

TECHNICAL DATA SHEET

Electromagnetic Extracorporeal Shock Wave Lithotripter YSESW-6X

Product advantage

I. Color LCD touch screen

1. 7-inch mobile bedside color LCD touch screen;
2. 10-inch true color LCD touch screen for the main console, double screen synchronous display;
3. 19 inch high-resolution medical LCD;
4. 19 inch LCD computer display;
5. Operation station with emergency switch, intercom function, and foot switch.

II. ARM intelligent embedded control system.

ARM control system is to install a micro-computer in the lithotripter. Our company uses the newest embedded control system and the advanced ARM processor. Rather than other company uses Monolithic integrated circuit or IC, separating components such backward technology control system, causing high-pressure table (energy) displays not stable; Unable to realize the self-diagnosis function; High failure rate; Components easily damaged and poor stability, etc..

Embedded control system has the advantage of making the device more intelligent, many of the actions we can to assist through the computer. Advantages:

1. Triggering counting adopts decrement count down automatic stop triggering. (It helps doctor to work efficiently)
2. High-pressure table displays stable. (It helps good treatment effect)
3. Automatically tracking voltage, automatic voltage regulator. (Safe and efficient)
4. Automatically displaying the location of the malfunction. (Easy maintenance)

III. Technology forefront treatment bed and host

1. Two C-arms work together, with ultrasound probe multi-angle movement to make an easy location of stones.
2. C-arm swing angle: $-8^{\circ} \sim 30^{\circ}$;
3. Small C-arm (with shock wave device): Slide angle Range along the circular movement 45° ;
4. Electric control treatment bed can be X, Y, Z three directions of movement;
5. Treatment bed can be used independently as urological surgical bed.

IV. X-ray positioning system

1. Italy IMD high frequency integrated X-ray generator;
2. High-resolution 9" Image intensifier;
3. High-resolution 1 million pixel CCD camera.

V. Accurate and efficient shock wave

1. Treatment depth: 110mm -150mm (standard 130mm, optional 110mm, 120mm, 150mm)

2. The shock wave source has an automatic vacuum pumping system, automatic water inflow, water drainage, and automatic water circulation.
3. Whole shock wave device including the ultrasound probe has multi-angle motion for easier locating stones.
4. Ultrasound probe automatic moving range: 0-100mm

Product technical parameters

I. Name of machine: Electromagnetic extracorporeal shock wave lithotripter

II. Positioning method: Double localization with X-ray and ultrasonic B.

III. Principles: Electromagnetic

III. Application: Efficient electromagnetic shock wave source, mainly for kidney stones, lithotripsy of ureteral calculi and bladder stones

IV. Technical parameters:

(I). Mature shock wave generator device:

- 1) Treatment voltage: 10-18KV continuously adjustable
- 2) Shock wave energy stepless adjustable: 0.3-2HZ;
- 3) The high-voltage discharge capacitor discharge: 50-162J
2. Focus shock pressure peak: 6MPa~30MPa
3. Focal shock wave pressure field parameters: Pulse front edge $\leq$ 0.5S; pulse width $\leq$ 1S
4. Focus range: radial $\pm$ 7mm, axial 45mm (to the direction of shock wave), 50mm (away from the direction of shock wave)
5. Treatment depth: 130mm
6. Automatically vacuum functions, vacuum degree range: -0.08 ~ -0.06mpa
7. Shock wave device, high voltage switch, HV capacitance and other spare parts can be independently replaced, low cost of after sales service.

(II) X-ray image system

1. Italy IMD high frequency integrated X-ray generator

- 1) X-ray generator using a voltage: 110KV
- 2) X-ray high voltage generator:80mA
- 3) Maximum power: 3.5KW
- 4) X-ray generator using a current:0-5mA

(III)The positioning system

1. X-ray Positioning System

- 1)High-resolution 9" image intensifier: $\geq$ 16LP/cm, High definition image display
- 2) High-definition 1 million pixel CCD camera, resolution: 1392 $\times$ 1040

a. Gigabit LAN card

b. Image processing computer (Supports vision perspective image storage, freeze function, Image playback function, print cases and image)

2. Ultrasonic B positioning system

- 1). Ultrasound probe multi-angle movement.
- 2). Linear and circular movement of the probe towards/ around the focal point, positioning error $\leq$ 3mm
- 3). Error of distance measurement between the probe surface and the second focal point is $\leq\pm$ 1mm
- 4). Pressure pulse focus and target marking spatial distance deviation of corresponding points $\leq$ 3mm

5). Minimum displacement of the positioning device in each moving direction $\leq 1\text{mm}$

6). Electric probe feeding range: 0-100mm

(IV) Operation control system

1. Equipped with 10-inch color LCD touch screen on the outdoor workstation, intercom function, which can be synchronous display with the bedside 7-inch monitor in the radiation room;

2. Bedside mobile 7-inch color LCD touch screen, display synchronized with the main console

3. 19-inch high-definition medical LCD display, resolution 1024 X 1280

4. 19-inch LCD computer monitors (case management system)

5. Automatically displays the fault location

6. Automatically exhaust, temperature protection, automatic water circulation

(V) The treatment bed and host

1. Treatment bed load: 180kg

2. Treatment bed can be used portable mobile multifunctional surgery bed, configurable urological surgery accessories for general urological surgery

3. Big C-arm swing angle range : $-8^{\circ} \sim 30^{\circ}$

4. Small C-arm (with shock wave system) sliding angle range along the arc slide: 45°

5. Electric control treatment bed can be X, Y, Z three directions of movement: Lateral movement: 0-100mm; Longitudinal movement: 0-100mm; Lifting movement: 0-140 mm

(VI) Power supply parameters

1. Power phase: Single phase

2. Power supply voltage: AC 220V $\pm 10\%$

3. Power frequency: 50Hz $\pm 1\text{Hz}$

4. Maximum power: 3000VA

5. Water requirements: distilled or purified water

6. Space requirements: Operation room $\geq 2.5\text{m} \times 5\text{m} \times 2.5\text{m}$, Treatment Room $\geq 3.5\text{m} \times 5\text{m} \times 2.5\text{m}$

V. Unique advantages of equipment:

1. ★ Embedded X-ray positioning, X ray along the shock wave source axis through the concentric; (Certificate approved)

2. ★ The X-ray C-arm focus around the shock wave source of circular motion with cross positioning, to make the stone positioning more directly, more accurate;

3. ★ The whole machine-embedded ARM intelligent control system, true color LCD touch screen.

a) ★ Triggering counting adopts decrement count down automatic stop triggering. (Certificate approved)

b) ★ High-pressure table displays stable. (Certificate approved)

c) ★ Automatically tracking voltage, automatic voltage regulator. (Certificate approved)

4. ★ Automatic display machine fault location. (Certificate approved)

YSESW-6X Product configuration list

Spare parts

Panama | Central America | Caribbean | CARICOM

Information from the authorized catalog. Confirm configuration, accessories and documentation in the quotation.

Assisted translation: review the manufacturer specifications before purchasing.