ziehm imaging

... dedicated to clinical innovation

Ziehm Vista.

Most Versatile C-arm.



Functionality. Mobility. Connectivity.



Ziehm Vista – for every surgical and interventional procedure requiring fluoroscopic imaging, including those in orthopaedic, pain management, urology, neurology and vascular surgery



The reduced dimensions of Ziehm Vista are especially designed for confined spaces in tightly equipped operating rooms

Today's hospitals are faced with an ever-increasing demand for medical procedures to be performed, especially in the areas of minimally invasive and interventional surgery. As the cost of healthcare continues to rise, hospitals are required to work as cost and profit driven enterprises. Each capital acquisition therefore follows a carefully considered evaluation process to determine the most cost and benefit-efficient equipment.

With Ziehm Vista – the most versatile mobile C-arm – the selection process is made easy. Offering outstanding functionality in terms of image quality, user interface and dose savings Ziehm Vista can be used for a wide range of fluoroscopic imaging applications. With its proven mobility and fully developed connectivity, working with Ziehm Vista results in increased efficiency and lower total cost of ownership.

Excellent Image Quality.

Ziehm Vista

Benefit from Superior Imaging Technology

Image Quality is clearly the most important feature of any mobile C-arm. The Ziehm Vista development team intensively reviewed the Vista's entire video chain – from the camera, through every element of the Ziehm *Video Signal Processor* – to the standardly integrated 18" flat screen displays.

The result is optimised image quality for every type of procedure. Ziehm Vista's *Full Frame* technology eliminates poor image definition and generates excellent, interference-free images.

Choose Your Anatomical Program

The *Anatomical Programs* found in every Ziehm Vista optimise image quality to each body region using the lowest possible dose.

Choose between the 'Extremities', 'Spine' and 'Thorax' *Anatomical Programs* to ensure superb image quality in each type of procedure. In addition, unique 'Metal' and 'Soft' imaging programs further enhance image quality in otherwise difficult imaging conditions.



■ Pain Management procedure: High quality imaging in this dense body region using the Ziehm 'Spine' Anatomical Program



■ Fixation of fractured fibula: Excellent bone detail using the Ziehm 'Extremities' Anatomical Program



■ Hip pinning procedure: Use of the Ziehm 'metal' program results in minimised image blooming where metal structures are present

Considerate Use of Radiation.



Use of Ziehm Vista's laser lights reduce dose both to the patient and to the surgical team



Virtual collimation without radiation

Wherever you look on the Ziehm Vista, you will find features that can significantly reduce the radiation dose delivered to the patient, the physician and personnel within the operating theatre.

Every Ziehm Vista includes specialised x-ray filters, which, in conjunction with the non-interlaced CCD camera, decrease the patient dose considerably with no loss in image contrast.

In addition, the following features ensure that Ziehm Vista is one of the most patient-friendly mobile fluoroscopy systems available:

- *Full Frame* Technology
- Digital image rotation and reversal without radiation
- Virtual collimation without radiation
- *Anatomical Programs*
- Pulsed fluoroscopy with last image hold
- Patient dose recording
- Half-dose mode
- Laser cross-hair positioning and centering

Designed with You, the User in Mind.

Extending the Capability of Your Unit

The Ziehm Vista offers a comprehensive range of system options and configurations to meet the needs of a wide range of applications. With a modular upgrade path, a standard Ziehm Vista 'Ortho' model can be re-equipped up to the highest specification 'Vascular' model.

Ease of Use

Clear, one-touch controls and a high level of automation allow you to concentrate on positioning, while your Ziehm Vista's computer system takes care of all imaging parameters.

At the monitor cart, helpful on-screen prompts guide you through tasks, so that you can make maximum use of the systems comprehensive features without the need for extensive training. Following image acquisition, a wide range of sophisticated post-processing functions can be performed quickly and simply using one-touch menu driven options.

Image Storage and Hardcopy

Once acquired, images can be stored on different media such as Hard Disk, Floppy Disk or CD-ROM to provide the medical team with a convenient, portable record of the image data from a procedure.

The monitor cart can accommodate a range of high quality video paper or film printers as well as a video recorder, to provide you with all the image documentation you may require.



■ The useful 16 image mosaic enables rapid patient image, data and dose review



■ A 31 cm image intensifier is an option for applications requiring a large field of view

Fluoroscopy and Endoscopy at One Glance.



■ One single cart carries both fluoroscopic and endoscopic monitors and can be placed in the optimum position in the procedure room

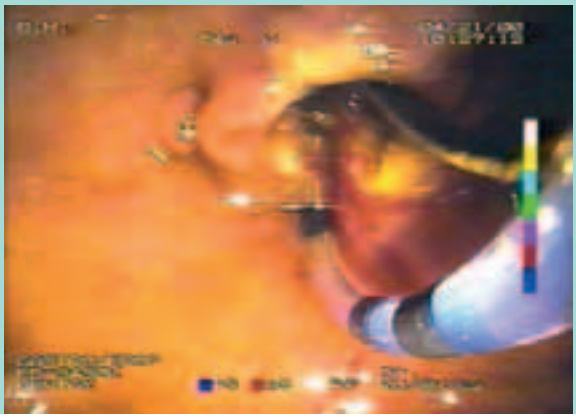
The Combination That Makes Sense

The Ziehm Vista Endo is a unique mobile C-arm system designed in joint co-operation with clinicians to optimise endoscopy procedures under fluoroscopic x-ray control.

In order to assist minimally invasive endoscopic procedures (e.g. ERCP/PTCP) the Ziehm Vista Endo's single mobile cart carries both the fluoroscopic and endoscopic monitors. This configuration allows the endoscopic surgeon the convenience of viewing both the fluoroscopic and color endoscopy image at a single glance. Additionally, the operating team gains more free floor space in the operating room as a separate endoscopic monitor cart becomes unnecessary.

The Ziehm Vista Endo is compatible with most popular endoscopes in use today including those from Olympus®, Pentax® and Fujinon®.

■ Endoscopic images are viewed on a large 20" Trinitron® monitor





■ Fluoroscopy using the special Endo program eliminates artefacts caused by the endoscope

Vista Endo

Uncompromized Image Quality

The specialized Ziehm Vista Endo provides perfect image quality as the dedicated endoscopic imaging software optimises the systems imaging characteristics especially for endoscopic procedures.

Hands-free Automation

The Ziehm Vista Endo focuses fluoroscopic imaging controls through one convenient and simple point of contact – the foot-switch control. When the fluoroscopy foot-switch is activated, image recording switches automatically from endoscopy to fluoroscopy.

Ease of Use

The Ziehm Vista Endo is ready to use almost immediately after switch-on, with no complex controls or selections. The unit facilitates free-floating operation making it extremely easy to move into position. Additionally precision-engineering provides light, fully-counter-balanced C-arm movements, even with locks disengaged.

Selected Options Meeting the Most Endoscopic Requirements:

- 31 cm image intensifier
- DICOM interfaces to your HIS/RIS/PACS network
- 5 Million Heat Unit Active Cooling x-ray generator for extended operating time
- Digital cine fluoroscopy replay
- 3.5" floppy disk or CD-RW for image export and archiving
- Accommodation of video printer as well as video recorder



■ The entire imaging procedure (endoscopy and fluoroscopy) can be conveniently controlled with the single foot control

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Pentax® is a registered trademark of Pentax Corporation
Fujinon® is a registered trademark of Fuji Co. Ltd.
Trinitron® is a registered trademark of Sony Corporation

Perfect Clinical Mobility.



Cable deflectors ensure that low-lying movable obstacles do not obstruct your path

Featuring one of the smallest footprints and reduced weight characteristics available, the versatile Ziehm Vista is the perfect choice for any surgical imaging application encountered during your working day.

Equipped with new wheels and precision bearings, Ziehm Vista provides even easier movements with the absolute minimum of effort. This benefits the user from a reduced possibility of stress-related injury and provides a more pleasant working experience.

Focusing on the mechanical precision of the C-arm's orbital rotation, angulation and swivel movements, Ziehm's research & development team highlighted new design improvements in the mechanical control of the C-arm. The resulting ergonomically shaped handles and levers provide the highest level of user friendliness available.

Unsurpassed Positioning Capability.

All C-arm movements are fully counter-balanced in all positions, making the C-arm stable even when the locks are disengaged, allowing a fast and effortless change of projection during intra-operative examinations.

The C-arm's ease of movement from one position to another is smooth and fast, requiring little effort on the part of the user and having one of the largest C-arm dimensions to be found.

And if your speciality is pain management or spinal orthopaedics, the optional 45° forward orbital rotation as well as 20 cm vertical lift extension allow Ziehm Vista's C-arm to adopt the extreme positioning angles required in many of these procedures.



■ A large C-arm opening is essential for trouble-free surgical imaging



■ Effortless movements and the unique single-lever rear wheel steering and braking control enables precise positioning anywhere around the operating table

Ziehm NetPort –
Exceptional Digital Network Integration.

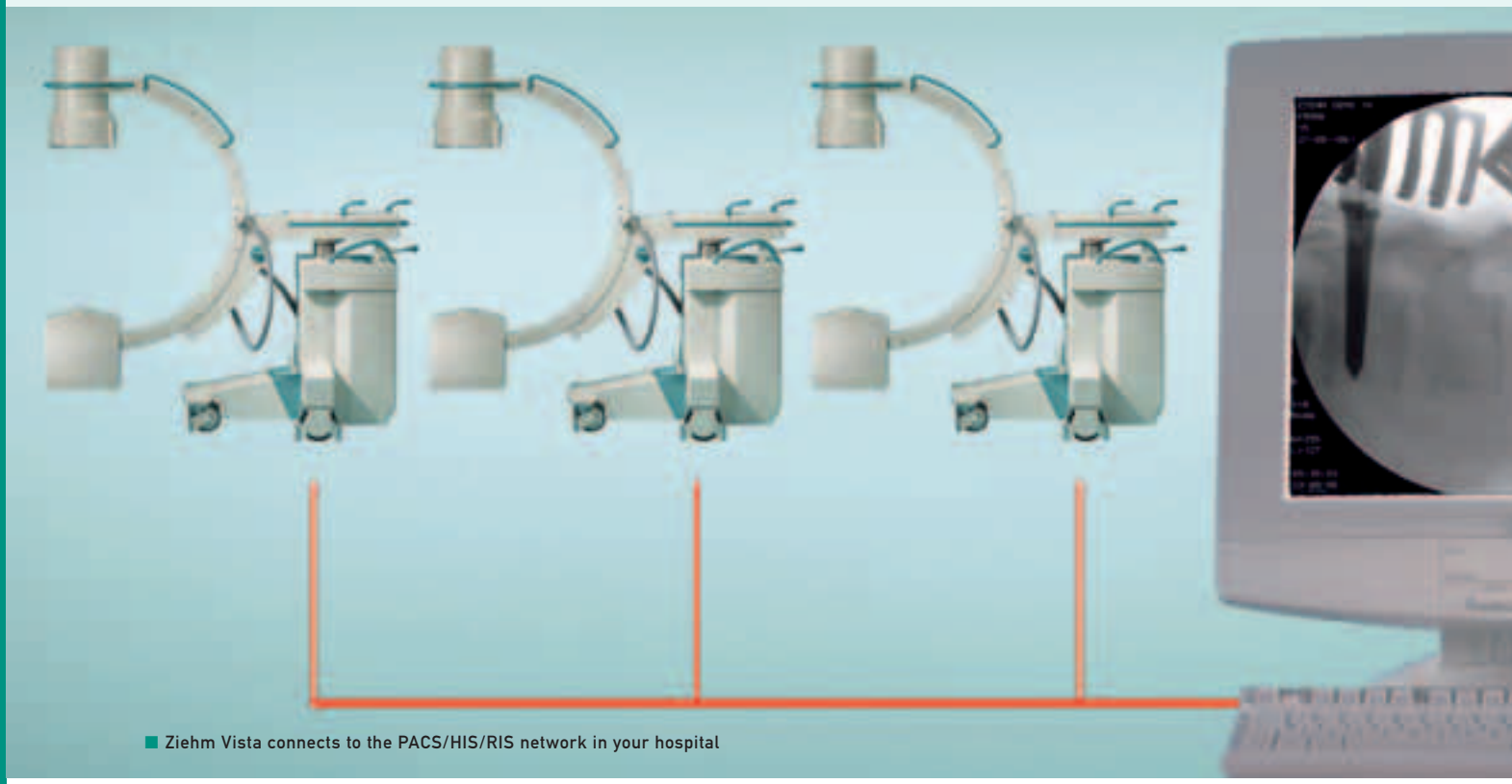
Ziehm Vista features the unique and fully integrated *Ziehm NetPort* using DICOM 3.0 communication protocols. Running via *Primary Capture* mode *Ziehm NetPort* is capable of transferring original images and patient data to and from PACS or HIS/RIS to provide you with a completely integrated digital network solution.

Using *DICOM Image Retrieve* module found in *Ziehm NetPort,* the surgical team benefits from total access to all image information available from your PACS. This eliminates the need for an additional workstation or monitor.

Ziehm NetPort also uniquely manages *DICOM Multiframe Class,* allowing the transfer of dynamic image sequences to and from the operating theatre.

Ziehm Imaging provides the most comprehensive access to the DICOM world, with the following range of DICOM Classes available:

- Storage Class incl. Storage Commitment
- Print Class
- Media Class
- Worklist Class incl. MPPS
- Query Function
- Image Retrieve
- Verification Class



■ Ziehm Vista connects to the PACS/HIS/RIS network in your hospital

Ziehm Vista –
Integration with Image Guided Surgery (CAS).

Ziehm Vista is designed to integrate the latest Computer-Aided Surgery (CAS) systems. In combination with Ziehm Vista it forms a surgical environment with real time image-guidance, allowing surgeons to operate with optimal precision and accuracy.

In CAS the x-ray image becomes a road map of the patient's anatomy that is correlated to the real-time position of the surgical instrument. The surgeon follows the instrument's movements without requiring continuous x-ray imaging of the patient.

This technology has its biggest impact in brain and spinal surgery as well as orthopaedics. Guaranteed connectivity of C-arms is important in this field, as proven compatibility with various CAS systems is essential for success. In this way, CAS and mobile C-arm systems can be chosen independently in order to best benefit local requirements.

Ziehm Vista is proven for use with all leading fluoroscopic CAS systems, such as those from Medtronik-Sofamor-Danek, Brainlab and Medivision.



■ Ziehm Vista – ready for the latest medical advances

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Manufacturing complies with DIN EN ISO 9001:2000.

Ziehm Imaging is constantly improving its products and reserves the right to change these specifications without notice.

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