

500MA X-RAY MACHINE

Radiography system : 500mA

Standard composition

1. 40kW Generator or more – High Frequency (20KHz or more)
2. Floor mounted tube support
3. Multi leaf collimator
4. X-ray tube with 50kW rating
5. Bucky table top.
6. It should have automatic exposure control device.
7. Exposure time should be 0.001 sec to 5 secs

X-ray High voltage generator

Generator high frequency inverter system.

Rating atleast 50kW or higher .

Radiography tube voltage : 40 – 125 kV at 1 kV step

Tube current : upto 500mA at 12.5% steps.

Anatomical program memory –

User programmable – 50 Programs or more.

LED/LCD readout for parameter display.

X-ray tube

High speed rotating anode tube (9000 rpm or more)

Anode heat capacity – 200kHU or more.

Focal spot size – small focus – 0.6 mm or better.

Large focus – 1.5 mm or better

Collimator : Multileaf collimator should have halogen lamp with auto shut off.

Field lamp with automatic switch off function.

Tube support : Floor mounted tube stand

X ray table

Motorised X ray table with minimum patient capacity of 200 Kg or more.

Should be provided with bucky which can hold all standard sizes of cassettes as mentioned in

CR

system.

Vertical Bucky

Vertical Bucky with grid ratio of 10: 1

Should have valid AERB type approval and CE/FDA certificate.

Bucky should travel entire length of the table.

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.
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.
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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 a 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.