

300mA X ray machine

X-RAY GENERATOR

1. Type: High Frequency X ray Generator
2. Max KVp : 125
3. Max mA: 300
4. Should have 300 mA at 100KVp.

X-RAY TUBE

1. Type: Rotating anode
2. Focal spot: Dual 1mm x1mm and 2mm x 2mm
3. Anode heat capacity : 115KHU
4. Anode speed: 2800 RPM at 50 Hz.

RADIOGRAPHY

1. KV range : 40 – 125 at 1KV step
2. mA range : Small focus - 80 to 160 mA
3. Large focus- 160 to 300 mA

CONTROL PANEL

1. Digital display of all radiographic parameters
2. KV/mAs increase/Decrease .
3. Should have exposure timer..
4. Automatic tube over load protection.
5. Automatic voltage compensator.

MECHANICAL SPECIFICATIONS

1. Floor to ceiling tube stand

2. Fully counter balanced
3. Easy to move and handle
4. Light beam diaphragm collimator.
5. One pair of high voltage cables at least 6 meters long.
6. Tube head should be rotated 360 deg.
7. Extendable hand switch with cable for x-ray exposure.

TABLE SPECIFICATION

1. The table should be horizontal type
2. Table top should be radiolucent with negligible x-ray absorption, stain free, break resistant and water proof.
3. Bucky should be movable grid type.
4. Grid should be aluminum interspaced with minimum ratio of 6:1 and 60 lines/inches.
5. Bucky should travel the entire length of the table.
6. Cassette tray should be of stainless steel, auto centering of cassette with cassette lock and should be capable to accommodate cassettes of all sizes as mentioned in CR system.
7. Compression band, hand grip, foot rest and foot step should be provided.

FEATURES

1. The quoted model and tube should be AERB type approved for usage up to 300mA. Relevant copies of the certificate should be attached with the bid.

STANDARD ACCESSORIES

1. Three fold X-ray protection barrier.
2. Lead apron 0.5mm lead equivalence with thyroid guard – 1 no.
3. Channel type hanger each size 5 nos.

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5. Should be supplied with chest stand and cone for skull x-rays.

POWER SUPPLY REQUIREMENTS

380 to 440Vac, Three phase, 50/60 Hz.

SPECIFICATION OF LEAD APRON

1. Should be AERB approved.
2. Should be light weight 1mm lead equivalent.
3. Should be hook and loop type (Velcro).
4. Should be supplied along with thyroid guard.

BARRIER.

1. Should be a three fold mobile lead protective barrier.
2. Should be mounted on heavy duty casters.
3. Should have 1.5mm thick lead equivalence.
4. Should have a viewing window of 1.5 mm thick lead equivalence.
5. The centre part should have 3 feet width and 6 feet height. The sides should be 1.5 feet width and 6 feet height.

Turnkey:-

Proper earthing shall be provided by the firm at the site.

Radiation Protection Accessories to be provided with X ray machines (Light Weight):

1. Lead Apron- 2 nos
2. Lead Gloves- 2 pairs
3. Lead goggles- 2 pairs
4. Lead Stand- 1 nos.

Lead-lining of the X ray room Doors and other modifications in rooms as per AERB norms as required at the site of installation.