

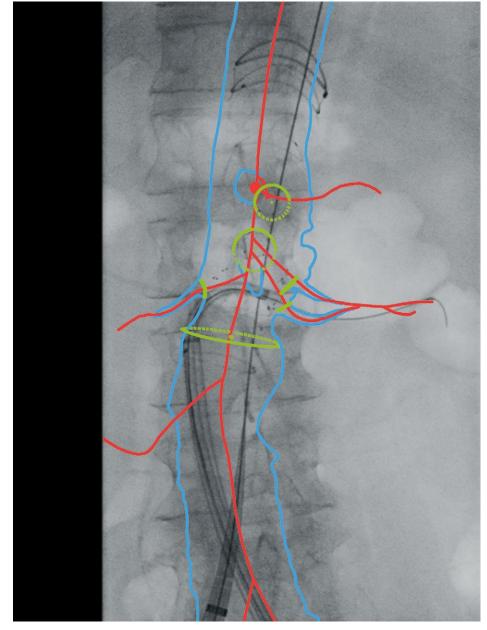
<u>Product portfolio</u>Dedicated to clinical innovations

Since more than 50 years, Ziehm Imaging has been setting new technological standards, empowering surgeons and medical professionals with precision and efficiency.

In 2025, we are taking a quantum leap in technology. The redesigned QuantumStream imaging system brings the entire premium portfolio to the forefront of clinical excellence. The pioneering innovation is proven by Endovascular Navigation¹, which has been integrated into a mobile C-arm for the first time. This is accelerating clinical workflows, improving accurate decision-making, and expanding treatment options like never before.

From orthopedics and traumatology to cardiovascular procedures, our solutions ensure superior image quality, maximum patient safety, and optimized efficiency.

Discover how Ziehm Imaging is shaping the future of mobile imaging – for better care.



The first Endovascular Navigation for aorto-iliac procedures integrated into a mobile C-arm University Hospital Giessen and Marburg (UKGM). Giessen. Germany

01/Orthoscan Mini C-arms²



Orthoscan TAU 2020







Orthoscan TAU 1512

Orthoscan TAU 2020

With the largest field of view on a mini C-arm, Orthoscan TAU 2020 shows more anatomy in full view. The stepless, motorized collimator minimizes radiation by limiting the area of exposure to the region of interest. Cutting-edge Intelligent Dose Reduction technology and pulsed fluoroscopy provide the best in diagnostic image quality while reducing exposure dose to both patients and staff. That's why TAU mini C-arms are the first ones approved for pediatric use.



Imaging technology	Flat-panel, 20cm x 20cm	
Image resolution	2,000 x 2,000	
Pulsed fluoroscopy	•	
High-resolution LCD monitor	32" or opt. 27"	
Stepless collimator	•	
Additional CU filtration	•	
Weight	215.5 kg	
Orbital movement	160°	

Orthoscan TAU 1515/TAU 1512

Orthoscan TAU 1515 and TAU 1512 show anatomy as it needs to be seen. Both systems come with a high-resolution monitor and the advanced touchscreen user interface Orthotouch with new features such as anatomically programmed selections as well as dedicated pediatric settings. Cutting-edge Intelligent Dose Reduction technology provides the best in diagnostic image quality while reducing exposure dose to both patients and staff.

Orthoscan Mobile DI

The Orthoscan Mobile DI is a portable fluoroscopic device that offers a range of connectivity options. The system guarantees ease of movement between exam rooms, satellite clinics, and off-site venues due to its lightweight and small footprint. With its flat-panel detector and imaging flexibility, the Mobile DI stands out for its easy positioning and flexible projections.





Flat-panel, 15 cm x 15 cm / 15 cm x 12 cm	Flat-panel, 15cm x 12cm	
1,500 x 1,500/1,500 x 1,200	1,900 x 1,500	
- /-	-	
27" or opt. 32" / 24" or opt. 27"	24"	
_	-	
•	-	
215.5 kg	15.9 kg	
160°	-	

available ■ | not available -

02/Compact C-arms



Ziehm Solo FD, CMOS, 21 cm x 21 cm

Ziehm Solo FD

With its all-in-one design, the Ziehm Solo FD is one of the most compact C-arms on the market for even the smallest treatment scenarios. The premium variant Ziehm Solo FD CMOSline³ delivers excellent image quality and offers a large variety of features to cover a wide range of applications. Versatile viewing options offer maximum flexibility in the OR to support your clinical workflow.



Ziehm Solo FD lite⁴

IGZO, flat-panel, 21 cm x 21 cm
1.5 k x 1.5 k
1kx1k
-
2.4kW, pulsed monoblock generator
•
•
-
-
•
-
165°

The Ziehm Solo FD is also available with a 21 cm x 21 cm and a 31 cm x 31 cm IGZO flat-panel. The bigger detector size allows to cover larger anatomical regions, such as the entire hip in orthopedics. Additionally, with Ziehm Solo FD lite⁴, there is a configuration with a 21 cm x 21 cm flatpanel and a limited option package to serve price-sensitive markets.



Ziehm Solo FD

IGZO, flat-panel, 21 cm x 21 cm / 31 cm x 31 cm	CMOS, flat-panel, 21 cm x 21 cm	
1.5k x 1.5k / 2k x 2k	2k x 2k	
1k x 1k	2k x 2k (QuantumStream)	
-	· ·	
2.4kW, pulsed monoblock generator	2.4kW, pulsed monoblock generator	
•	•	
•	•	
	-	
•	•	
	•	
165°	165°	



Ziehm Solo FD

03/Versatile C-arms



Ziehm Vision FD, CMOS, 21 cm x 21 cm

Ziehm Vision FD

The Ziehm Vision FD was the world's first mobile C-arm with a flat-panel detector. The device has proven itself in the market for nearly 20 years. The premium variant Ziehm Vision FD CMOSline features latest flat-panel technology for excellent image quality and – thanks to the Advanced Active Cooling – is designed for continuous use. In addition, finely tuned workflows

and new software features help to optimize patient outcomes and further increase productivity. The Ziehm Vision FD is also available with a new 21 cm x 21 cm IGZO and a 31 cm x 31 cm a-Si flat-panel. The bigger detector size allows to cover larger anatomical regions in orthopedic and vascular surgery.



Imaging technology	IGZO, flat-panel, 21 cm x 21 cm	
Detector resolution	1.5 k x 1.5 k	
Image Chain	1k x 1k	
Image Insights	-	
Power generator	2.4kW, pulsed monoblock generator	
Ziehm Usability Concept	•	
SmartDose	•	
Advanced Active Cooling (AAC)	•	
Orbital movement	165°	





a-Si, flat-panel, 31 cm x 31 cm	CMOS, flat-panel, 21 cm x 21 cm		
2k x 2k	2 k x 2 k		
1kx1k -	2k x 2k (QuantumStream)		
2.4 kW, pulsed monoblock generator	2.4kW, pulsed monoblock generator		
	•		
•	· ·		
165°	165°		

available ■ | not available -

Ziehm Vision RFD, CMOS, 31 cm x 31 cm

Ziehm Vision RFD

The Ziehm Vision RFD is the model of choice for orthopedics and trauma or demanding cardiovascular interventions. The C-arm is equipped with a powerful generator that penetrates even large anatomy. In addition, Advanced Active Cooling facilitates long and demanding

procedures and the intuitive Ziehm Usability Concept⁵ helps surgeons ensure consistently high clinical standards. This impressive feature lineup makes the Ziehm Vision RFD ideal for challenging interventions.



Imaging technology	a-Si, flat-panel, 30 cm x 30 cm	
Detector resolution	1.5 k x 1.5 k	
Image Chain	1k x 1k	
lmage Insights	-	
Power generator	25 kW, pulsed monoblock generator	
Ziehm Usability Concept	•	
SmartDose	•	
Advanced Active Cooling (AAC)	•	
Orbital movement	165°	

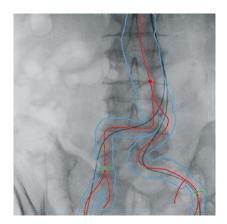




IGZO, flat-panel, 21 cm x 21 cm / 31 cm x 31 cm	CMOS, flat-panel, 21 cm x 21 cm / 31 cm x 31 cm
1.5k x 1.5k / 2k x 2k	2 k x 2 k / 3 k x 3 k
1k x 1k	2k x 2k (QuantumStream)
_	•
25kW, pulsed monoblock generator	30 kW, pulsed monoblock generator
•	•
•	•
•	•
165°	165°

available | not available -

05/Hybrid Room Solution



Ziehm Vision RFD Hybrid Edition, CMOS

Ziehm Vision RFD Hybrid Edition

The Ziehm Vision RFD Hybrid Edition⁶ is a powerful 30 kW mobile C-arm that is available with CMOS imaging technology to successfully perform during highly demanding interventional cardiovascular procedures – flexible and everywhere – at any time. With its zero room preparation, the comprehensive mobile hybrid solution easily takes your OR to the next level. The first mobile C-arm to integrate Endovascular Navigation makes it possible to achieve more accuracy in demanding hybrid OR procedures. Plug in your system and start your hybrid procedure.



CMOSLI

Imaging technology	a-Si, flat-panel, 30 cm x 30 cm	
Detector resolution	1.5 k x 1.5 k	
Image Chain	1k x 1k	
lmage Insights	-	
Power generator	25 kW, pulsed monoblock generator	
Ziehm Usability Concept	•	
SmartDose	•	
Advanced Active Cooling (AAC)	•	
Orbital movement	165°	
Motorization	Full control of the 4 motorized axes	
Vascular Image Fusion	Stand-alone solution: Therenva EndoNaut ⁷	

Stand-alone solution: The Integrated solution: Endo	
Full control of the 4 motor	rized axes
165°	
•	
	
•	
30kW, pulsed monoblock	generator
-	
2k x 2k (QuantumStream))
2k x 2k / 3k x 3k	
CMOS, flat-panel, 21 cm x	21 cm / 31 cm x 31 cm

Endovascular Navigation enables physicians worldwide to achieve greater precision in demanding hybrid interventions. The combination of preoperative CT data and intraoperative images leads to even more accurate results while helping to reduce X-ray dose and the use of contrast agents.

The Endovascular Navigation software is designed for interventions in the aorto-iliac region. It can be used for EVAR procedures as well as for complex interventions such as FEVAR. In combination with the Ziehm Vision RFD Hybrid Edition or the Ziehm Vision RFD 3D, Ziehm Imaging is pioneering with Endovascular Navigation and presenting two different options:

All-in-one solution

Endovascular Navigation for aorto-iliac procedures is directly integrated into the Ziehm Vision RFD Hybrid Edition or the Ziehm Vision RFD 3D. A dedicated workflow on a single user interface combining imaging and Endovascular Navigation with image fusion enables simple and fast handling.

Stand-alone solution

With EndoNaut from Therenva, existing imaging systems can be easily expanded to include an Endovascular Navigation solution via plug & play. The system offers two different modules, one for aorto-iliac procedures and one specially designed for peripheral diseases.

Therenva Part of Ziehm Imaging



Endovascular Case Planning with EndoSize



Vascular Image Fusion with EndoNaut

Plan, perform, and review your procedures with greater confidence



Plan in minutes with EndoSize using a fast, automated Al-based image processing algorithm.



Import planning on C-arm to have your 3D volume with all relevant information available intraoperatively – such as measurements, endograft name, C-arm positioning, and simulation of vessel deformations.



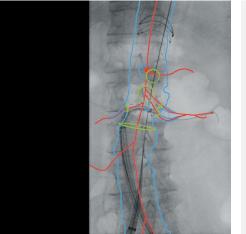
Work with fast Vascular Image Fusion and experience automatic registration and displayed fusion updated according to patient, table, or C-arm movements.



Navigate and review intuitively directly from the interventional table.



Algorithm based on artificial intelligence



Endovascular Navigation for aorto-iliac procedures

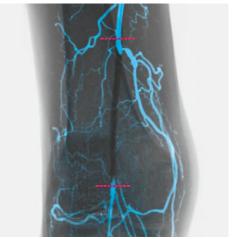
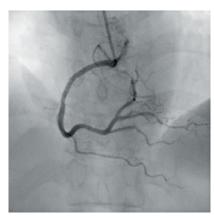


Image fusion with EndoNaut created from the panoramic view

07/Mobile CathLab

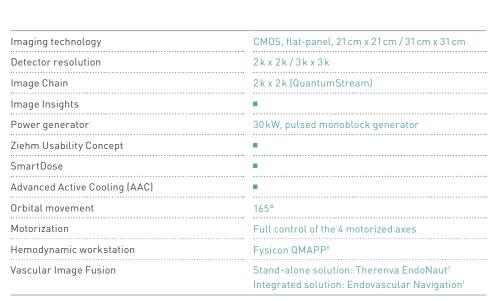


Ziehm Vision RFD Hybrid Edition, CMOS

Ziehm Vision RFD Hybrid Edition Cardio

Due to an aging population, we observe a rising burden of cardiovascular diseases. That is why we identified the need for advanced imaging during cardiovascular interventions. Against this background, we developed especially dedicated cardio packages as well as sophisticated software applications for our proven Ziehm Vision RFD Hybrid Edition. This enables physicians worldwide to deal with these circumstances in the OR.

Connectivity options for hemodynamic workstations or CathLab-ready monitors complete the mobile CathLab.





08/Intraoperative 3D devices



Ziehm Vision RFD 3D, CMOS

Ziehm Vision RFD 3D

Building on almost two decades of experience in 3D imaging, the Ziehm Vision RFD 3D features not only proven a-Si technology, but now also the cutting-edge CMOSline³. Bundling 2D and 3D functionality for greater intraoperative control, it reduces the need for post-operative CT scans and costly corrective



Imaging technology	a-Si, flat-panel, 30 cm x 30 cm	
3D volume size / voxel	16 cm x 16 cm x 16 cm; 320° voxel opt.: 10 cm x 10 cm x 10 cm; 320° voxel	
	opt.: 19-8 cm x 19.6 cm x 18.0 cm; 320° voxel	
Detector resolution	1.5 k x 1.5 k	
Image Chain	1k x 1k	
lmage Insights	_	
Power generator	25 kW, pulsed monoblock generator	
Ziehm Usability Concept	•	
SmartDose	•	
Advanced Active Cooling (AAC)	•	
Motorization	Full control of the 4 motorized axes	
3D scanned information	2D: 165°/ 3D: 180° (SmartScan)	
Open navigation interface (NaviPort)	Brainlab, Stryker, Globus Medical, Medacta, NuVasive	
Vascular Image Fusion	Stand-alone solution: Therenva EndoNaut ⁷	

surgeries. The system is equipped with ZIR (Ziehm Iterative Reconstruction) to minimize fan and metal artifacts in 3D reconstruction, so far only known from CT imaging. This makes the Ziehm Vision RFD 3D ideal for high-end orthopedic, trauma, and spinal interventions as well as for demanding multidisciplinary use.



CMOS, fla	t-panel. 3	1 cm	x 31	cm

16 cm x 16 cm x 16 cm; 320³/512³ voxel opt.: 10 cm x 10 cm x 10 cm; 320³/512³ voxel opt.: 19.8 cm x 19.6 cm x 18.0 cm; 320³/512³ voxel

3 k x 3 k

2k x 2k (QuantumStream)

30 kW, pulsed monoblock generator

Full control of the 4 motorized axes

2D: 165° / 3D: 180° (SmartScan)

Brainlab, Stryker, Globus Medical, Medacta

Stand-alone solution: Therenva EndoNaut⁷ Integrated solution: Endovascular Navigation¹

available ■ | not available -

09/Ziehm NaviPort

During complex minimally invasive procedures, high-resolution intraoperative 3D imaging improves confidence and precision during the interventions and reduces the need for revision surgeries. The proven Ziehm NaviPort interface connects the mobile 3D C-arms of Ziehm Imaging to the navigation and robotic-guidance systems of leading providers? The high-resolution 3D data set is transferred seamlessly from the C-arm through Ziehm NaviPort to the navigation system. It gives the surgeon a real-time navigation guide, eliminating the need to register the 3D data record again. The navigation and robotic-guidance software automatically aligns the intraoperatively obtained image data with the patient's anatomy while visualizing surgical instruments on the monitor. As a result, the surgeon can quickly and reliably check and document the results of the intervention.





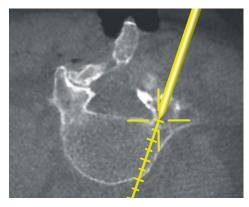


Image-guided navigation



Brainlab Spine & Trauma Navigation

Brainlab image-guided surgery platforms Kick and Curve in combination with Ziehm Imaging's intraoperative 3D devices address the demand for meaningful visualization that helps surgeons effectively plan and execute spine and trauma procedures. Surgical instruments are continuously tracked by the infrared camera, with their position visualized on the patient data. This allows for more accurate procedures compared to conventional surgical techniques.



Stryker Spine Navigation

The navigation systems of Stryker, in combination with Ziehm Imaging's intraoperative 3D devices offer a further excellent solution for navigating spine and trauma procedures. While choosing the right navigation procedure, the infrared camera is set up to track the SpineMask Tracker or patient tracker attached to the patient. For cases not classified as minimally invasive, Stryker also offers an additional registration integrated with a traditional rigidly fixated patient tracker.



Globus Medical Robotic Navigation Platform

Together with ExcelsiusGPS of Globus Medical, Ziehm Imaging supports advanced computer-assisted surgery for spine applications with the Ziehm Vision RFD 3D systems. The ExcelsiusGPS combines a rigid robotic arm and full navigation capabilities into one adaptable platform for precise trajectory alignment and visualization in spine surgery.

www.ziehm.com/naviport

Visit our website for more details about further partners like Medacta or NuVasive.



Minimizing dose while maintaining image quality is an important goal worldwide for surgeons, their staff and patients. Ziehm Imaging supports this through further improvements to SmartDose¹⁰ for different applications.

The comprehensive concept consists of a broad, clinically proven application portfolio to address the daily challenges of low dose and high image quality. With significant dose savings, Ziehm Imaging sets the benchmark in user-friendly adjustment of dose exposure.



LASER POSITIONING DEVICE

integrated in flat-panel and generator housing for accurate and dose-free positioning of C-arm



REDUCTION OF PULSE FREQUENCY

manually or fully automatically to lower the accumulated dose



ANATOMICAL PROGRAMS

with automatic optimization of dose and image quality for best results



HIGH-SPEED ADR

for intelligent, fast regulation of pulse rate to lower the dose level



LOW DOSE MODE

in all anatomical programs for particularly dose-sensitive procedures, e.g. in pediatrics



OBJECT DETECTED DOSE CONTROL (ODDC)

to automatically analyze the area of interest and minimize dose while optimizing image quality



VIRTUAL COLLIMATORS

for exposure-free positioning of collimators



ZAIP ALGORITHM AND FILTERS

to display fast-moving objects like guide wires and even the smallest vessels in razor-sharp image quality



PREMAG

for exposure-free magnification of X-ray images



AUTOMATIC ADJUSTMENT

for large patients – with no additional increase in dose



REMOVABLE GRID

to reduce dose in pediatric and other dose-sensitive procedures



BEAM FILTRATION11

for reduced entrance skin dose without compromising on image quality





Heavy case loads and a large number of different users call for OR equipment with a highly standardized and ergonomic design. Ziehm Imaging supports this need with the unique Ziehm Usability Concept⁵. Seamlessly integrated workflows offer unmatched levels of usability – anytime, anyplace.



As the innovation and technology leader, Ziehm Imaging has developed the sophisticated,

yet intuitive Ziehm Usability Concept that combines a unique and finely tuned set of hardware features with seamlessly integrated software functionalities. In a challenging clinical environment, the entire concept is geared toward increasing ease of use in daily tasks. It improves process efficiency and ensures standardized quality levels in the OR for optimized patient outcomes.



COLOR-CODED SCALES AND HANDLES to ensure clear communication in the OR



MOST COMPACT FOOTPRINT WITH 0.8 m² to fit in even the smallest treatment scenarios



UP TO 165° OF ORBITAL MOVEMENT to support easier patient coverage



ZIEHM VISION CENTER featuring an intuitive touchscreen user interface



SMARTEYE
enabling users to
keep track of orientation and object
position



ANATOMICAL MARKING TOOL to easily apply markings and labels to fluoroscopic images – now enhanced with color



WIRELESS DUAL-PLUS FOOTSWITCH to control all imaging functionalities without any disturbing cables



ZIEHM NETPORT with WLAN enables easy integration into IT networks



WIRELESS VIDEO transmitting live X-ray images to external monitors



CONTROL MODULES for a fast and flexible setup in the sterile field



VERSATILE
VIEWING OPTIONS
to offer maximum
flexibility in the OR





Rely on Ziehm Imaging for flexible and fast service to stay on the cutting edge of technology. Tailored service packages, remote service and individual upgrade paths keep you competitive in your daily hospital routine.

- 1. Nuremberg (Germany)
- 2. Massy (France)
- 3. Rennes, Therenva SAS (France)
- 4. Valencia (Spain)
- 5. Reggio Emilia (Italy)
- 6. Tulln an der Donau (Austria)
- 7. Kerava (Finland)
- 8. Dubai (UAE)

- 9. Tokyo (Japan)
- 10. Shanghai (China)
- 11. Guangzhou (China)
- 12. Singapore (Singapore)
- 13. Sandton (South Africa)
- 14. São Paulo (Brazil)
- 15. Orlando, FL (USA)
- 16. Scottsdale, AZ, Orthoscan (USA)

subject to tolerances. Country specific data and options may apply.

- ¹ Endovascular Navigation represents an optional medical device software package owned by Therenva SAS. Planning is performed with the software EndoSize, also owned by Therenva SAS. The EndoSize license is included in the Endovascular Navigation software package. Therenva SAS is
- a subsidiary of Ziehm Imaging GmbH. ² Ziehm Imaging is the official Sales and Service representative of Orthoscan mini C-arms in Europe, Middle Fast and Africa.
- 3 CMOSline represents a system configuration that is based on a Ziehm Imaging CMOS flat-panel detector.
- 4 Ziehm Solo FD lite represents a group of optional hardware and software that creates an option package on the device named Ziehm Solo FD.
- 5 The Usability Concept includes a variety of hardand software features. Due to regulatory reasons the availability of each feature may vary. Please contact your local Ziehm Imaging sales representative
- ⁶ Ziehm Vision RFD Hybrid Edition represents a group of optional hardware and software that creates an option package on the device named Ziehm Vision RFD.
- ⁷ EndoNaut® is a registered trademark of Therenva SAS. In the USA, the EndoNaut® software obtained a substantial equivalence determination and FDA clearance through the CDRH premarket notification

- process (510(K)). In Europe, the EndoNaut® software is CE marked (class IIb), not eligible for reimbursement. The information provided in the labelling and manual is intended for Healthcare Professionals only. For the safe and successful operation and use of the device, always read the instructions.
- 8 QMAPP® is a registered trademark of Fysicon B.V.. In the USA, the QMAPP® software obtained a substantial equivalence determination and FDA clearance through the CDRH premarket notification process (510(K)). In Europe, the QMAPP® software is CE marked (class IIb). The information provided in the labelling and manual is intended for Healthcare Professionals only. For the safe and successful operation and use of the device, always read the instructions.
- ' Further partners and country specifications available, see www.ziehm.com/naviport for more details.
- 10 The SmartDose Concept includes a variety of hardand software features. Due to regulatory reasons the availability of each feature may vary. Please contact your local Ziehm Imaging sales representative for detailed information.
- "The technology Beam Filtration reduces dose exposure for Ziehm Imaging flat-detector systems in comparison with conventional filtration techniques. Data on File. Results may vary.

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