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Manufacturer**



MS WESTFALIA GmbH
est. 1995

X-Ray equipment

**Stationary X-Ray units
Mobile X-Ray units**



MS Westfalia GmbH produces:

**ENT Equipment • X-Ray Equipment • Modular Cleanrooms
Cosmetology Equipment • Physical Therapy**

Stationary X-Ray systems

Ares RC

Remote-controlled X-ray system



Ares RC Flat Panel is an innovative remote-controlled table conceived so as to ensure the perfect combination with the Ares D imaging system employing the Trixell Pixium RF4343 dynamic flat panel: utmost flexibility in any diagnostic application and unmatched image quality in both radiography and fluoroscopy exams.

The imaging system offered with the Ares RC Flat Panel:

- Matrix from 2880 x 2881 x 16 bits.
- Cadence: from individual exposure up to 30 images per second.
- Radiography and continuous/pulsed fluoroscopy.
- DICOM full functionality.

Benefits

- Ergonomic arrangement of the panel increases operator's access to the patient.
- High quality images of high DQE and small pixel size of 148 microns.
- The increase in working field by 50% as compared to using tapes to film / CR traditional formats of 35x43 cm.
- Single image obtaining speed up to 30 images per second.
- Integration into hospital information network.
- Reduction of the dose load significantly for all types of research.
- Instant imaging.
- High capacity.



Ares RC Flat Panel

Remote-controlled X-ray system

- **Ares RC** 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** offers efficient execution of radiographic and tomographic projections in any positions. Rapid and complete SFD with a comprehensive program of charger compartments and retractable grid. The tabletop tilting from the vertical position to 30° or 90° allows the execution of any routine and special studies. Easy access and comfortable patient positioning are ensured by all versions especially by the configurations provided with the adjustable-height tabletop. High frequency generators ensure advanced quality performance in any application field. They are complete with straightforward and powerful anatomical programming. The imaging devices are available in a wide range including advanced image intensifiers and high-performance TV cameras. The digital imaging systems are able to meet most demanding requests for utmost image quality, dose reduction, greater efficiency and full DICOM connectivity.
- **Ares D**, digital systems combining the highest image quality with an unmatched dose reduction: the top solution for both standard dynamic examinations and angiographic procedures. The features of Ares D systems are further enhanced by a comprehensive series of post-processing functions and full DICOM connectivity and represent the ideal combination with ARES remote controlled tables and generators.
- **Ares D**, available also with DSA functionality, uses a 1024x1024x12bit CCD digital camera, allowing acquisition of up to 30 images per second in digital fluoroscopy and up to 15 images per second in digital fluorography.
- Image optimization is obtained automatically through specific Look Up Tables customizable by user: resulting unmatched quality ensures exceptional diagnostic accuracy in all gastroenterology, urology, arteriography and flebography exams and in all angiographic procedures such as brain, lungs, coronaries or legs.



Ares RAD

Universal X-Ray unit



- X-ray unit for 2 workspaces (radiographic table and wall bucky stand) can be equipped with a linear tomography option, but can be shipped without it.
- The unit consists of:
 - An X-ray table with a deck moving in 4 directions, charger format: 13x18 to 35x43. X-ray tube rotation $\pm 180^\circ$. Angles of tomography: 8° , 20° , 30° , 40° . Layer width selection: 0 to 25 cm. The table can be equipped with an elevator.
 - Wall bucky stand (charger format up to 35 x 43, vertical movement range 395 - 1950 mm from the floor), charger holder device has a 90° degree tilt angle (horizontal position) and -20° for radiography in special projections.
 - High-frequency X-ray generator for radiography 32 or 50 kW. Anatomical programming parameters of exposure. Exposure time: 1 msec to 6.3 sec.
 - X-ray tube with rotary bifocal anode (focal spot of 0.6 / 1.2 mm, 3000 / 9000 rpm), maximum voltage 150 kV.

Ares P

Universal X-Ray unit

- Ares P can be used in trauma units and orthopedics, emergency surgery and polyclinic network. The device is ideal for initial surveys (emergency medicine) and all major radiographic studies.
- Allows conducting surveys of these loci: skull, skeleton, chest, abdomen.
- Allows patient surveys in any position.
- Easy to install and use, very little time required for installation, start-up and training.
- Compact - required area of the premises for installation is 14 m.
- Cost effective - at a modest price, it allows the doctor is able to perform more than 90% of possibly required radiographic studies.
- In conjunction with the radiolucent table-trolley (stretcher), it is functionally similar to a unit for 2 workspaces.
- **Ares P 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.



Mobile X-Ray units

Ares MB / MC

Mobile X-Ray unit



- The Ares MB unit, which has been designed and constructed with an innovative design, has notably reduced dimensions and weight compared with other machines in the same category.
- Its X-ray generator with double focus rotating anode X-Ray Tube Head allows the performance of a wide range of exams.
- The X-ray generators inverter, thanks to the high operating frequency and to the optimum efficiency, shows an almost continuous output voltage (ripple $\leq 3\%$ at the maximum power). The X-ray unit, thanks to a capacitors bank for energy storage, can be connected to every standard 230 V AC supply mains, even where the line resistance is not the best.
- The highly ergonomic Touch Screen control panel offers excellent supervision of all parameters and possible regulations. Moreover, the microprocessor control unit provides ease of use (topped by the possibility of saving up to 600 pre-programmed anatomical techniques with an alphanumeric keyboard in the Touch Screen) and high reliability.

- Unit transport is facilitated in even the hardest conditions by features such as the blocking system of the arm/X-Ray Tube Head assembly when the arm is retracted and by the convenient tilting device, to overtake small obstacles. The unusual design, and the handling possibilities allow easy positioning underneath any patients bed with precise movements.
- The brake system, to be activated by means of the relevant pedal, allows safe stationing and stability during exposure operations.
- The vast capability of movement and vertical positioning of the arm and the X-ray assembly rotation allow solving any problems related to the positioning of the X-ray source and therefore of the X-ray beam incidence. These movements are also made easier and safer by comfortable handles and mechanical devices with clutches.
- Finally, the casing of the electronic parts has been designed to allow easy and immediate access during unit maintenance.



Ares MR

Mobile X-ray unit with C-arm



- C-arm unit ARES MR S/R is easy to handle, position and use, and is especially well-suited for orthopaedic, traumatological, abdominal and urological applications.
- **The radiological techniques available in the most complete version are:**
 - Continuous fluoroscopy.
 - Pulsed fluorography.
 - One Shot fluoroscopy.
 - High dose (boosted) fluoroscopy.
 - Low dose fluoroscopy.
 - Radiography with cassette.
- In its basic version, the unit consists of a C-arm stand, a mobile base on wheels, with a rack on it holding the low voltage electronic components of the unit, and a C arm (arch) carrying the X-Ray Tube Head and image intensifier with a TV camera. The control panel for the operating functions is housed in the top part of the rack.

- The arch can be positioned at different heights, rotated around the horizontal axis of the support arm, moved along this and also be suitably angled by a rotation around the axis of the vertical column so that it can take up all the positions useful for radiosopic examinations during surgical operations.
- The unit is moved by pushing it and, thanks to a wheel positioning system, can be moved easily both in narrow and crowded places and can carry out small precise movements in the directions needed to position the stand. The wheel positioning system also has a stand locking feature.
- The unit is supplied with a 40 kHz RX generator with either a 120 kV rotating anode tube or a 110 kV stationary one.
- 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).
- The mobile "C" arm unit is completed with a display station, fitted with wheels with locking brakes, where the power supply devices are housed, which can be released by means of an emergency pushbutton. Inside it there is also the Image Processor Unit for digitally processing of the images which are shown to the user on either one or two high resolution monitors, according to the configuration selected.



Ares MR Angio

Mobile X-ray unit with C-arm

High image quality and compact design. Extensive image processing ability and user-friendly interface ensures quick learning curve and powerful diagnostic abilities. The unit is equipped with a high-definition digital system primarily suited for angiography, but very useful in routine radiology too.

- 2 monochrome LCD-TFT monitors between 18", 19", 20", and 21", 1280x1024 pixels x 8 bit
- Third LCD-TFT colour monitor, 17" (1280x1024 pixels), Touch screen type with operating software of all console commands (optional).
- DICOM 3 Protocol to transfer the images and relative data over the network, fitted with CD-Rom/DVD Burner, DICOM Print Interface, DICOM work list.
- Patient radiation dose measuring device (DAP chamber) with indication of the value on the control panel display (optional).
- Infrared remote control device for remote control of main ARES MR options and for digital memory.
- Digital thermic printer (optional).
- Laser localiser for centring the anatomical area to be examined (optional).
- Real-time DSA with automatic/manual masking.
- Full DSA:
 - Max opacity modality.
 - Land marking to display the subtraction mask with variable percentage.
 - Road mapping.
 - Landscape.
 - Pixel Shifting.



Ares MR Cardio

Mobile X-ray unit with C-arm

Unique mobile X-ray unit, intended for angiographic scanning in cardiology. Optimal for multi-field hospitals and medical centers seeking to enhance their diagnostic capacity in cardiological field. Cardiological programs:

- Localization and severity estimation for coronary artery lesions.
- Left ventricle ejection fraction estimation.
- Quantified estimation of left ventricular wall contractility.
- Routine angiography and radiology package.
- Real-time image processing.
- Anatomical programming.
- DICOM integration.





MS Westfalia GmbH

MS Westfalia GmbH (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, equipment for cosmetology and physical therapy. MS Westfalia GmbH offers a full spectrum of services linked with our equipment:

- Our specialists will aid you by providing consulting and planning services, designing professional integrated solutions for various types of medical equipment and premises.
- Competent and highly professional service engineers will install your equipment and perform its maintenance.
- Our dedicated logistical service will deliver your purchase from our German facilities to you wherever you are.
- Skilled trainers will brief your personnel to take full advantage of medical equipment you purchase from us.

MS Westfalia GmbH produces:

- Cosmetology Equipment (home photoepilators).
- ENT Equipment (ENT units).
- Modular Cleanrooms (Wall systems, Ceiling systems, Door systems, Slide gate systems, Accessories).
- Physical Therapy.
- X-Ray Equipment (Stationary X-Ray units, Mobile X-Ray units).

