



**GOVERNMENT OF WEST BENGAL  
OFFICE OF THE PRINCIPAL  
DEBEN MAHATA GOVERNMENT MEDICAL COLLEGE & HOSPITAL**

Vill.:Hatuara, P.O.:Vivekananda Nagar, P.S.:Purulia Muffasil, PIN: 723 147

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Memo No: DMGMCH /PRL/

Dated: June , 2021

**CORRIGENDUM ORDER**

In pursuance of e-tender published vide Memo No. DMGMCH/PRL/604 dated 15.06.2021 & the pre bid meeting held on 23.06.2021 the terms & conditions of the Tender will have the following:

**Terms & conditions of the tender:**

1. Point no. 1. a) to be read as 'Only those suppliers (having valid License & experienced in Government supplies for at least 3 years will be eligible'.
2. Point no. 1. b) to be read as ' Only those Firms who have experience in Surgical Supplies in Govt. Organization or Semi-govt. or Govt. undertakings [Credential Certificate(s) against the order copy should be uploaded]'

**The modified specification of C-Arm image intensifier:**

Microprocessor controlled C- arm machine should provide the excellent image quality at low radiation with the following specification

**A) IMAGE INTENSIFIER:**

- Image Intensifying Tube: 9 Inches, Triple Field.
- Camera: High Resolution camera.
- Monitors: Two nos. 19 Medical display monitors mounted on modular trolley.

**3) C- ARM MOVEMENTS:**

1. Rotation: +108 Degrees or more
2. Motorized Up/down: 400mm or more
3. Horizontal Travel: 200 mm or more
4. Arc Orbital Movement: 120 Degrees or more
5. Wig Wag=12.5 Degrees.
6. Source to Image distance should be more than 900mm
7. Depth of C should be at least 550mm

**4) X-RAY GENERATOR:**

1. High Frequency (50 KHz) or more
2. Output power should be 3.5 KW or more
3. Fluoro & Red. K v 40 to 100 KV
4. Radiographic mA: 60mA or more
5. Pulse Fluoroscopic mA (Average):-[Should be mentioned in AERB Certificate]
  - Up to 3.5 mA or more (Normal Mode)
  - Up to 8 mA or more (HD/Boost Fluoro mode)



### **X-RAY TUBE & COLLIMATOR:**

- Monoblock tube head having dual focus rotating anode or stationary anode - X-Ray tube of focal spot 0.3mm (small focus) & 0.6mm (large focus) should be provided.
- Anode Heat Storage capacity should be 200 HU or more.
- Iris with preview Collimator and Full Parallel shutter collimator should be provided.
- Laser CENTRING Cross hair laser centering device should be provided.

#### **E) CONTROL: Control should have the following:**

A very compact, soft touch control panel (APR) with L.C.D display on which KV, fluoro mA, Radiography mAs, Fluoro time, I.I Zoom, error interlocks for KV, filament and thermal overload are displayed. Console panel has following functions and indications.

- Machine ON/OFF Switch.
- I.I magnification ( I.I field) selection switch.
- Fluoro and Radio mode selection.
- Fluoroscopy timer (Five minute cumulative timer with buzzer that activates after the completion of 300 seconds of exposure to reinitiate the exposure rest switch is provided).
- ABS ( Automatic brightness stabilization) selection for hand free operation-also known as ADR
- KV and mAs increase and decrease switches.
- X-Ray ON switch with indicator.
- Switches for up/down movement of C on both side of Panel
- Image rotation & Flip from control Panel

#### **F) MEMORY SYSTEM : should include the following:**

##### **Standard features detail**

Dedicated PC based Image acquisition software with Image storage capacity of >50,000 Frames.

Image acquisition, processing & storage in 1 K 1 K Matrix

##### **Operating Modes**

- Fluoroscopy
- Boost Fluoro/Cine

##### **Pre - Processing Features**

- Fluoroscopy facility with Frame rate up to 30 fps for fluoro & cine modes.
- Cine loops storage up to 150 frames (Multiple cine Loops storage).
- Patient data entry & Patient work list. Emergency Patient entry
- Last Image HOLD facility
- Pre-programming of different imaging parameters for different operating modes, as per procedure & as per user.
- Frame averaging (Recursive) for smoothing of images real time up to 16 frames.
- DICIM 3.0 Version



- Metal Compensated ABS

#### **Post processing features.**

- Image reversal-Left to Right & Top to Bottom
- Image rotation Clock wise & antic clock wise
- Window width (WW) & Window level (WL) adjustment for brightness & contrast.
- Dynamic Zoom with pan
- Image Invert/ Negative Image
- Frame by frame review of Cine loops
- Copy to 2<sup>nd</sup> monitor
- Electronic Collimator

#### **Connectivity & storage Features**

- Storage of Images on CD/DVD with inbuilt DICOM viewer software enables to view images on any PC.
- DICOM 3.0 ready to connect with any DICOM 3.0 modality (like PACS, RIS/HIS/DICOM Printer)
- LAN connectivity to transfer the image to another system.

#### **G) Power requirement:**

- The unit should be operable on Single Phase 230 V = 10% AC, 50 Hz
- Suitable rating voltage stabilizer should be provided.

#### **1) OTHER REQUIREMENTS:**

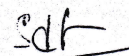
- The company should be ISO certified company.
- The quoted model should be European CE Certified/ Indian CE with notified Body No.
- The unit should be approved by AERB.
- The company should have a Service center in State.
- The company should have proven track record in Govt. Sector.

#### **ACCESSORY THINGS REQUIREMENTS:**

1. Lead Jacket-15 No.
2. Lead Goggles - 15 No
3. Thyroid Shield-15
4. Lead Jackets Stands

#### **Warranty Period :**

- The warranty period of C-Arm Image Intensifier should preferably 3 years from purchase.



**Principal**

**Deben Mahata Government Medical College & Hospital  
Purulia**

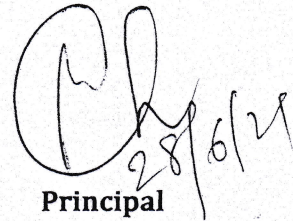


Memo No: DMGMCH /PRL/ 654/1 (4)

Dated: June 28 2021

Copy for information and necessary action to:

1. Medical Superintendent cum Vice Principal, Deben Mahata Government Medical College & Hospital, Purulia
2. The IT Cell, Swasthya Bhawan, Kol-91 for uploading this tender notice in the official website of Dept. of Health & Family Welfare
- ✓ 3. Website, Deben Mahata Government Medical College & Hospital, Purulia
4. Guard/Office File



Principal

Deben Mahata Government Medical College & Hospital

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Hatwara, Purulia