHD built in LED lighting is included. It comes in two angels to get the best possible result.

Autofocus

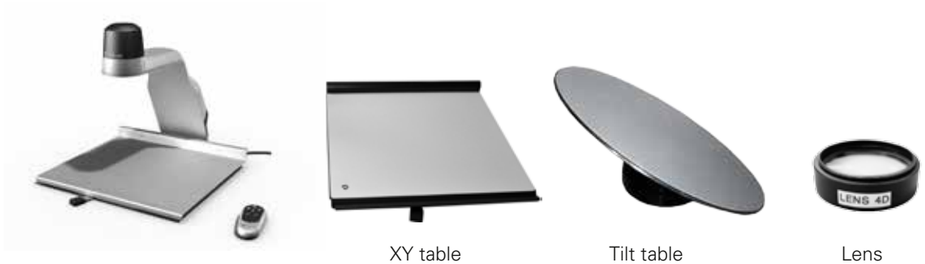
Cmore FHD is extremely fast finding focus. You can also, if it´s necessary, change to manual focus, to find the focus exactly where you want it on the object you are working with.

Specifications Hardware

Resolution monitor	1920x1080 (Full HD)
Resolution computer	1280x720 (HD)
Camera zoom	x30 optical
Frame rate	60 full digital frames / second
Free working height under camera	280 mm
Operating system demands	win10 / win8 / win7
Output	mini USB computer HDMI screen
Lighting	built in two angled LED lighting
Monitor size	optional
Dimensions	H 410mm W 170mm D 350mm
Weight	4,5 kg
Monitor format detect	yes
Autofocus	yes
Image / Video capture	yes

Options

You can also combine the system with our excellent XY table which allows you to precision control of the object you are working with. You can also use it with our Cmore tilt table which allows you to see the object in different angels. Cmore FHD comes in two versions 20x optical zoom camera as standard or with 30x optical zoom camera as option.



XY table | Tilt table | Lens

Software

The software is included on a USB stick to all Visus Cmore systems. It is also possible to download on www.visustechnology.se. No drivers, no product keys, install and run.

Control your Cmore

With the Cmore software you can control the Cmore unit from the PC, with functions as

Zoom, freeze the image, control the brightness, Turn of the Autofocus and control the focus from the pc if you need that. Use a Hair-Cross refence, turn off the color, set the Digital zooming on and off.

Save live pictures.

You can also zoom and store pictures from the mouse direct.

Using booth left and right button on the mouse options as save video can also be used.

Messaurement and drawing

With the software one also have the option to make drawing or measure on the image or the object that One is magnifying or investigating.

- Vertical, horizontal, angles, diameter.
- Use it as a mark tool to make dots for printing.
- Mark the object image with freehand or square marking.
- Different options to mark circle or measure angle between to known lines or angle vs the horizontal line.
- If you need more accuracy in the measuring, a klick-klick option for calibrate is available.
- If one calibrate and uses the very same zoom each time, this values can be stored and reloaded again another time, when the same object is about to be analyzed.

We adapt the software to your needs

Visus Technology also offers special demands to the Software as we can make options needed for certain customer needs. Example: Customer needs to make many measure and wish to have these values insert to excel file direct. Or different command or shortcuts.

VISUS technology

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