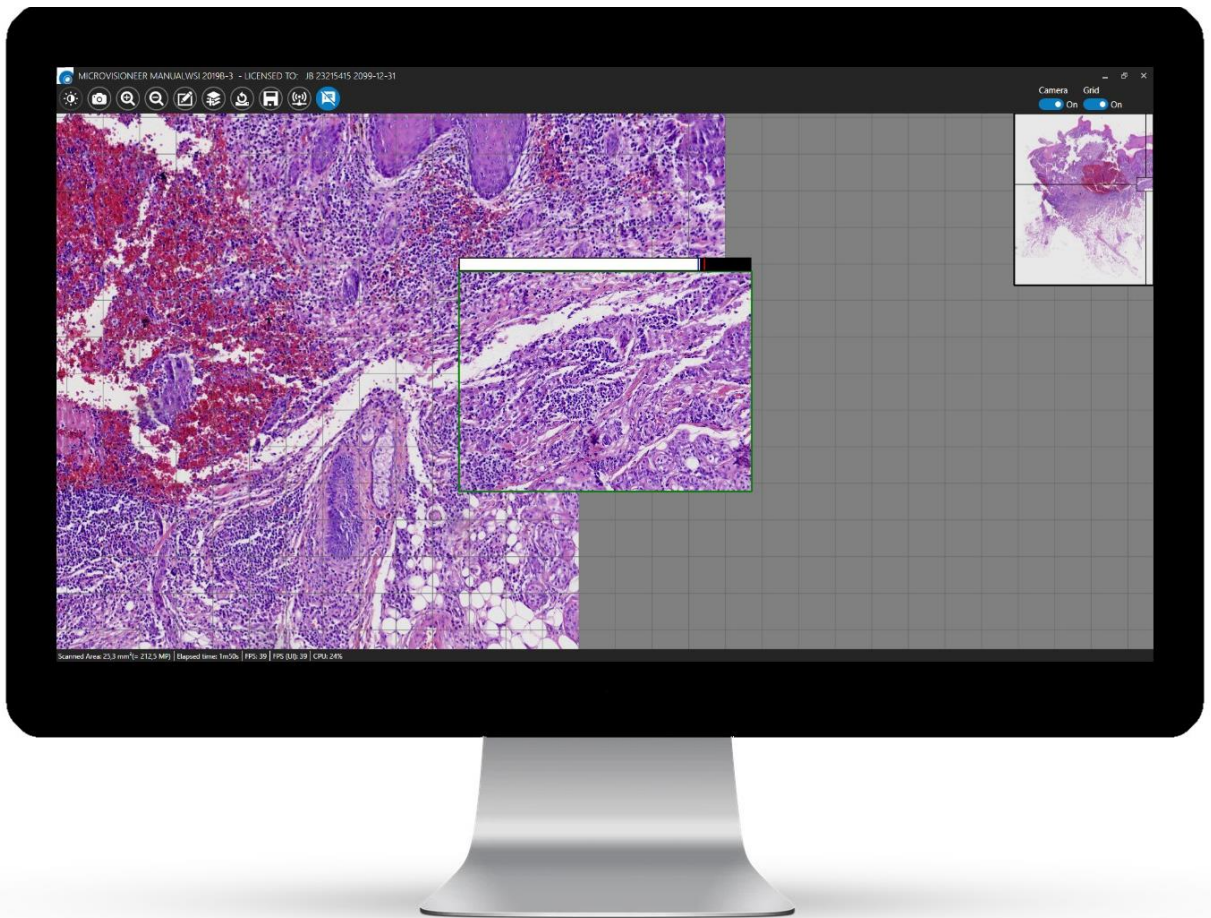




## MANUAL WHOLE SLIDE IMAGING



### **Microvisioneer manualWSI**

The easy solution for digital pathology

<https://www.microvisioneer.com/manualwsi>



# The Microvisioneer manualWSI Scan Software

Upgrade your microscope to a manual slide scanner

Microvisioneer manualWSI is an affordable and high-quality manual scanning software allowing to upgrade existing microscopes to manual whole slide scanners. The exceptionally versatile and innovative solution enables customers in currently 55+ countries worldwide to create virtual whole slide images (WSI) for various applications. The manualWSI system is affordable, easy to use and readily available, and allows smooth image stitching at high quality, similar to that of automated slide scanners. Almost any type of slide can be digitized, no matter how exceptional.



Microvisioneer offer an innovative software and personalised support package allowing users to convert digital images directly into whole slide images (WSI) of a quality comparable to commercial whole slide scanners.

Jeremy Parry,  
Managing Director  
DLS Pathology Services

## The manual scanning process



1

Upgrade your microscope to a manual slide scanner with a suitable camera and the Microvisioneer manualWSI scan software. Camera mounting and software installation is extremely easy. A simple microscope upgrade - the ticket to virtual microscopy.

2

Create whole slide images by manually moving the stage. It has never been easier. Any desired objective can be selected. Scanning is intuitive and smooth. Real-time stitching of the panoramic image is seamless.



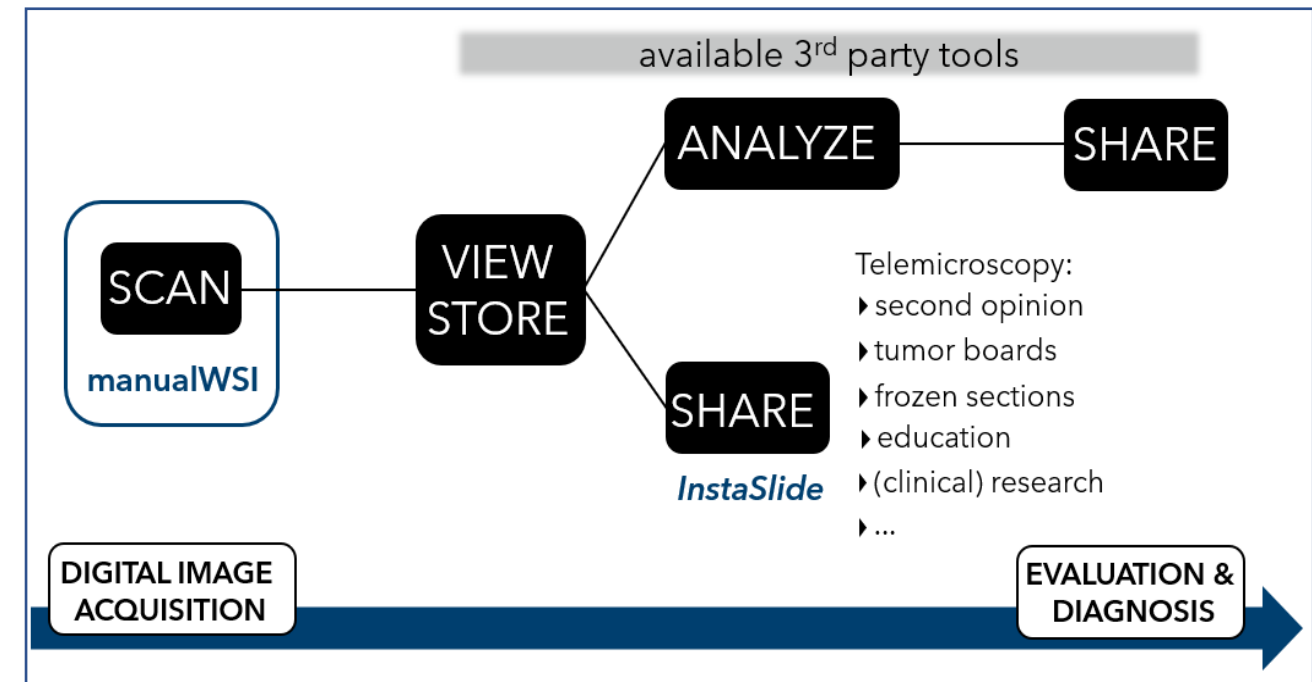
3

View, analyze, archive or share virtual slides. The virtual slides are compatible with all major available viewers and image analysis tools. For sharing the images, simply use cloud-based systems or the Microvisioneer InstaSlide software.



# The Digital Pathology Workflow with manualWSI

The easy transition to fully digital workflows



The Microvisioneer manual scanning solution can be readily integrated into any environment. The file formats of the whole slide images are standard and open industry file formats which are compatible with all major existing digital pathology tools, such as viewers, image analysis software or cloud platforms. Thus, no major capital investment is necessary and a full and cost-effective telemicroscopy / telepathology workflow can be established.

Microvisioneer manualWSI is an extremely powerful technique as it is easy to access and therefore significantly facilitates a transition to digital workflows.

For quick and straight-forward slide sharing, Microvisioneer also offer a telemicroscopy solution, InstaSlide.

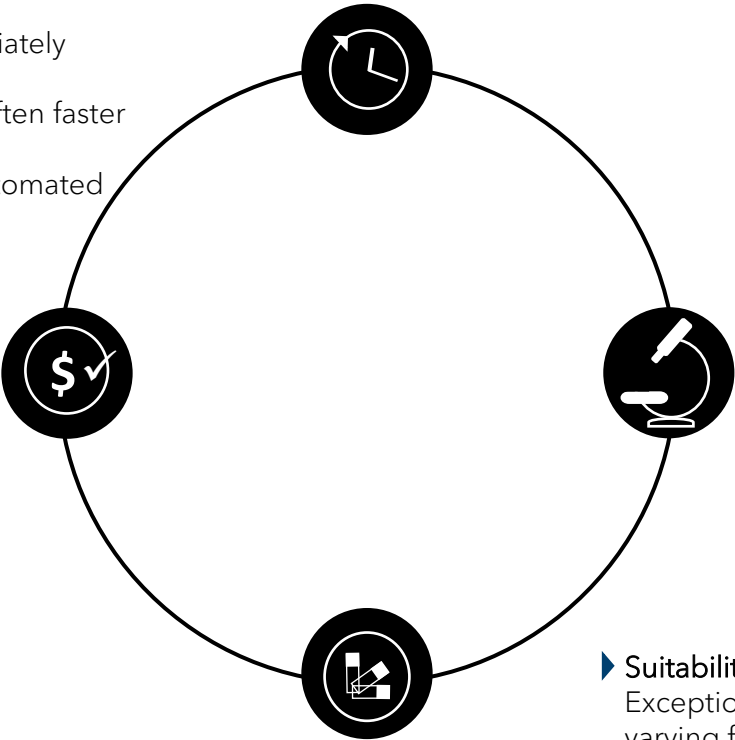
# Benefits and Opportunities

Good reasons for manual scanning with Microvisioneer manualWSI



▶ **Time-saving:**  
 Hardware items and software are immediately available.  
 Manual scanning of small specimens is often faster than automated scanning.  
 Compensation of potential outage of automated scanners.  
 Scan right away on your desk.

▶ **Affordable:**  
 Upgrading of microscope with the manualWSI software and, if necessary, inexpensive hardware.  
 Long-lasting solution without expensive maintenance.



▶ **Maintains traditional microscope features:**  
 Any desired objective can be selected.  
 Slides can still be assessed through the eyepiece.

▶ **Suitability for exceptional slides:**  
 Exceptionally thick slides or slides with varying focus plane can be easily scanned due to the flexibility of the microscope.

## ManualWSI opens up all the opportunities of digital pathology



**Image Analysis**  
 Perform representative and reproducible analyses.  
 Automate image analysis.



**Documentation & Publication**  
 Save your digital slides, annotations and comments.  
 Preserve the original staining.  
 Create publication-ready high-quality images.



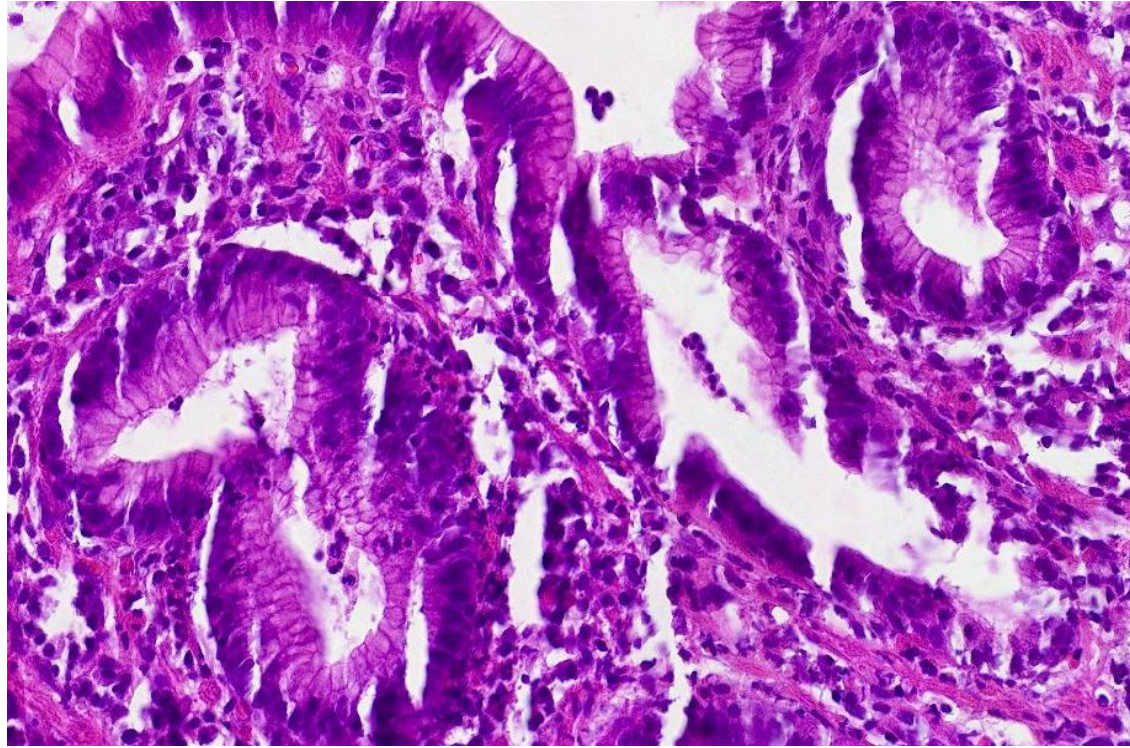
**Education**  
 Scan your own teaching slides and move away from expensive glass slides.  
 All students see exactly the same virtual slide, remotely and simultaneously.



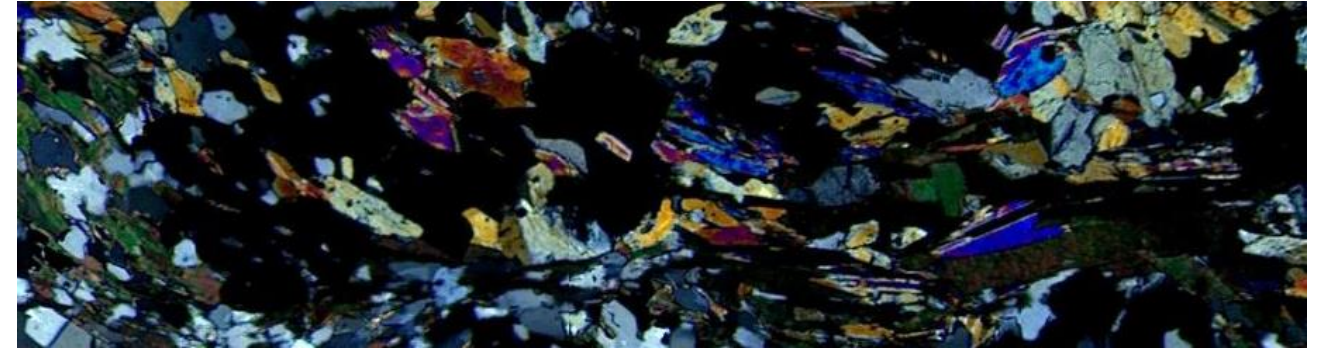
**Collaboration**  
 Share digital slides with colleagues worldwide.  
 Work remotely and save time and costs.

# Applications

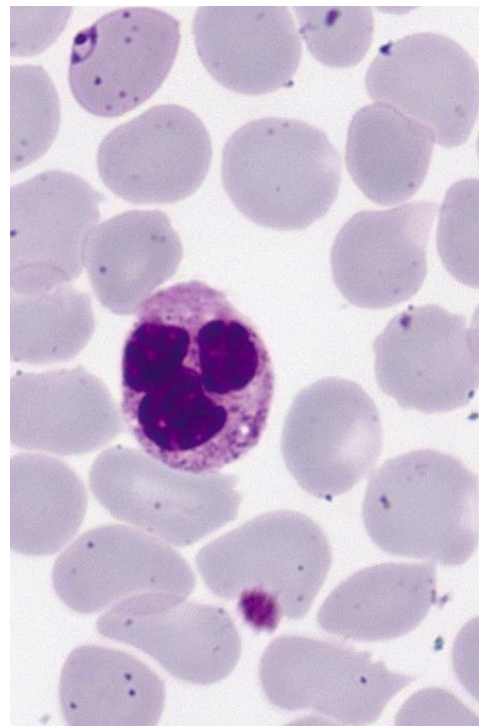
You decide what you scan



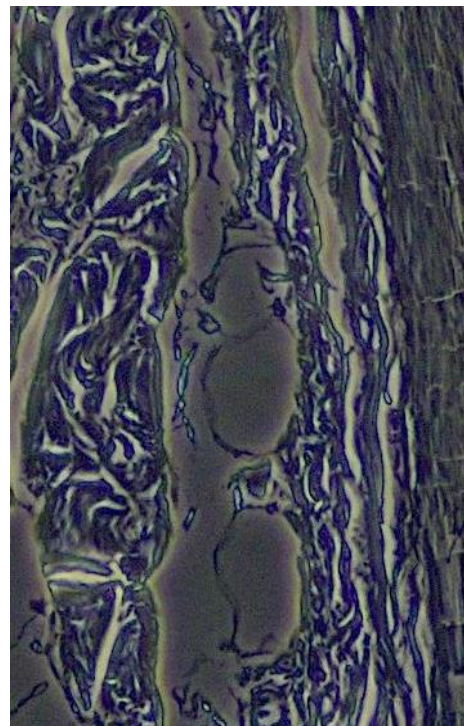
brightfield  
human  
intestine,  
H&E stain



polarized light  
rock thin section

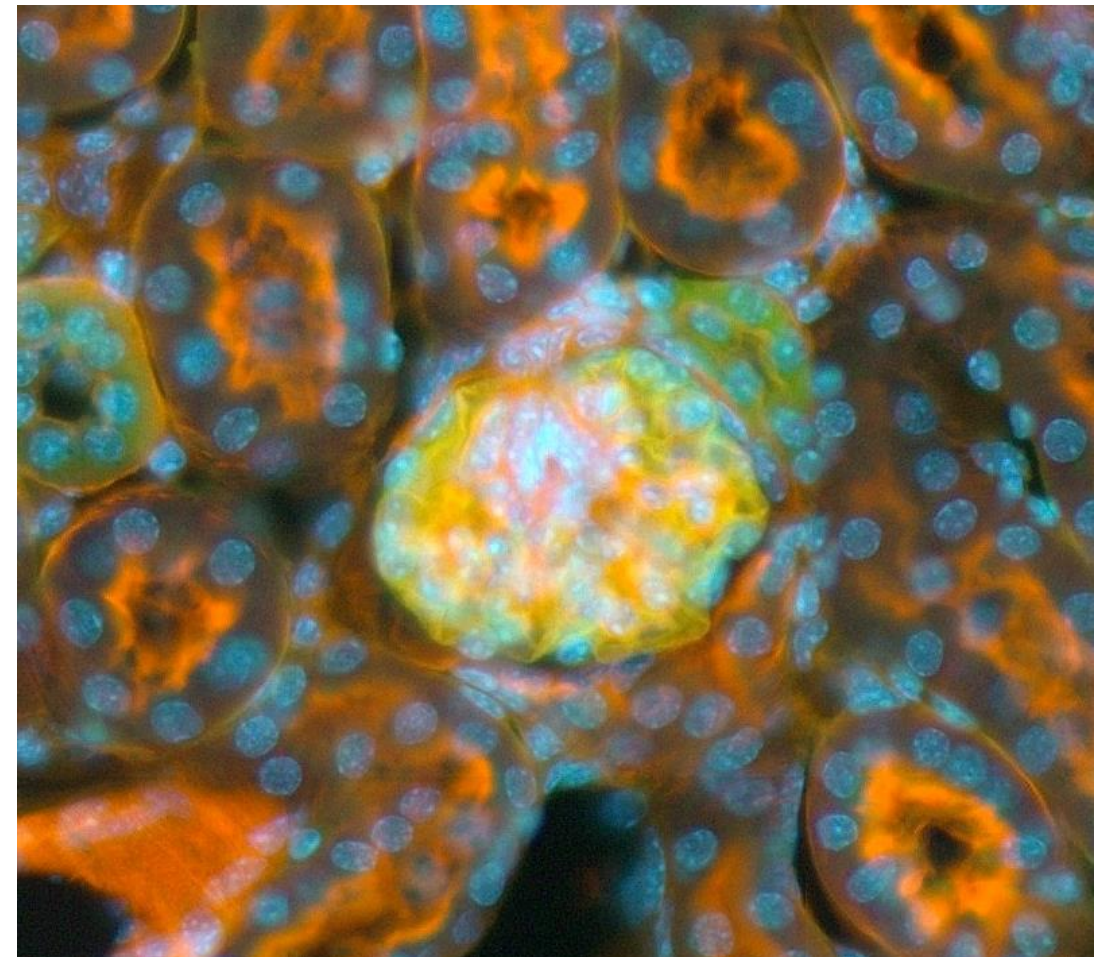


oil  
immersion  
blood  
smear,  
Wright's  
stain



phase  
contrast  
skin of  
pig  
embryo

fluorescence  
FluoCells™  
prepared  
slide #3  
(mouse  
kidney  
section with  
Alexa Fluor™  
488 WGA,  
AlexaFluor™  
568  
Phalloidin,  
and DAPI)



# Specifications

Key technical features of Microvisioneer manualWSI

Supported microscopes	Trinocular with PLAN lenses or better
Supported scan modes	Brightfield, darkfield, phase contrast, polarization, oil immersion, and fluorescence
Supported cameras	Cameras with global shutter sensors or CCD sensors in progressive scan mode
Output file formats	SVS, TIFF, JPG, BMP, PNG
Shading compensation	Active compensation of shading / vignetting
Flicker compensation	Active compensation for older microscopes with flickering light sources
Freeze feature	Combination of multiple scans of different tissues / stains into one virtual slide
Snapshot feature	Shortcut to create and automatically save still images with or without scale bar while scanning. Alternatively, snapshots can be created via usb-foot switch.
Presets	Store and load settings for different objective lens magnifications and stains
Realignment	Semi-automatic, automatic
Barcode reading for high-throughput scanning	Integration of barcode reading for automated file name creation including regular expressions and time stamps
Pen annotation feature	Direct integration of basic annotations into the scan
White balance	Automatic and manual
Exposure adjustment	Automatic and manual

Microvisioneer manualWSI is for research use only.

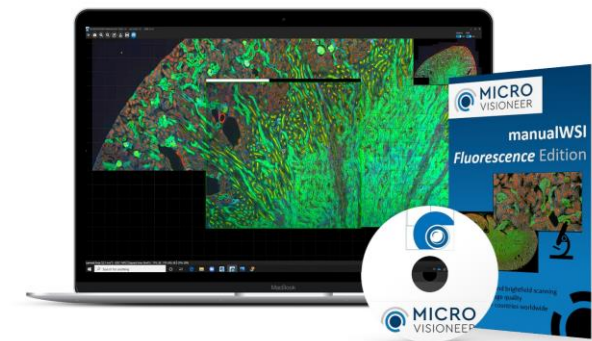
# Microvisioneer Product Range

Find your solution



## Microvisioneer manualWSI Brightfield Edition

Manual scanning for brightfield applications, oil immersion, polarized light and phase contrast. Suitable for histology, immunohistochemistry, cytology, material science and many more.



## Microvisioneer manualWSI Fluorescence Edition

Manual scanning for brightfield applications *plus a special mode for fluorescence scanning*. Both single channel and multi channel fluorescence imaging is possible. Fluorescent slides can be scanned at low costs and high quality with the existing equipment.



## Microvisioneer mvSlide Edition for Evident /Olympus and Carl Zeiss Cameras

The proven Microvisioneer manual scanning solution exclusively compatible with:

- ▶ Carl Zeiss AxioCam cameras 305, 503, 506, 512, 702, 705, 712, Carl Zeiss AxioCam MR Rev. 3 and HR Rev. 3
- ▶ Evident / Olympus cameras DP22, DP27, DP28, DP73, DP74, and DP80



## Microvisioneer InstaSlide Slide Sharing Software

Immediate sharing of virtual slides via the internet with anyone, anywhere. A Microvisioneer telemicroscopy solution.

## Microvisioneer

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73728 Esslingen am Neckar  
Germany  
VAT ID: DE308339453



Contact us to discuss your opportunities or to book an online demo.

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<https://www.microvisioneer.com>

