

CLIENT NAME:

**TAPAN MUKESHBHAI PATEL
MEMORIAL HOSPITAL ,
MEDICAL COLLEGE AND
RESEARCH CENTER,
SHIRPUR**

RADIOLOGY TENDER

TENDER DOCUMENT:

SVKM/TMPMH/C-ARM/006

SECTION 2 – SPECIFICATIONS

1. C-ARM

C-Arm system for application in all Radiology Interventional procedures, Orthopedics, Neurological, Urological, Surgical procedures and all other surgical applications. Mobile Surgical Image Intensifier TV system with C-arm for Fluoroscopy and cassette exposure with the following specification. High frequency generator with automatic power line matching adaptation Motor-driven collimation system with iris diaphragm.

- **Generator:** The X-ray generator of 2.5 kW Capacity, High Frequency wave forms with 16.5 KHZ inverter frequency, with single tank construction.
- **Exposure Voltage range:** 40 to 110KV or more
- **Fluoroscopy ma Range:** 0.5 to 7 mA.
- **Cassette exposure:** 13 - 63 mA ; 40 – 100 kV upto 200mAs.
- **X Ray tube:** Stationary anode with focal spot size of 0.5 mm / 1.5mm with the heat storage capacity of the tube is 35.5 kJ.
- **Fluoroscopy Duration:** X-Ray tube should with stand longer fluoroscopy continuously for 30 Min.
- **Collimation system:** Iris controlled Concentric Collimation.
- **Image Intensifier:** Metal-Enamel Construction with fine detail, high quality input screen and high resolution output screen with Scattered light trap. Nominal input Diameter 23cm (9") Format Change over 23/15cm II tube offered with high resolution Grid 40 lp/cm 8:1. CCD sensor with high resolution TV Standard 625 lines at 50HZ image rotation Continuous ± 220 deg or more.
- **TV Monitor:** Two no's of at least 15" TFT displays for live and reference image display High-contrast, anti-glare TFT displays for live and reference image display in 256 gray scales. Resolution 1024 x 1024 pixels. Horizontal and vertical viewing angles of 170° each. Luminance max. 550cd/cm²
- **Digital Image System & Storage Capacity:** For disk storage of 4 images, 1024 X 1024 pixel memory matrix.
- **Operating Modes:** Radiography and fluoroscopy.
- **Image Processing:** 1024 X 1024 with 8 bits.
- **C- Arm Movements:** Orbital Movement - 125° (-35 to +90°), Angulation ± 190 deg Horizontal Travel 20 cm, C Arm Depth. Min 63.5 cm. Swivel range $\pm 12.5^\circ$, Vertical Travel Motorized 40 cm, Focus to II distance mm. 86cm.
- **Power requirement:** Single phase 230V, $\pm 10\%$ 50HZ.
- System to be offered with:
 - Cassette holder with 2 nos.
 - 1 set Sterile Covers for C-arm, X-ray tube and Image intensifier.
- Systems have AERB approval certificate.