



C-Arm

Manufacturer

www.micronicasrl.com

Who We are

Passion for New Ideas



Micronica is a **family-owned** company that **designs and manufactures medical devices** to digitally capture **fluoroscopy** images.

We develop **innovative, customized solutions** and **systems**: our **C-Arms** are **entirely designed and manufactured in our site at our factory**.

Based in the heart of Europe's most prominent biomedical district—Mirandola—we turn over **35 years of experience** into cutting-edge solutions, driven by a **deep know-how** and passion for **innovation**.



Our outstanding team is guided by the expertise and vision of **Massimo Tomasi**, author of numerous publications and patents across various medical fields, making our corporate identity truly **unique in the industry**.

Our Story

Yesterday



In 1996 **Massimo Tomasi**, former president and R&D director of **SIMAD**, designed the **first C - Arm system in Europe that uses a personal computer with Windows NT to capture dynamic and static radiological images.**

In 1998 this system obtained the FDA 510K (pre-market notification) for the US, Mexican and Canadian markets.



This is when the **Micronica** idea started, bringing together a **professional team driven by passion** and committed to pursuing **innovative solutions**, with a clear understanding of both past experiences and future developments.

Based on these experiences **Micronica** was founded in **2007**.

Our Story

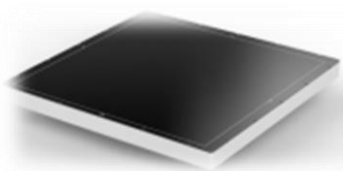
Today & Tomorrow



Today

We are a young and dedicated team, for over 35 years we've been **looking ahead** — and we still do today. Together with many other achievements, including the development of industrial applications with **linear RX sensors** and portable dental diagnostic systems, the technological evolution and success of our **C - Arm** continues to this day.

One of **Micronica's** latest innovations is the integration of **new-generation dynamic flat panel detectors** into our C - Arm:



IGZO



aSi



CMOS

Tomorrow

We continue to shape the future through sustainable **investments in research and development**, supported by the dedication and expertise of the men and women who work with us.

By following global innovations and future trends, **Micronica** continues to contribute to the evolution of the sector with its **own unique approach**.

Micronica C - Arm

Product Range



unico

10kW power



Neurosurgery
Emergency Room
Spine

Orthopedy
Pain Management
General Surgery

Compact, all-in-one, **multi - purpose** unit to meet everyday O.R. needs.

maximo

20 / 25 kW power

32 kW coming soon



Neuroradiology
Cardiology
Pulmonology

Vascular Surgery
Urology
Gastroenterology

Our most powerful and complete C - Arm designed for **high demanding surgical procedures**.

Micronica C - Arm

Main Features



Time is everything

Designed to be **plug & play**, without asking the user to enter any additional information: switch-on the system and acquire superb quality images.



Efficiency in the surgery room

The system automatically adapts the X-Ray parameters (kV, mA and pulse width) to best fit the anatomical region in use.



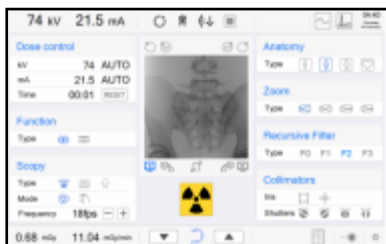
A.I. Image Detection

Automatic exposure control driven by **A.I.** algorithms to reduce the dose and have a minimal impact on the human body. **Acquire detailed images even in unfavorable exposure conditions.**



Easy-to-move

Compact and **lightweight** design ensures effortless movement and positioning even in the smallest OR.



Convenient Workflow Interface

Touch screen command console and user friendly interface to control X - Ray parameters, settings and DICOM functions.



Proprietary technology

All key components, hardware and software , are entirely **designed and developed by Micronica.**

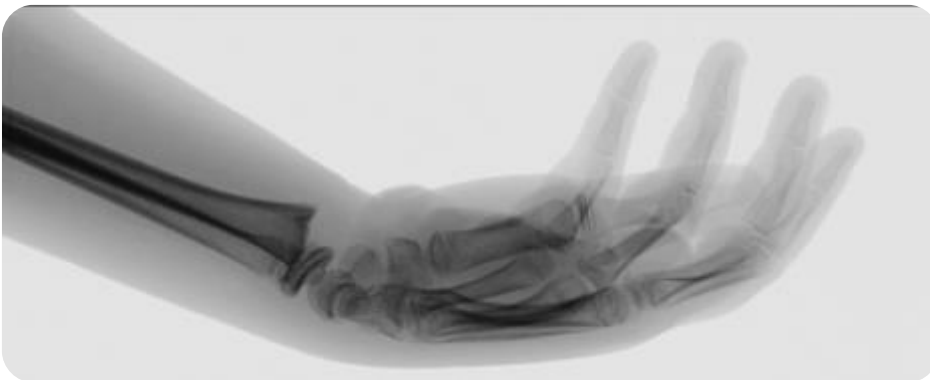
Micronica C - Arm

Technical Highlights



All **Micronica** C – Arms are equipped with our internally designed, engineered and produced **High Voltage Generator PLANARIX™**. In combination with its innovative high frequency inverter, it is able to deliver extremely short square pulses to the X-Ray tube, providing **sharp images** at the **minimum dose** to the patient with an overall **superb image quality**.

Micronica has also developed an innovative system that **rotates the anode** up to **10,000 rpm**, significantly enhancing tube power handling and heat dissipation — a **unique feature** in the mobile C - Arm segment.



The combination of HV - Generator and X-Ray tube housing offers **high power output** with **incredible dose stability** along with **system reliability**.

Micronica C - Arm

Heat Management & Square Collimator



Automatic heat management and **active liquid cooling**, with dissipation up to **1200W**, enable prolonged examinations **without the risk of overheating**.

This feature guarantees **continuous C - Arm operation during complex cardiac surgeries**, without any interruptions for cooling.

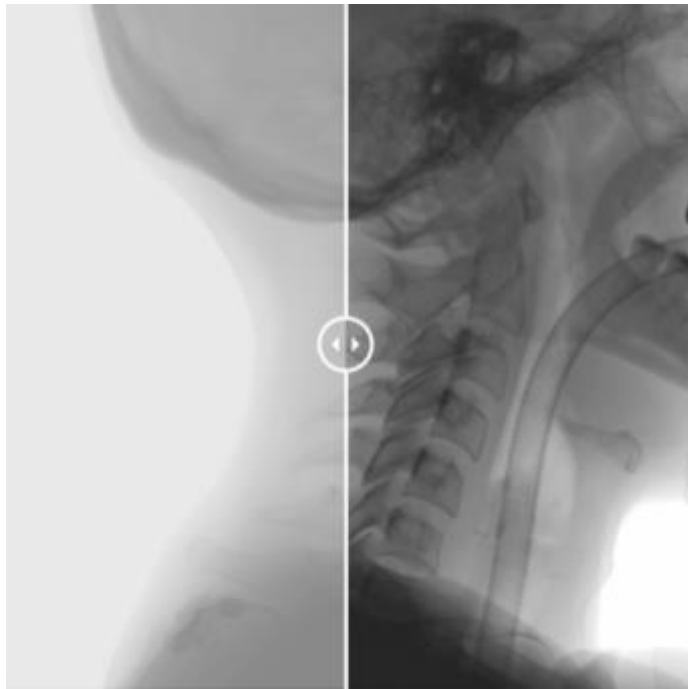


The **square collimator** automatically limits the X-Ray beam to perfectly match the square edges of the detector, **reducing scatter and improving image contrast**.

Collimation reduces the exposed volume of tissue and it is **beneficial for both the patient and the operator**.

Also the collimator is internally designed, engineered and produced by **Micronica**.





Standard

With A.I.R.E.

A.I.R.E.

Automatic Intelligent Radiographic Engine

Our **proprietary imaging software, automatically detects the anatomy** and optimizes exposure parameters for superior image quality, while minimizing dose for both patient and operator.

This concept is **crucial in long surgical procedures or pediatric surgeries.**

Our devices provide real-time reports on accumulated radiation dose during the procedure.



Our **C - Arms** are fully compatible with most RIS / PACS systems, providing users with a seamless **integration** for improved **efficiency**.

With a wide range of **DICOM** functions and **optional** features, our system can be fully tailored to **meet the user's specific needs** and workflow preferences:

- Store
- Storage Commitment
- Worklist
- Print
- MPPS
- Query Retrieve
- Radiation Dose Structured Report
- **UPS battery** system for workstation power protection
- **Bluetooth** footswitch
- **Wireless** LAN & Printer Interface
- Articulated monitor support (workstation)
- **BRAINLAB™ surgical navigation interface**



One Step Beyond

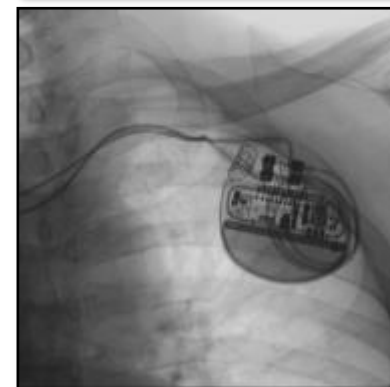
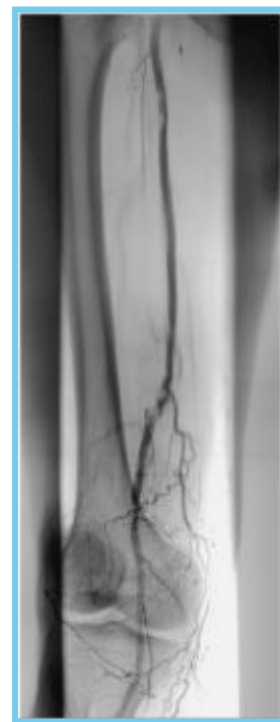
Key selling points



Our **ongoing collaboration with surgeons** in the operating rooms has provided valuable insights for our research and development efforts enabling us to introduce **innovative and unique features**:

- **Plug & Play** Mode
- **Stitching** - Asynchronous Real-Time Image Fusion
- **H.V. Generator Planarix™** entirely designed and manufactured in-house, up to 32 kW power
- Automatic **anode rotation** 10.000 / 3.000 rpm
- **UNICO** all-in-one C – Arm with **10 kW** power
- **Full control on software, hardware and supply chain**
- Deepest “C” on the market, with a SID of 110 cm and more than 90 cm of free space
- Lowest lateral position of 106 cm

Stitching





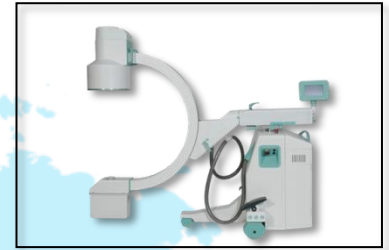
From the very beginning, **Micronica** has focused on developing innovative systems for diagnostic and surgical applications, anticipating future needs and delivering solutions ahead of demand.

Exploring different markets helps us understand diverse needs—turning those insights into solutions designed for global export.

Today **90% of our products are exported**, mainly under OBL agreements.

We are committed to continuous innovation, in full compliance with international standards such as **IEC 60601-1, EU MDR 2017/745, UNI CEI EN ISO 13485:2021, FDA 510(k)** and **TFDA**.

Micronica has installed **over 800 mobile C - Arm units worldwide**, mainly through OBL agreements.





©Micronica srl
via Righi 30
41037 · Mirandola (MO)
Italy
P.I. - VAT 03148420361

 info@micronicasrl.it
 +39 0535 730303
 MicronicaSRL

micronicasrl.it