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## **Ares X-Ray Equipment**

**Stationary X-Ray Systems  
C-Arms  
Mobile X-Ray Units  
Gaia Mammography Units**



### **Equipment manufactured by MS Westfalia GmbH:**

Cleanrooms • **X-Ray equipment** • ENT equipment • Anaesthesia and ICU equipment • Medical lamps  
Functional diagnostics • Ophthalmology equipment • Microscopes and colposcopes • Lithotripters  
Cosmetology and SPA equipment • Physiotherapy equipment • Home photo epilators

## Stationary X-Ray Systems

### Ares RC DFP

#### Remote-controlled X-ray system with flat digital detector



- Ares RC DFP is a system featuring a high degree of integration including remote-controlled tables, generators and digital imaging systems. Many features have been developed in order to meet the requirements of any operational conditions and to ensure the optimization of the performance-cost ratio.
- Ares RC DFP offers efficient execution of radiographic and tomographic projections in any positions. It provides the utmost flexibility in any diagnostic application and unmatched image quality in both radiography and fluoroscopy exams.
- Remote controlled tabletop with tilting angles  $+90^{\circ}/-90^{\circ}$  and adjustable height ensures easy access and comfortable patient positioning.
- The imaging system has the following properties:
  - matrix: 2880 x 2881 x 16 bits;
  - frame rate: from individual exposure up to 30 images per second;
  - radiography and continuous/pulsed fluoroscopy;
  - DICOM full functionality.

- High quality images of high DQE and small pixel size of 148 microns.
- The increase of working field by 50% compared to using film tapes/CR traditional formats of 36 x 43 cm.
- High productivity: single image obtaining speed up to 30 images per second.
- Essential reduction of radiation dose for all types of surveys.



### ARES RC RAD FP

#### X-ray system with flat digital detector

- The system is designed for routine diagnostics and combines the latest digital technology and management simplicity.
- The main configuration, based on vertical turning image stand with ceiling mounted X-ray tube provides all types of radiographic examinations.
- Wide range of possible combinations of shipment for any order:
  - with two stationary detectors (dimensions of the detector: 35x43 or 43x43 cm);
  - with one stationary and one portable detector;
  - with one portable detector.
- High-frequency X-ray radiography generator: 32, 50 or 65 kW.
- The system can be shipped with a ceiling or floor mounted X-ray tube.
- Manual, motorized or automatic operation of movement of the X-ray tube, image table or vertical stand for any chosen combination.

## Ares RC

### Remote-controlled X-ray system for 3 workplaces

- 3-in-1 X-ray system for fluoroscopy, radiography and tomography in one multifunctional remote-controlled table.
- Modular construction: wide choice of tables, generators, digital and analogue imaging systems and X-ray tubes enables to design equipment that meets the specific needs of a clinic.
- Remote controlled microprocessor-based tilting table has automatic cassette holder for fluoroscopy, radiography and tomography with image enhancer from 9" to 16".
- The tabletop tilting from the vertical position to 30° or 90° allows the execution of any routine and special studies.
- Possibility to choose optimal position for radiography and tomography projections.
- High frequency generators (400 kHz) are available: 50, 65, 80 kW.
- Analogue or digital imaging system: the image enhancer 9", 12", 13" or 16" combines the highest image quality with an unmatched dose reduction. The features of the system are further enhanced by a comprehensive series of post-processing functions and full DICOM connectivity and represent the ideal combination with the Ares remote-controlled tables and generators.



## Ares RC M

### Universal X-ray unit

- Ares RC M can be used in traumatology and orthopedics, emergency surgery and polyclinic network. The system is ideal for initial surveys (emergency medicine) and all major radiographic studies.
- Allows conducting examination of skull, skeleton, chest, abdomen.
- Allows patient examination in any position.
- Easy to install and use, very little time is required for installation, start-up and training.
- Compact - required area for installation is 14 m<sup>2</sup>.
- Allows the doctor to perform more than 90% of possibly required radiographic studies.
- In conjunction with the radiolucent table-trolley (stretcher), it is functionally similar to conventional radiography systems.
- Ares RC M includes: a swivel stand, a mobile X-ray table with brakes, high-frequency X-ray generator for radiography at 32 or 50 kW.
- Convenient control panel, automatic calibration, optional connection of an automatic exposure control, a set of automated programs, an X-ray tube with a rotary bifocal anode.

## C-Arms

### Ares MR Angio

#### C-arm X-ray system for angiographic studies

- Designed for angiography, endovascular studies, as well as traditional surgery, urology, gynecology, orthopedics and traumatology.
- Large power reserve of 20 kW.
- Excellent image quality (CCD camera 1k x 1k).
- Outstanding versatility: flexible configurations suitable for all the examinations.
- Removable keyboard fixable on Angio table.
- Dual cooling system: innovative and exclusive liquid cooling system with liquid-to-air heat exchanger. At the nominal X-ray power the temperature of the X-ray assembly remains steady for an indefinite period of time.
- All C-arm movements can be motorized.
- Dynamic anticollision system on all C-arm movements.
- Dual power system: power reserve system allows functioning from any standard wall outlet. Power is stored and released according to necessity.
- Full DICOM, USB, CD/DVD interfacing.
- Remote control.



### Ares MR Cardio

#### Stationary ceiling mounted C-arm X-ray system for cardiological studies

- Due to unique technologies complex (dual cooling, dual power and motorized C-arm management) Ares MR Cardio is the best solution for interventional cardiology and angiology.
- Fields of application: hemodynamic studies, electrophysiological studies, angioplasty, stenting.
- Up to 1000 mA, 100 kW power provides high quality diagnostics for angiology.
- Liquid cooled X-ray tube (4" graphite rotating anode).
- Complete angiographic system for all cardiology studies.
- Ceiling mount of the system and LCD monitors in the treatment room.
- Remote control of all system movements.
- DICOM interface.
- Excellent maneuverability and improved design.

### Ares table

#### Operating table

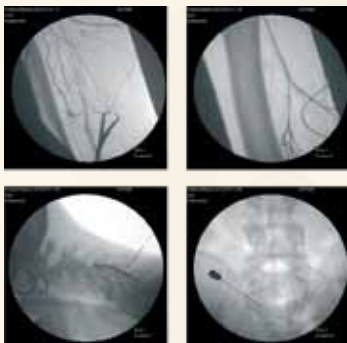
- Fields of application: peripheral angiography, electrophysiology, endoscopy, neuroangiography, urology.
- A wide range of longitudinal movement of the table.
- The table deck tilts in the longitudinal and transverse directions.
- Quick and easy centering of the table during the study.
- Remote control.
- A complete set of essential accessories.



## Ares MR AFG/DFG

### Mobile X-ray units with C-arm

- The units are equipped with a high-definition digital system primarily suited for angiography, but also useful in routine radiography.
- High image quality and compact design. Extensive image processing ability, user-friendly interface and powerful diagnostics.
- Specifications:
  - image intensifier 9" or 12";
  - high definition digital camera: 1024x1024 pixels;
  - pulsed high contrast fluoroscopy (HCF);
  - 2 monochrome LCD monitors;
  - interface for automatic starting of media contrast injector;
  - general radiography and angiography program packages;
  - real time work with images;
  - anatomic program set up;
  - DICOM system integration;
  - real time DSA (digital subtraction angiography) with automatic/manual mask;
  - full DSA.
- Laser collimator.
- Patient dose monitoring.
- Thermal printer A4 format, transparent film or paper support.
- **AFG digital system:**
  - image frequency up to 25 images/sec;
  - shipment with X-ray tube with rotating anode.
- **DFG digital system:**
  - image frequency up to 30 images/sec;
  - digital camera CCD 1kx1K;
  - advanced program package for image processing;
  - shipment with X-ray tube with rotating anode.



## Ares MR

### Mobile X-ray unit with C-arm

- Ares MR unit with C-arm is aimed at multi-functional use: general and urgent surgery, orthopedics, traumatology, endoscopy, in day care and veterinary practice.
- The system modes are the following: digital fluoroscopy (continuous, pulsed, boosted, one shot), high speed images processing, radiography (digital, film).
- Monoblock with rotating or stationary anode X-ray tube.
- High frequency generator enables to provide high image quality at low radiation dose.
- The unit is furnished with radiography hand switch, fluoroscopy pedal, 24 x 30 cassette holder, blades and iris motorized collimator, sterile drapes.
- Furthermore, it is possible to select either the 7" image intensifier with two fields (1 zoom) or the 9" or 12" image intensifiers with three fields (2 zooms).
- High contrast and high resolution LCD monitor TV 17"-21" with a trolley.
- The unit is managed by an easy using control panel, with two liquid crystal displays, and by a high reliability electronic system, controlled by microprocessor.
- DICOM 3.0 (optional).
- The unit, in all its versions, may be equipped, on request, with patient dose monitoring. The dose, absorbed by the patient, is indicated on the control panel display or on the TV monitor, according to the unit configuration.

## Mobile X-Ray Units

### Ares MB Flat Panel

#### Digital mobile X-ray unit

Mobile unit equipped with digital images acquisition system in radiography mode used in intensive care, operating theater and hospital ward.

- Flat panel detector, active matrix: 3052 x 2540 pixel, pixel dimension: 139 micron, resolution: 3,6 lp/mm, cycle time: 8/10 seconds, preparation for examination: 2 seconds, weight: 3,9 kg.
- 19" LCD TFT color panel with non-reflective surface, touch screen.
- Storable images, graphic functions: display of grid, distances calculation, angles calculation, text overwriting on the image.
- DICOM functions.
- Max. power: 30 kW, kV range from 40 to 125 kV in steps of 1 kV, rotating anode bifocal X-ray tube.
- Patient dose monitoring, possibility to save patient's information (date, name, dose).



### Ares MB / MC

#### Mobile X-ray units



Ares MB



Ares MC

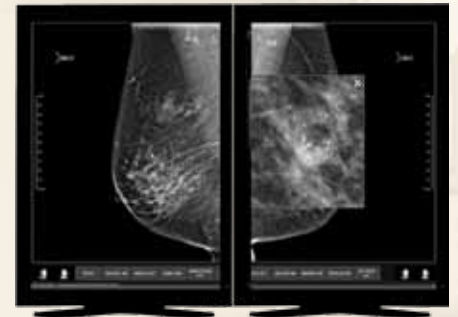
- High-frequency monoblock (40-100 Hz), different power options: 3.5 kW, 4 kW, 6 kW, 30 kW and 32 kW.
- X-ray control panel - LCD touch screen. Multi-language interface.
- Anatomical programs availability.
- Bucky connection.
- When shipped with dosimeter such options as showing data on the dose, printing, saving patient data (date, name and dose) are possible.
- Simple, ergonomic mechanics of the stand, easy to move and position the X-ray tube.
- The system is equipped with a cassette holder (maximal format: 35x43 cm), winding meter, goniometer.
- Ares MB X-ray units differ from Ares MC by simpler mechanics.

## Mammography Units

### Gaia Digital

#### Digital mammography unit

- Gaia Digital mammography unit is optimized for digital imaging in breast cancer screening and diagnostic procedures.
- The unit is based on the most advanced amorphous selenium technology. Use of amorphous selenium enables to produce the highest signal/noise ratio and offers greater efficiency compared to other known technologies. With amorphous selenium the X-radiation is transformed directly into electric charges without relying on an intermediate step to convert X-ray energy to light. So the direct detection avoids a light diffusion effect that degrades image quality, produces a clear signal profile and preserves the image sharpness.
- Images are taken with 18x24 or 24x30 cm flat panel detector with tungsten anode tube and rhodium filtration.
- Innovative compression system:
  - motor-driven adjustable pressure and manual compression with safety release;
  - value of the actual exerted pressure on the breast shown on two displays;
  - progressively reducing paddle speed once in contact with the breast;
  - smooth compression paddles design for higher patient comfort.
- In order to reduce dose a carbon fiber free structure has been designed with automatically selected small focus once fitted.
- Integrated auxiliary display shows C-arm inclination, ACR projections, compression force selected/applied, breast thickness and laterality selection.
- A professional workstation for medical image presentation and processing is optionally available. It is based on innovative concept of display presentation and workspace configuration. It consists of:
  - workstation with DVD recorder;
  - software for images management and processing;
  - very high resolution 5 MPixel dual headed monitors;
  - LCD colour service display system;
  - DICOM 3.0 MG conformity;
  - HIS-PACS-RIS interface.



### Gaia

#### Analogue mammography unit

- New features to improve operation efficiency, such as:
  - C-arm integrated patient and operator hand rail;
  - control panel positioning possible on either side of the unit;
  - fully balanced C-arm with every table size;
  - user programmable projection views.
- New compression system allows a correct and at the same time more comfortable compression.
- X-ray generator data:
  - high frequency: 100 kHz ripple;
  - power: 5 kW;
  - kV Range: 20 - 35 kV (steps of 0.5 kV);
  - mAs range: 1 - 640 mAs.
- Different X-ray tubes can be chosen:
  - with molybdenum anode and molybdenum filter (standard version);
  - with bimetallic anode (Mo and W) – option;
  - with biangular anode (10° and 16°) – option;
  - high speed tube (9.000 rpm) – option.
- An auxiliary digital display placed frontally on the bottom of the unit shows the following data:
  - C-arm angle rotation;
  - effectively applied compression force;
  - compressed breast thickness.
- Modern, ergonomic design.

## MS Westfalia GmbH. About the company

MS Westfalia GmbH (established in 1995, Troisdorf, Germany) is an ISO-certified (ISO-9001, ISO-13485) medical equipment manufacturer, producing a wide range of equipment, including modular cleanrooms, ENT units, X-ray machines, ophthalmology equipment, etc.

MS Westfalia GmbH provides a full range of services:

- Consulting and planning.
- Project design and development.
- Service engineering of the equipment supplied.
- Logistics service.
- Flexible payment terms.



MS Westfalia GmbH headquarters in Troisdorf, Germany

## Equipment manufactured by MS Westfalia GmbH



Cleanrooms



X-Ray equipment



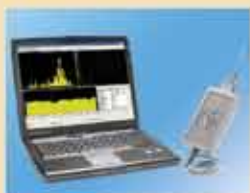
ENT equipment



Anaesthesia and ICU equipment



Medical lamps



Functional diagnostics



Ophthalmology equipment



Microscopes and colposcopes



Lithotripters



Cosmetology and SPA-equipment



Physiotherapy equipment



Home photo epilators



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