



## **Notice Inviting e-Tender**

**West Bengal Medical Services Corporation Limited**

**Swasthya Sathi**

**GN-29, Salt Lake, Sector-V**

**Kolkata-700091**

Phone No (033) 40340307/320

E mail: procurement@wbmsc.gov.in

**Supply and Commissioning of 01(one) C-Arm Fluroscope for department of Orthopaedics at  
Medical college & Hospital**

(Submission of Bid through *online*)

**Bid Reference No.: WBMSCL/NIT-624/2025**

**Dated-19.07.2025**

### **AMENDMENT-I I**

## **REVISED Technical Specification Of C-Arm Fluroscope Machine**

The system should have the below mentioned specification:

**1. Flat panel detector**

- a) Receptor type should be of Amorphous Silicon technology
- b) Conversation screen should be of CsI
- c) FPD with 21 X 21 cm size or more should be provided
- d) Image matrix should be 1K X 1K or more
- e) Pixel pitch should be **154 µm** or less
- f) ADC conversation should be 16 bit or more

**2. C-ARM STAND:**

- a) It should be ruggedly built and should be of good design
- b) It should have 1 or 2 separate steering for controlling back and front wheel movements

c) It should also have the below mentioned movements.

- Horizontal travel should be minimum 200 mm
- Orbital movement should be above 130° or more
- Panning movement should be  $\pm 12.5^\circ$
- Vertical movement should be motorized of 400 mm
- Focus to I.I distance should be 900 mm
- C-Arm rotation should be  $\pm 180^\circ$  (Preferably  $\pm 360^\circ$ )

### 3. MONITORS:

- a) Medical grade monitor minimum 32 inches more on trolley – 1 No.
- b) The monitor trolley should be provided for mounting 2 monitors and should have 2 shelf for keeping memory and stabilizer.

### 4. GENERATOR:

- a) It should be microprocessor controlled digital system with display.
- b) It should be of high frequency with output of minimum 6 KW and frequency of 100 KHz.
- c) The KV should be from 40 to 110 KV.
- d) The fluoroscopic mA should be from 0.3 to 8 mA or wider.
- e) The system should have fluoroscopy mode like
  - Manual Fluoro mode and Continuous Fluoro mode.
  - Pulsed fluoro mode with facility to select time interval between the pulses from 1 pps to 10 pps or more
  - Auto Dose Rate Control in fluoroscopy mode by which mA & KV should be set automatically as per the thickness of the organ.
  - Manual KV selection during fluoroscopy also should be available.
  - Boost fluoroscopy mode (optional) / High Definition Fluoroscopy
- f) The digital fluoroscopic timer should be incorporated with arrangement of auto cut off of exposure after 300 secs.
- g) The radiographic mAs range should be from 20 to 30 mAs or more
- h) The X-ray tube should be dual focus rotating anode. The focal spot of the tube should be

1) Small: 0.3mm x 0.3mm

2) Large: 0.6 mm x 0.6 mm

It should have mono block / **anode** heat storage capacity of 200 KHU or more. It should also have inherent filtration of 0.5mm or more Al eq.

- i) The system should have backlit LCD display (**13 inch or more**) of fluoro mA, KV, timer & radiography mAs should be provided
- j) The reversal, image rotation, functions should be operatable either from control panel or with a remote control.
- k) Memory functions like store recall/image transfer should be operatable from control panel as well as from memory unit.
- l) There should be independent selection of mA and KV & mAs.
- m) The control should have indicator for power, Overload, X-Ray & Tube heating
- n) The system should be upgradable to latest functions

#### **5. IMAGE MEMORY:**

- a) Digital Image Processing & Memory system with PC or a USB Drive.
- b) The System should have DVD recording facility as externally or internally.
- c) It should have **100000** images
- d) It should have at least **100000** permanent images storage capacity
- e) It should have image integration function to reduce the image noise
- f) Should be capable of copying images to Pen Drive.

#### **ESSENTIAL ACCESSORIES:**

- a) Lead aprons (thickness 0.35 mm), Thyroid Shield, Lead Goggles (**12 nos each**)
- b) Lead apron stand – 03 Nos. & for each stand 4 nos. Hanger should be supplied

6. Should be AERB approved

7. The system should be DICOM compatible.

8. **The bidder should submit valid CDSCO Certificate/Registration/License for both the manufacturer(s) and importer(s) as applicable.**