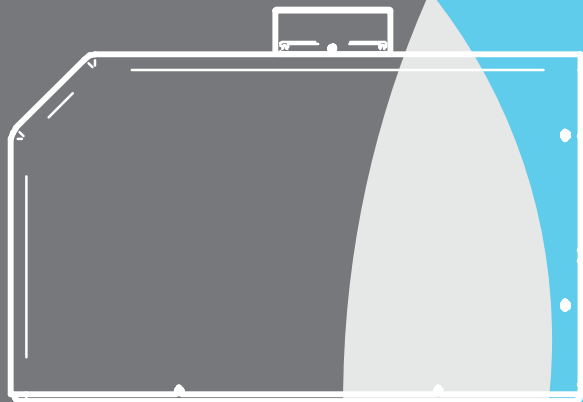


maXimo

powering tomorrow

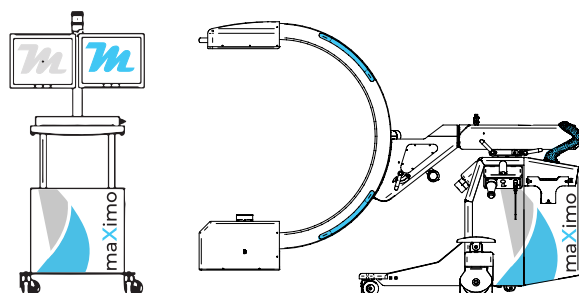


maXimo

The **idea** that marks the times is the
one that **ANTICIPATES** them

Innovation is the result of a tried and tested way of working and thinking generated from
a deep understanding of the needs of the times and of those who use the equipment.

FUTURE ENVISIONED, INNOVATION DELIVERED



WHO WE ARE WHAT WE DO

Focused in the electro-medical device field, we create **cutting-edge**, tailored solutions and **systems** while distributing top-tier, state-of-the-art equipment meticulously **handmade** and entirely **engineered** and **produced within our facility**. Based in **Mirandola**, in the northern province of Modena, we thrive at the epicenter of **Europe's most crucial biomedical hub**.

With over **30 years of experience**, our exceptional team, led by Massimo Tomasi, brings unique expertise. His visionary approach, complemented by numerous papers and patents, defines and shapes our **distinctive corporate identity**.

OUR DNA IS DEFINED BY

01. Research & Development

Our unwavering **dedication in research and development** positions us as proficient partners in the realm of diagnostic and surgical radiology.

02. Unique in Italy

Our exclusive ability to **independently manufacture C-arm systems** in Italy is attributed to strategic preparation and thorough continuous training of our workforce. **We meticulously design, develop, create and assemble every component of our equipment** - from mechanical parts and electronics to imaging software, DICOM services and the revolutionary **high-voltage generator, Planarix™**.

Our commitment to in-house production reflects our **dedication to innovation and design excellence**.

03. Shared knowledge

Our strategic management approach promotes **teamwork** and skill exchange, cultivating a collaborative environment. Mutual skill sharing enhances our understanding of diverse manufacturing processes and the distinctive characteristics of each component in the devices we produce. **We envision, innovate and rapidly adapt to market dynamics and the evolving needs of our clients.**

04. Exploration

In the 90s, the **Micronica** team embarked on a journey of exploration, pioneering the creation of the **first innovative C-Arm using Windows NT**. Exploration, to us, means **understanding the world** observing global needs and expectations. **Our commitment lies in anticipating future needs and offering solutions proactively.**

maXimo

OUTSTANDING POWER ENDURANCE PERFORMANCES

Optimized dose and image quality for acquiring detailed images in all conditions

Vascular software

Slim-design workstation for advanced image processing

Equipped with the latest FPD technologies
aSi, **CMOS** & **IGZO**

10.000 rpm
anode speed rotation
for better
heat distribution



maXimo is our **most powerful and complete C-Arm**, designed to extend its capabilities and outstand in every surgical field: from the most complex **vascular** and **cardiac** applications to high-demanding surgical procedures.

maXimo consistently delivers high end performance, offering **long-lasting power and superb image quality**.



Automatic **Cooling System**,
for prolonged working times

X-Ray tube housing to ensure
high-end performance
and system reliability

Up to 25kW pulsed
High voltage generator
PLANARIX™

Double - sided brakes

LOOKING BEYOND HOW **WE** WORK



Creation

From mechanical and electronic components to software and firmware, **we proudly design, implement and install each part of our C-Arm with care and passion.**

Our approach goes beyond mere assembly, we have complete control over our products **enhancing quality and efficiency.**



Test

Every product undergoes **rigorous internal testing** before reaching the customer, ensuring the utmost **reliability and quality** in each delivered equipment.



Research and Development

Through continuous **investments in research and development**, we strive to discover **innovative methods** that consistently **elevates the quality** of our equipments.



Training

Micronica conducts **trainings** to provide **users** with **full knowledge of the system** and **technicians** capable of efficiently address system issues, **minimizing service interruption times.**



Certification

We consistently stay **updated** with the latest standards and **in compliance** with the current **national and international regulations.**

DETAILS THAT MAKES THE DIFFERENCE

A.I.R.E.

AUTOMATIC INTELLIGENT RADIOGRAPHIC ENGINE

- ▶ Fast Startup and **ready to go**. No need for additional settings
- ▶ Internally developed **software for image detection** to recognize the anatomy and automatically select optimal X-ray settings while minimizing overall patient and operator dose
- ▶ **Intuitive** user interface for **smooth clinical workflow**



CUSTOMIZED MECHANICAL DESIGN DESIGNED AROUND YOU

Double sided wheel brakes and **ergonomic handles** for **smooth movements** inside even the smallest operating room. Avoid floor obstacles thanks to on-wheel **cable pushers**.

Perfectly balanced wide C-Arm with 912 mm of free space and a depth of 71.6 cm ensuring **top of the range versatility**.



AUTOMATIC COOLING SYSTEM COOL DOWN

The **liquid cooler exchanger** and **automatic heat management** enable up to 1200 W of continuous dissipation, **extending system autonomy** during the most complex and power-demanding treatments.



VASCULAR DEDICATION ROADMAP AND DIGITAL SUBTRACTION

Vascular software package includes **Roadmap** and **Digital Subtraction** (DSA) mode for vascular and cardio-vascular applications.



SCAN THE
QR code
to discover
ALL
DETAILS

maXimo^{optimization}

maximum advanced ray imaging



UNCOMPROMISING PERFORMANCE

Long Lasting Power

Today the power of dynamic flat panel C-arms has significantly increased, being used daily for a wide range of surgical treatments often involving extended X-ray exposures. An efficient cooling system is imperative to ensure **outstanding performances** even in the **most demanding applications**.

maXimo automatic heat management features different types of cooling systems, including a **liquid cooling** exchanger, providing continuous heat dissipation up to 1200 W for **extended working times** while **preserving the lifespan of the X-Ray tube**.

Efficiency in the Surgery Room

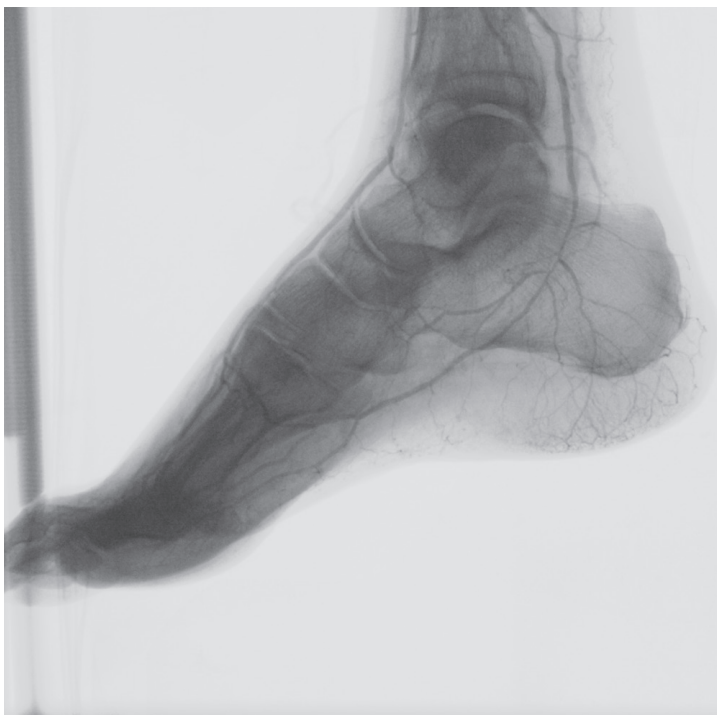
Even the most complex surgery requires an easy approach: it's with this focus that we designed our **most advanced C-Arm**. The system **automatically adjusts X-Ray parameters** (kV, mA and pulse width) always delivering the best image quality possible at minimum reasonable dose **without the need to insert additional settings**-the system is **ready to go**.

Immerse yourself in a synchronized and **efficient clinical workflow** thanks to the **touch-screen console**: control system settings, collimator and DICOM functionalities with a single touch.

Advanced Vision

Medical Software with Integrated **Artificial Intelligence**

Revolutionize medical practice with our proprietary image acquisition and digitization software, driven by internally developed innovative **Artificial Intelligence**. The algorithm automatically detects the anatomy based on input dose, optimizing the RX parameters for **superior image quality** in any context while always ensuring compliance with the A.L.A.R.A. dose principle. Our **internally developed and produced** HV-Generator **PLANARIX™** delivers extremely short square wave pulses to the X-Ray tube: the synergy between these two systems, along with the proprietary **intelligent anode speed control**, ensures **sharp images and system reliability**.



We meticulously
DESIGN
develop CREATE
and assemble
EVERY
component of our
equipment

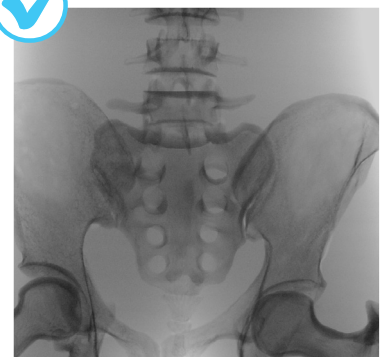
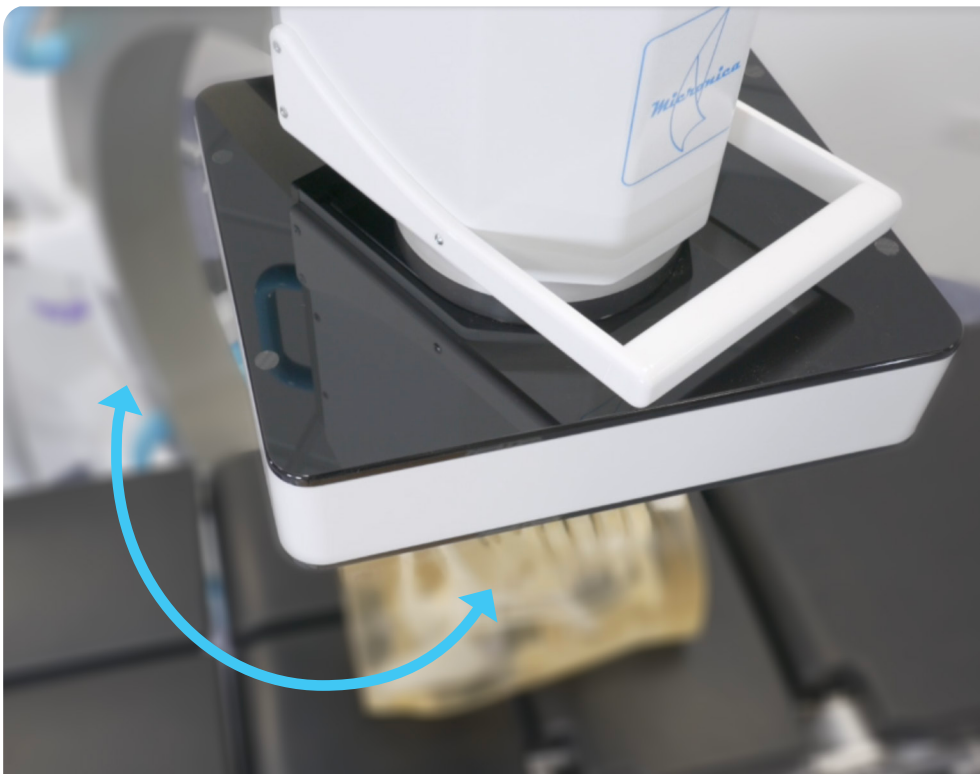
IMAGE AT THE CENTER

FLAT PANEL DETECTOR ROTATION

As **modern operating rooms** become smaller, the number of equipment inside is increasing. In addition to the need for increasingly **compact devices**, this presents **challenges in optimal positioning of the C-Arm around the surgical table**.

The **digital rotation** of the image is the simplest solution for this challenge. However, with modern square FPD detectors, when rotation is applied, corners are lost, resulting in a **smaller displayed image area and fewer details**.

MICRONICA's innovative solution introduces **cath-lab features into a mobile C-Arm**: mechanical **detector rotation**.



- ▶ **Eliminate the need to shift the entire room** or digitally rotate the image to align with the surgeon's preferred viewing angle
- ▶ Patient visualization on the monitor becomes **independent from the C-Arm position** around the surgical table, while always maintaining the **full panel acquisition area**
- ▶ Achieves up to **20% more image area** compared to standard systems with digital image rotation

We **envision**
INNOVATE
and rapidly **ADAPT**
to **MARKET DYNAMICS**
and the **evolving needs**
OF OUR CLIENTS

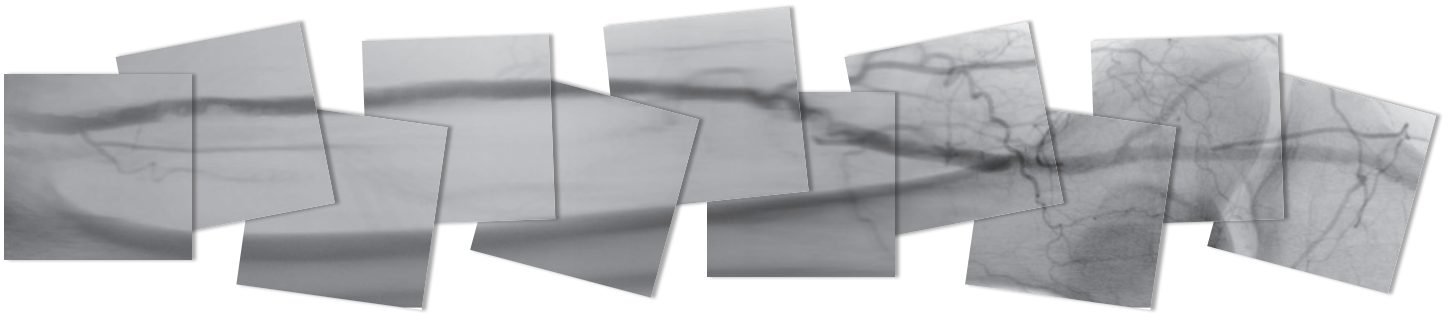


EXPAND YOUR VISION

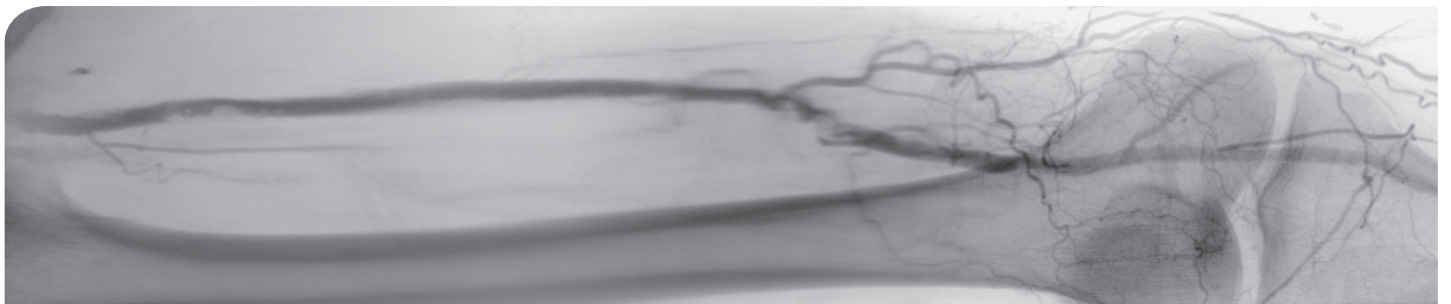
STITCHING

Typically used in larger equipment such as RF systems or Cath-labs, specialists can generate a **more detailed and expansive view of the examined anatomy.**

This is particularly useful for visualizing large structures or areas that exceed the limitations of a single scan or the size of the detector itself. **Micronica** has integrated this capability into a portable device, providing users with an even **broader range of applications.**



Our digital imaging software integrates advanced algorithms capable of **combining a complex dynamic acquisition into a single wide image, without any synchronization** between the C-Arm and the surgical table.

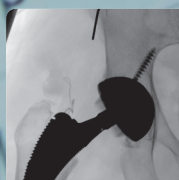


This is not the result of a simple merge of multiple static images, but rather a **real-time process** involving the coupling of **thousands of frames.**

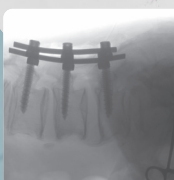
This feature provides a **comprehensive view of the intervention area**, assisting surgeons in strategic planning and precise identification and check of the treated area.



CLINICAL APPLICATIONS



Orthopedics



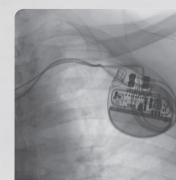
Spine surgery



Vascular surgery



Neurosurgery



Cardiac



SYSTEM SPECIFICATIONS

Source Image Distance (SID)	111,2 cm (43.7")
Free space	91,2 cm (35.9")
C-arm depth	71,6 cm (28.18")
Orbital	147° (-90° / +57°)
Horizontal travel	22,5 cm (8.8")
Vertical travel	45 cm (17.7")
Lowest lateral position	106,4 cm (41.8")
Swivel range	21° (± 10.5°)
Pivot	480° (± 240°)
H x W x D of C-arm frame	156,5 x 78 x 219 cm (61.6" x 30.7" x 86.2")
Weight	330 kg
Power Supply	230 Vac (±10%) 50/60Hz
Power	Up to 25 kW, pulsed HV Generator + X-Ray tube housing
kV Range	40 - 120 kV
Max Current	Up to 250 mA

aSi	CMOS	IGZO
23 cm x 23 cm	22 cm x 22 cm	23 cm x 23 cm
30 cm x 30 cm	30 cm x 30 cm	31 cm x 31 cm

ADVANCED FEATURES and OPTIONALS

- ▶ **Advanced Image Process and Acquisition** thanks to anatomic tables, recursive filter and fps selection, dynamic acquisition and measure tools for **enhanced image quality**
- ▶ **Square collimator** and filters available in different combinations to match every needs and application, with **preview function** to position the collimator dose - free
- ▶ **Wireless footswitch**
- ▶ System-integrated detector and tube-side **laser targeting device**
- ▶ Full connectivity with USB 3.0, LAN and **DICOM 3.0** integration entirely developed by **Micronica**
- ▶ **DAP** Dose Area Product device
- ▶ **Liquid Cooler Exchanger**
- ▶ Neuro-navigation Interface BRAINLAB™ and Injection System Interface
- ▶ **Articulating monitor support** for increased flexibility inside the OR
- ▶ **UPS battery backup system** (workstation side ONLY)

MICRONICA WORLDWIDE

Experience leaves Its mark

Since the beginning of our journey, we've meticulously observed the world, dedicating great care to develop innovative systems and equipment. With our **visionary approach**, we proudly distinguish ourselves as the premier choice for fluoroscopy partnerships, possessing an international vision driven by **attitude and curiosity** to comprehend the world and communicate in its diverse languages.

Our commitment lies in anticipating future needs and offering solutions proactively.

We shape the future through **sustainable investments in research and development**, coupled with the valuable contribution of all the men and women working with us, by identifying **new ways to enhance the quality of our systems** and **actively participating in the evolution of the scientific community**.

Our ideas, solutions and projects support and facilitate cutting-edge improvements in surgical procedures, making the invisible visible.



Today
90%
of Micronica's
PRODUCTS
are **EXPORTED**

maXimo





Cod. 9005430001

Micronica srl is constantly improving its products and reserves the right to change system specifications and data without prior notice.
Presented data are subject to tolerances. Country specific data and options may apply.

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