Technical Specification of X-Ray machine 500mA

S. N.	Purchaser's Specifications	Bidder's Offer
	X-Ray machine 500mA or more	
	Name of Bidder	
	Manufacturer	
	Brand	
	Type/Model	
	Country of Origin	
1	**Description of Functions**	
1.1	A general purpose X-Ray machine 500mA with output power of 40kW or more	
2	**Operational Requirements**	
2.1	It shall operate on three phase line frequency electrical supply.	
3	**System Configurations**	
3.1	500mA or more X Ray imaging system, 1unit.	
3.2	Dual Focus Rotating X Ray Tube 500mA, 1 unit	
3.3	X –Ray High Voltage Tank, 1 unit	
3.4	Floating X-Ray Table, 1 unit	
3.5	Floor to Ceiling Stand, 1 unit	
3.6	Chest Stand, 1 unit	
4	**Technical Specifications**	
4.1	**X Ray Generator:** 500mA, 125KVP, 40kW or more full wave rectified x-ray generator for radiography purpose. Should have digital display of mA, mAs, and KV Output Power: ≥ 40KW mA Range: ≥500mA KV Range: 40 to 125 KV	
4.2	**X Ray Tube:** Dual focus rotating anode X-Ray tube	
4.3	**Floor to Ceiling Stand (FC Stand):** Floor to ceiling stand and with counter balanced tube head (rotatable ± 180 degree) 360 degree rotatable; mounted on floor ceiling rails for convenient movements. Atleast 195cm, movement arrested by electromagnetic brakes	
4.4	Minimum 2 position floating table with grid, cassette tray and foot switch control suitable for x-ray examination should be provided.	
4.5	Must have X-ray exposure switch	
4.6	Should come with overload protection device for tube, HV cable and HT tank.	
4.7	Should come with tube overload and overheat protection.	
4.8	Collimator: Light beam collimator for centering and radiation protection is needed.	
4.9	High voltage cables of at least 6 meter needs to be provided.	
5	**Accessories, Spare Parts and Consumables**	
5.1	Lead Apron – 1Pc Neck Apron – 1Pc	

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5.2	All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer. Bidders must specify the quantity of every item included in their offer.	
6	**Operating Environment**	
6.1	Power supply: 350-440 VAC, 50Hz three phase supply with appropriate plug for X-ray generator and 220-240 VAC single phase 50Hz fitted with appropriate plug for other units. The power cable must be at least 3 meter.	
6.2	The system offered shall be designed to be stored to operate normally under the conditions of the purchaser's country. The conditions include power supply, climate, temperature, Humidity, etc	
6.3	Suitable Voltage Stabiliser should be supplied with the machine.	
7	**Standards & Safety Requirements**	
7.1	Must submit ISO13485: 2012 for Medical Devices	
7.2	CE (93/42 EEC Directives) or USFDA approved product certificate.	
7.3	Shall meet: -IEC 60601-1-3-part 1: General Requirements for safety- Collateral standard: General requirements for radiation protection in diagnostic Xray equipment -IEC 60601-2-7-part 2-7: particular requirements for the safety of High voltage generators of diagnostic X-ray generators.	
8	**User Training**	
8.1	Operator training should be given at the time of installation.	
8.2	On-site maintenance training to the Hospital's Engineer and clinical training / Operating training to the users.	
9	**Warranty**	
9.1	Comprehensive warranty for 2 years after installation	
10	**Maintenance Service During Warranty Period**	
10.1	During the warranty period supplier must ensure preventive maintenance and corrective/breakdown maintenance whenever required.	
11	**Installation and Commissioning**	
11.1	Supplier must accomplish proper installation & commissioning of equipment onsite.	
12	**Documentation**	
12.1	User (Operating) manual in English.	
12.4	Must submit original brochure	
12.5	Certificate of calibration and inspection from factory.	
12.6	Must submit Manufacturer's Authorization letter	

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