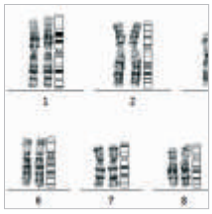
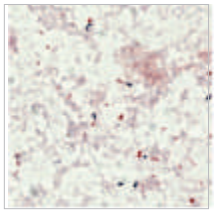
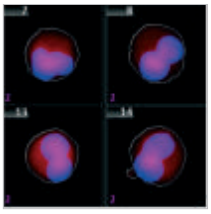
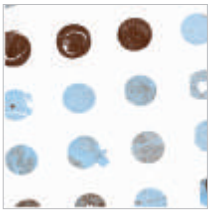
MetaSystems

Innovative Solutions for Automated Imaging

COMPANY PROFILE

MetaSystems

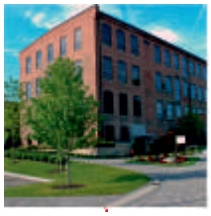
MetaSystems
A Global Company

Success by Merging Continuity and Innovation

Since 1986 MetaSystems has designed and manufactured systems for computerized automated microscopic imaging. From the very beginning, the close relationship to the end user has been an essential part of the MetaSystems philosophy. The following three decades have revealed that this was a successful strategy; from humble beginnings, MetaSystems has grown into a highly innovative corporation which still remains connected to its strong roots.

MetaSystems takes pride in the fact that it has been independent from sponsors and external investors for the entirety of its existence. As a result, we now look back to a history of unrivaled continuity. Our products are subject to constant advancement, and our customers benefit from uninterrupted update and upgrade paths - even for installations done in the early days of the company.

Users throughout the world have chosen to optimize their work with MetaSystems products. This has only been possible with the help of the many skillful and hard-working business partners of MetaSystems. We understand that the contribution of our partners is crucial to our success; therefore in 2001, we introduced yearly company meetings for our worldwide distributors. The company has also established a number of subsidiary offices outside of Germany to support our customers and partners in their regions.



MetaSystems headquarters (large photo, left) are located in Altlussheim, Germany. The map below indicates the locations of MetaSystems offices (Boston, MA, USA; Milano, Italy; Bangalore, India; Hong Kong, China), and of our partner companies.

Neon

Neon, MetaSystems' innovative imaging platform, is much more than a microscopic imaging system. Neon reliably manages cases, images, and results of single workstations, as well as of large multi-user installations. Neon guarantees that all relevant information is visible whenever and wherever it is needed. Neon's elaborated and flexible workflow settings facilitate seamless integration with existing routines, and allow for the use of a variety of different imaging applications.

Cytogenetics, Hematology, Oncology

Routine workflow optimization and clinical case data management

Neon is optimized to comprehensively cover the requirements of a clinical routine lab. Neon, with the Metafer module for example, finds metaphases automatically and acquires high-resolution images for karyotyping - a highly valued time saver in routine cytogenetics labs. Additionally, FISH signal patterns in interphases and tissue sections can be analyzed automatically or interactively. Smart multi-user workflows adapt to existing structures, and integrate third-party software by automated import and export of selected case data and images.

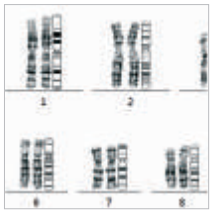
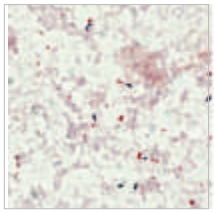
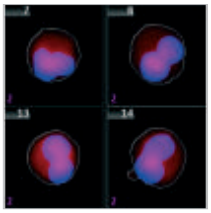
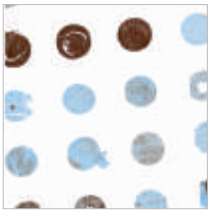
Additional applications are supported by the many on-board tools of Neon, e.g., the multicolor FISH and multicolor banding functionality, the tissue micro-array tool, the cell clone analysis, and many more. Patients, physicians, and technicians benefit from consistent documentation, secure handling of sensitive data, and user-friendliness in all procedures.

Microbiology

Routine imaging of Gram stain samples, wet mount parasite slides, and other microbial material

Neon is the perfect tool to digitize and analyze microbiology slides. In collaboration with Copan Italia S.A., a manufacturer of automated specimen processors for microbiology, an optimal workflow for Gram sample digitization has been established. The high resolution images can be directly reviewed on Copan's image workstation, side by side with the culture plate results. All Neon images can also be uploaded to a VMD server (an online image database). Authorized users can then access the images in a web browser, hardware-free, and from anywhere in the world. Institutions with scattered locations can use VMD to share their image and case data. Others may want to utilize VMD for training and education.

MetaSystems also offers products for parasitology, including the digitization of wet mounted floatation samples, and the detection of *M. tuberculosis* in sputum and of *Plasmodium* trophozoites in blood preparations.

Mutagenicity Assays

Quantification of DNA damage in toxicology, environmental studies, and biological dosimetry

MetaSystems has unparalleled expertise in the automated evaluation of microscope-based mutagenicity assays. With Neon, all of the most important tests for genetic toxicology (micronucleus tests, chromosomal aberrations assays, Comet assay and CometFISH, Ames II test, and γ-H2AX assay) can be analyzed on the same scanning platform. Where applicable, these tests are performed in full compliance with the respective OECD guidelines, and can also be implemented in GLP laboratories.

The global radiation research and protection community acknowledges MetaSystems' scanning systems as reliable tools to automate and standardize biological dosimetry assays. Though time saving is an important factor, the main advantage lies in the possibility of establishing global analysis standards, and thus, the ability to create flexible international networks capable of managing casualties in a fast and flexible manner.

Pathology, Neurology, and Proteomics

Slide digitization, tissue analysis, and tissue matching

Neon has many tools to facilitate sophisticated tissue imaging and analysis tasks. Slides are sampled very rapidly, and the single images are stitched to digital slide images in the background. Because Neon utilizes a motorized, fully equipped research microscope, it has access to any image acquisition option; users can choose to engage any magnification, contrasting method, and/or other extra that they want.

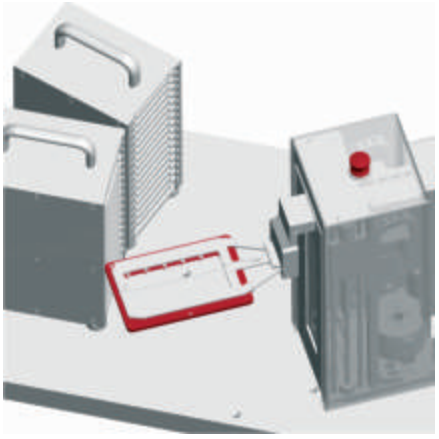
Together with Neon's unique software tools, smart slide digitization is made easy. Tissue sections can be matched, regions of interest can be selected and re-scanned with different parameters, and objects detected and analyzed during scanning can be visualized in the whole slide image. A dedicated software for tissue FISH allows for fast on-screen analysis of fluorescence signals in histology samples. With VMD, the online image database server software, images can be uploaded to the internet and shared among different locations.

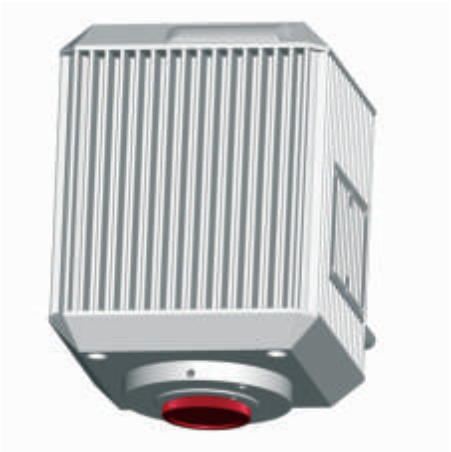
Hardware

Neon systems are composed of carefully selected and thoroughly tested third party hardware. However, some aspects of Neon's performance could only be achieved with dedicated parts and hardware items that are completely designed by MetaSystems.

SlideFeeder x80

Every Neon scanning system can be easily extended with the innovative SlideFeeder x80. This fully automated slide frame exchanger is based on a highly flexible concept that can be adapted to any workload. Handy magazines hold 16 frames of 5 slides each. The total capacity of the SlideFeeder x80 can be upgraded simply by adding slide magazines - from 80 slides (one magazine) up to 880 slides (11 magazines).





CoolCube CCD Cameras

Each MetaSystems device with image acquisition functionality is equipped with at least one of four different CoolCube CCD cameras. MetaSystems offers two camera models; CoolCube 1 (1.4 MPx) and CoolCube 2 (4 MPx). Both cameras come either as a monochrome camera, or as a color camera. Conveniently, the Neon system can be equipped with both camera models at the same time.

Customer Care

MetaSystems takes pride in having established a widespread and innovative product portfolio. However, an integral and equally important outcome of the company's activities is the implementation of global business strategies with a human approach. This unique attitude, which may be referred to as the “MetaSystems Spirit,” has been instrumental in achieving the highest product quality and customer satisfaction. Through years of experience and growth, MetaSystems has established and streamlined its procedures, resulting in a robust quality management system.

Service and Helpdesk

Purchasing a MetaSystems imaging platform is not like buying any piece of consumer electronics. Our goal is to deliver tailor-made service solutions, ensuring optimal results for the individual demands of the customer.

- Our team of highly skilled application specialists and technical professionals will assure smooth production and installation of all systems.
- All users are trained thoroughly; either on-site or at the MetaSystems campus.
- We offer tailored software update and maintenance contracts for all installations upon request.
- We offer fast and competent help and support via telephone, eMail, and remote access.

Quality

All MetaSystems products are manufactured in Germany under a comprehensive quality management system. MetaSystems has been certified according to the ISO 13485 standard for the design and manufacture of medical devices.

In Europe, MetaSystems products are labeled with the CE mark, a conformity mark for products sold within the EU.

MetaSystems cares about sustainability and social responsibility. The company has been audited in the areas of ecology, economy, and social competence, and has been awarded the seal of approval for trusted sustainability (D-12/400772).

PROBES

Our partner company, MetaSystems Probes, has an extensive and continuously growing portfolio of FISH DNA probes. For details, please refer to the probes website or contact us.

www.metasystems-probes.com

MetaSystems

Innovative Solutions for
Automated Imaging

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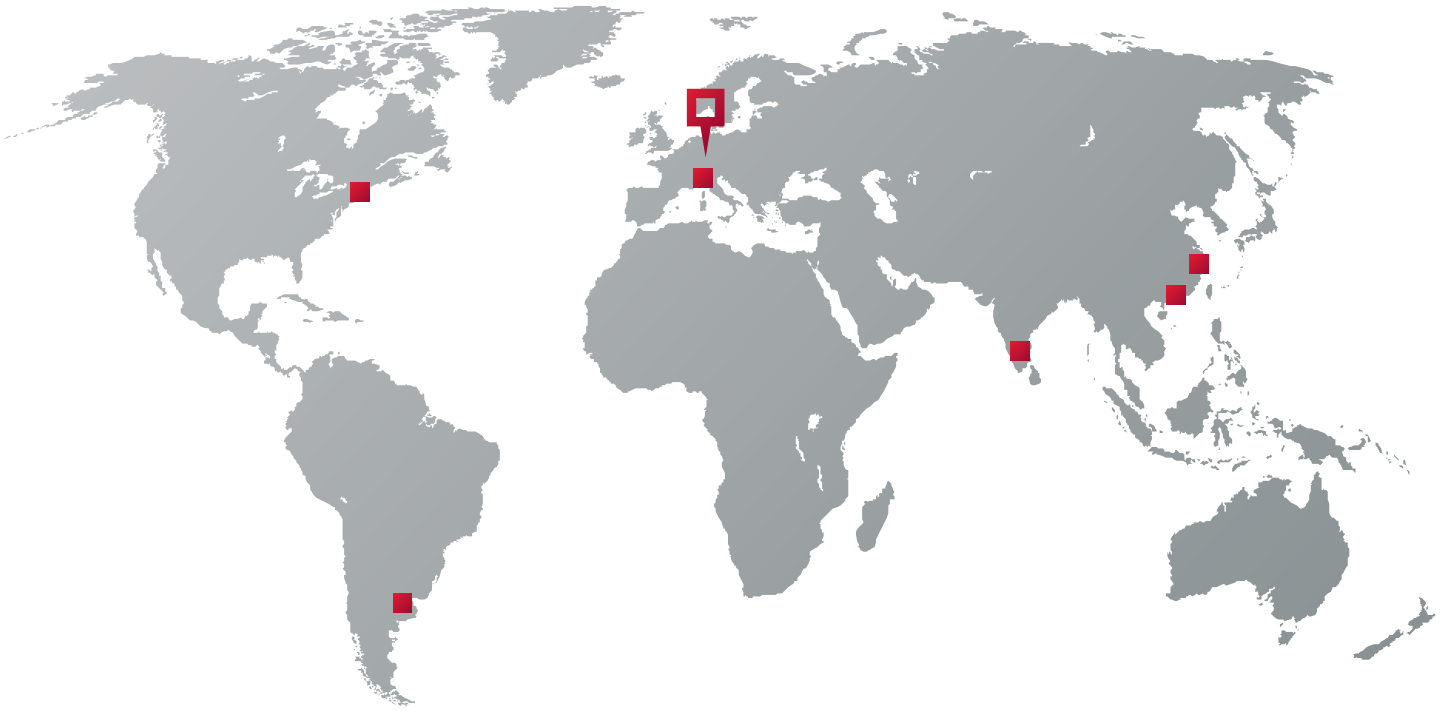

CONTACT

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