Ziehm Vision RFD
The ultimate C-arm to outperform
Ziehm Vision RFD. The treatment of cardiovascular and degenerative musculoskeletal conditions calls for high-performance intraoperative imaging technologies. Incorporating the latest CMOS technology for excellent image quality, the Ziehm Vision RFD is the ideal product. In addition to the cardiovascular-focused 20.5 cm x 20.5 cm flat-panel version, the Ziehm Vision RFD is available with a 31 cm x 31 cm CMOS flat-panel detector. This is the preferred model for highly demanding orthopedic, trauma or cardiovascular interventions that require more information in one image. Both systems are equipped with a powerful generator for optimum penetration, Advanced Active Cooling to enable longer procedures and an intuitive operating concept for high clinical standards.
01/ Trust in over 10 years of flat-panel performance now enhanced with CMOS imaging excellence

Building on more than a decade of experience in flat-panel technology, the Ziehm Vision RFD now features the latest CMOS technology. Benefits of this enhancement include clear visualizations, lower noise levels and high spatial resolution for optimal soft tissue and bone contrast. These innovative improvements make the Ziehm Vision RFD ideal for challenging procedures in cardiovascular interventions and orthopedic, spine and trauma surgery.

→ CMOS flat-panel technology

The Ziehm Vision RFD CMOSLine² integrates the innovative detector technology for two specialized detector sizes. With the choice of 20.5 cm and 31 cm flat panels, the mobile C-arm provides comprehensive information with each examination, previously capable only with fixed room systems. CMOS technology achieves higher spatial resolution due to a smaller pixel size combined with lower noise levels and a higher read-out speed at full resolution. With CMOS technology true resolution, especially in magnification modes, makes interpolation unnecessary and improves overall efficiency. In addition, the Ziehm Vision RFD CMOSLine² now comes with newly developed dose saving technology: Beam Filtration² supports the latest improvements in Ziehm Imaging’s enhanced CMOS imaging chain, enabling an exceptional skin entrance dose reduction. Because of these innovations and CMOS technology, the Ziehm Vision RFD CMOSLine provides excellent image quality with a lower dose.

Whether cardiovascular or highly demanding orthopedic and trauma procedures, the Ziehm Vision RFD offers solutions to fulfill all those needs.
→ Contrast-rich display
For the excellent display of the crystal-clear X-ray images the Ziehm Vision RFD uses 19" duo-flat-screens, which are designed for the highest demands in the OR. They stand for their exceptional brightness and contrast even at a distance. With Wireless Video you benefit from fewer cables in the OR and the ability to transfer live X-ray images to external monitors.

The Ziehm Endo Package is a unique configuration designed in cooperation with clinicians to optimize minimally invasive endoscopy procedures [e.g. ERCP] under fluoroscopic X-ray control. A 26" color monitor enables the combined display of the X-ray image and the live endoscopic image side by side. The surgical team gains more space as a separate endoscopy monitor becomes unnecessary.

→ Comprehensive tools to support optimal image quality
SmartVascular offers a specialized workflow to meet the needs of complex vascular procedures. It easily allows switching between Fluoro, DSA, MSA and road mapping (RSA) with just one click. It even enables performing an RSA from a single DSA image. In addition, SmartVascular features a dedicated footswitch configuration for specialized needs.

The Anatomical Marking Tool (AMT) enables the user to apply markings and left/right labels to live images using the touchscreen. It is also a straightforward tool to mark blood vessels, branches or implant positions on live images.

Contrast medium imaging with CO₂ is an innovative and sound alternative for mobile C-arms. In addition to conventional iodinated contrast, it displays MSA and road mapping (RSA) without allergic reactions in patients as well as lowers costs.
02 / Unlock the power to perform
with advanced generator and cooling technology

A powerful 25 kW monoblock generator for optimum penetration provides ideal support for surgeons. Advanced Active Cooling keeps the generator at a consistent operating temperature and prevents system failure due to overheating, making the Ziehm Vision RFD a reliable and safe choice for complex procedures.

→ Compact and powerful
This industry-leading high-frequency generator operates with a variable pulse width, which optimizes the image quality while minimizing dose levels. With up to 25 frames per second, the C-arm provides you with crystal-clear images, even of fast-moving objects. Due to its outstanding generator performance and innovative imaging chain, the systems deliver excellent results – also during exposures with steep angles and lateral projections. The small housing of the compact yet powerful generator further simplifies its positioning at the OR table.

→ Advanced Active Cooling
The unique liquid cooling system Advanced Active Cooling (AAC) supports the mobile C-arm during lengthy, demanding procedures. Even during complex applications such as TAVI, angioplasties and EVAR, the Ziehm Vision RFD thereby delivers reliable results for the duration of the entire procedure. In the event of a temperature increase, the pulse frequency is automatically reduced until the generator’s temperature has cooled down.
03 / Deliver advanced surgical care with the Ziehm Usability Concept

Best-in-class ergonomics pave the way for an ultra-intuitive operating experience, enabling consistent, high-quality outcomes. With an orbital movement of 165 degrees for easier patient coverage and the Wireless Freedom Concept for added operational safety and flexibility, the Ziehm Vision RFD raises the bar for procedural efficiency.

→ Best-in-class ergonomics
With a footprint of 0.8 m², the Ziehm Vision RFD is one of the most compact mobile C-arms on the market. With its easy-drive system it can be maneuvered with minimal effort during long procedures. The big C-arm opening and 165 degrees of orbital movement ideally support the workflow and provide easier patient coverage. In addition, different-colored scales and handles allow the surgeon and staff to quickly and simply select the desired function.

→ Intuitive user interface
The Vision Center is a rotating and tilting touchscreen control panel mounted on the mobile stand as well as on the monitor cart and, optionally, directly at the OR table or on a separate trolley. Up to three synchronized user interfaces offer the entire range of functions on both units. The wizard-guided workflow, coupled with clear and easy-to-follow icons, supports an intuitive operation of the imaging system. With SmartArchive, it has never been more convenient and faster to access the current patient folder at any time.
→ Ziehm Usability Concept

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 Concept. Seamlessly integrated workflows offer unmatched levels of usability – anytime, anywhere.

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.
04/ Reduce exposure significantly with the next-generation SmartDose concept

The Ziehm Vision RFD is designed to meet growing demand among surgeons and their staff for minimized dose exposure without compromising image quality. New filtration enhancements and advanced anatomical programs deliver on these demands, making this device perfect for dose-sensitive applications.

→ Best image quality. Minimized dose.
The comprehensive concept consists of a broad, clinically proven application portfolio to address 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. Our latest improvements in SmartDose help to display even the smallest details of complex anatomical areas and reduce dose with intelligent pulse regulation and optimized anatomical programs. Furthermore, dedicated SmartDose functions significantly reduce exposure in pediatric surgery.

→ Groundbreaking optimization of the X-ray spectrum
Our feature-rich SmartDose concept now comes in an enhanced version with the ground-breaking Beam Filtration. The new filtration technique for an optimized X-ray spectrum supports our enhanced CMOS imaging chain. This combination enables an exceptional reduction in the skin entrance dose for all CMOSLine systems. In a nutshell, the premium line of Ziehm Imaging C-arms provides excellent image quality with a lower dose.
**World Wide Service**

Make sure to get the best service for your daily business.

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

### Offices
1. Nuremberg (Germany)
2. Orlando, FL (USA)
3. Scottsdale, AZ (USA)
4. São Paulo (Brazil)
5. Paris (France)
6. Reggio Emilia (Italy)
7. Kerava (Finland)
8. Midrand (South Africa)
9. Singapore (Singapore)
10. Shanghai (China)

### Features

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<td>Flat-panel</td>
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<tr>
<td>Image intensifier</td>
<td>Ø23 cm Ø31 cm</td>
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<tr>
<td>Pulsed monoblock generator</td>
<td>7.5kW/20kW</td>
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<tr>
<td>Optional: endoscopic landscape color monitor</td>
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<table>
<thead>
<tr>
<th>Image intensifier</th>
<th>CMOS, 20.5 cm x 20.5 cm</th>
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<tbody>
<tr>
<td>Pulsed monoblock generator</td>
<td>25 kW</td>
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### Clinical Applications

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<tr>
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<tbody>
<tr>
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<tr>
<td>Vascular surgery</td>
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<td>Coronary imaging</td>
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Available • | Not available – | Good • | Very good • • | Ideal • • •