



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 two (2) C-ARM machines for Dept of Trauma Care Centre
OT at IPGME&R-SSKM Hospital

(Submission of Bid through *online*)

Bid Reference No.: WBMSCL/NIT-362/2025

Dated-06.05.2025

AMENDMENT-I

REVISED Technical Specification

C-ARM Machine

The system should have the below mentioned specification:

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 **205** µm or less
- f) ADC conversation should be 16 bit or more

1. 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 $\pm 360^\circ$)

2. MONITORS:

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

3. GENERATOR:

- a) It should be microprocessor controlled digital system with display.
- b) It should be of high frequency with output of minimum 5 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 20 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 25 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 mA range should be from 20 to 30 mA or more
- h) The X-ray tube should be dual focus **rotating** anode. The focal spot of the tube should be

1) **Small: 0.3 mm x 0.3mm**

2) **Large: 0.6 mm x 0.6 mm or less**

It should have mono block / tube housing heat storage capacity of **700** KHU or more. It should also have inherent filtration of 0.5 mm or more Al eq.

- i) The system should have **touch screen** 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

4. 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 100 images
- d) It should have at least 100 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 (8 nos each)
- b) Lead apron stand – 03 Nos. & for each stand 4 nos. Hanger should be supplied
- c) Servo stabilizer -1

- 5. Should be AERB approved

6. The system should be DICOM compatible.
7. The bidder should submit valid CDSCO Certificate/Registration/License for both the manufacturer(s) and importer(s) as applicable.