BIDDING DOCUMENTS

CIVIL HOSPITAL KARACHI

HEALTH DEPARTMENT

GOVERNMENT OF SINDH

Contract NO:- PD-Trauma Centre-CHK/042 (Rev) 2015-16

Supplying, Installation, Testing, Commissioning & Maintenance (during maintenance period) of **Medical Equipment** for the project "Shaheed Mohtarma Benazir Bhutto Accident, Emergency & Trauma Centre and Ancillary Services Complex at Civil Hospital Karachi"

VOLUME-II

FINANCIAL BID DOCUMENTS

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FORM OF BID

The Project Director,
Shaheed Mohtarma Benazir Bhutto,
Accident, Emergency & Trauma Centre,
And Ancillary Services Complex At,
Civil Hospital Karachi

Sub: Supplying, Installation, Testing, Commissioning and Maintenance (during maintenance period) of **Medical Equipment** for the project Shaheed Mohtarma Benazir Bhutto, Accident, Emergency & Trauma Centre and Ancillary Services Complex at Civil Hospital Karachi
Contract No. PD-Trauma Centre-CHK/042 (Rev) 2015-16

Dear Sir,

1. Having examined the Tender Documents and the site conditions for the above mentioned Project, we, the undersigned offer to Supply, Installation, Testing, Commissioning and maintenance (during maintenance period) of the whole of the said works in conformity with the said tender Documents (and Addendum if any) for the sum of under-mentioned amount on DDP basis:-

Bid Price (In Figure):	
Bid Price (In Words):	

2. The above total sum is based on the quantities shown in the Bill of Quantities and other works as mentioned in Salient Features.

3. We undertake, if our tender is accepted, to sign an agreement within 15 calendar days following receipt of letter of award in the form laid out in annexure to this Tender with such alterations and additions thereto as may be required to adopt, such Agreement to circumstances of this Tender.

4. We undertake, if our Tender is accepted, to mobilize on site within 7 calendar days of receipt of the letter of award and commence the works on the first works comprised in the contract within the time of completion specified in the Salient Features.

5. We agree to abide by the Tender for a period of 90 calendar days from the date of opening of tender and shall remain binding upon us and may be accepted at any time before the expiration of that period.

6. Unless and until a formal Agreement is prepared and executed, this Tender together with your written acceptance thereof and other relevant correspondence subsequent to the Tender shall constitute a binding Contract between us.

7. We understand that you are not bound to accept the lowest or any tender you may receive, and that your will not reimburse any expenses incurred by us in preparing and submitting the Tender or otherwise in connection with the Tender.

8. As a guarantee for the performance of the undertakings and obligations of this Tender, we submit herewith Earnest Money/Bid Security equivalent to 01% of the quoted cost in an amount Rs. _____ (Rupees _____) in form of Pay Order issued by the Bank vide No. _____ dated _____ made in your favor and made payable to you without any reference to us and valid for 90 calendar days from the date of submission of Tender.

9. The Tender Documents referred to above constitute a part of this Tender and comprise of the documents listed hereunder:

   a. Instructions to bidders.
   b. Salient Features / Terms & Condition of the Tender.
      Questionnaire / Proforma – Evaluation Criteria
   c. Form of Agreement.
   d. Scope of work / Bill of Quantities / Specification (Technical).
   e. The Addendum (if any).
   f. The Drawings (if any).

Dated this _____ day of _____ 20_____

Signature _____ in the capacity of _____ duly authorized to sign bids for and on behalf of _____

(Name of Bidder in Block Capitals)
(Seal)

Address

_____

_____

_____

Witness:

(Signature) _____

(Name) _____

Address: _____

_____

Occupation _____

BILL OF QUANTITY

Supply, Installation, Testing, Commissioning and Maintenance (during maintenance period) of **Medical Equipment** for the project Shaheed Mohtarma Benazir Bhutto, Accident, Emergency & Trauma Centre and Ancillary Services Complex at Civil Hospital Karachi

CONTRACT NO. PD-TRAUMA CENTRE-CHK/042 (REV) 2015-16

S.No	Specification	Qty	Unit	Unit Price	Total Amount
(1)	(2)	(3)	(4)	(5)	(6)
01	**Diagnostic & Therapeutic Angiography System** **Single Plane General Angiography / Vascular Interventional System for Trauma work:** • A fully digital flat panel single plane General angiography system dedicated for diagnostic & interventional and peripheral procedures with the following minimum specifications and application softwares. • The quoted model must be latest and bidder must mention the number of systems installed worldwide and in Pakistan. • The local vendor must have sold angiography equipment in the province and submit letter of satisfaction of similar general / vascular angio-systems installed by them regarding satisfactory after sales service performance from three reputable public / private centers of Sindh. This is a knockout clause.	01	Unit		

S. No.	Item details - model and specifications	Vendor should fill up this performa with verifiable references from data sheet. Please mention page number of data sheet.
1.	**POSITIONING ARM:** **Ceiling suspended arm**	
1.2	The system should be ceiling mounted with capability to do head to toe patient imaging without moving the patient	
1.3	Real time display of rotation angulations.	
1.4	Geometry: C-arm / G-arm	
1.5	RAO / LAO +/- 120 ° or more.	
1.6	Cranial / Caudal: Min. +/-45° In all detector positions	
1.7	Rotation Speed: 50°/sec or more in LAO / RAO.	
1.8	Isocentric Height: Variable / Fixed.	
1.9	Auto Positioning: Programmable auto positioning of selected.	
1.10	Angulations, (50 or more) programmable positions.)	
1.11	The control panel can be mounted at any side of the patient table.	
1.12	All the rotational / angles should be digitally displayed	

	1.13	Motorized / manual parking / rotation of the positioning arm.					
	2.	**Digital Flat Panel Detector 8 x 8 Inch**					
	2.1	Single plane C-Arm / G-Arm					
	2.2	Image matrix of 1024 x 1024 x 14 bits or more.					
	2.3	12x16 inches large field of view					
	2.4	Built in temperature stabilizer.					
	2.5	Integrated collision protection feature.					
	2.6	All other standard accessories according to this digital flat panel.					
	2.7	Dose management with floro filters					
	2.8	Pixel Size of 200 um or better.					
	3.	**Patient Support/ Table:**					
	3.1	Catheterization Table					
	3.2	Floor mounted with up/down, longitudinal and transverse movements					
	3.3	Original table from manufacturer					
	3.4	Longitudinal Stroke: 1000-1500 mm.					
	3.5	Lateral stroke: 100-300 mm					
	3.6	CPR in any table position.					
	3.7	All table side movement controls.					
	3.8	Table top should be of such construction in material and durability to accept patient's weight of not less than 150 kg plus 100 kg for resuscitation.					
	3.9	Table dimensions should be able to accommodate patients of all ages.					
	3.10	Table top should have large metal free over hang for un-obstructed imaging coverage.					
	3.11	Complete accessories should be provided including arm holder.					
	3.12	Hand grip, arm support and arm rest and positioning aids.					
	3.13	Left / right table pivoting: + / - 90 degree.					
	4.	**X-Ray Tube:**					
	4.1	Triple focus with at least 3.0 MHU or better anode heat storage.					
	4.2	Large Capacity to enable continuous heat dissipation during serial exposure. Tube power should be same as generator power i.e. 100kw.					
	4.3	Rotating anode bearing less liquid metal technology tube.					
	4.4	Focus 0.3, 0.6 and 1.0 mm or similar					
	4.5	Dose management with auto adjustment flouro-filters.					
	5.	**X-Ray Generator:**					
	5.1	Microprocessor based high frequency using fiber optic for data communication					

			between each imaging system.					
		5.2	Dedicated X-Ray generator of 100KW.					
		5.3	Radiographic rating minimum 1000mA.					
		5.4	Serial filming exposures with shortest exposure of 1ms, with automatic kV and mA control for optimum image quality.					
		5.5	The system should have capability of digital radiography and fluoroscopy.					
		5.6	Should have capability of doing digital pulsed fluoroscopy at 10/2.5/15 frames and 25/30frames per second.					
		5.7	Automatic kV, mA & pulse width regulations.					
		6.	**Digital Imaging & Acquisition / Fluoroscopy**					
		6.1	Digital system.					
		6.2	Acquisition, storage and display in 1024 x 1024 x 12 bits or more at 12.5 / 15 and 25/30 FPS and 512 x 512 at 60 FPS for pediatric work.					
		6.3	Parallel processing capability / multitasking facility.					
		6.4	Real time filtering and road map function.					
		6.5	Magnetic Disk Capacity for Storage of 100,000 images in 1024 x 1024 on the magnetic disk of main console.					
		6.6	Minimum scene length to be 10 seconds in 1024 matrix.					
		6.7	Digital pulsed fluoroscopy with 12.5 / 15 and 25 / 30 FPS in 1024 x 1024 x 10 bits or more.					
		6.8	Images to be stored on and retrieved from archival disks for possible manipulation and quantification using available software packages.					
		6.9	Rotational DSA package with 50 degrees/second minimum head end carm rotation speed					
		7.	**Monitoring System:**					
		7.3	Two monitors for live images and road mapping in the control room 18 inch or larger LCD/LED and 2 in cath room					
		7.4	All the monitors will be of Medical Graded, complied with international standards for medical monitors.					
		8.	**Recording / Archiving & Communication System:**					
		8.1	Recording / archiving system should be DICOM-3 compatible.					
		8.2	The digital images should be stored as backup on CD/DVD.					
		8.3	DICOM (send/storage, commitment, retrieve/query)					

	8.4	Ethernet connection to connect with other terminals.					
	8.5	Integrated Intercom system.					
	9.	**Software / Hardware Packages:**					
	9.1	Complete analysis package for the following vascular applications.					
	9.2	Dynamic pre and post intervention comparison with one image live and other reference.					
	9.3	Automatic loop replay after acquisition or fluoroscopy.					
	9.4	Dynamic real time pan / zoom.					
	9.5	Dynamic real time digital image processing like edge enhancement or gamma correction, noise reduction (spatial filtration.)					
	9.6	Roadmap facility					
	9.7	Simultaneous display of fluoroscopy and reference images, not only as static images but as dynamic loop.					
	9.8	Multitasking capability of recording CD in the background while acquiring new patients flouro images					
	9.9	Online image density (gray scale) correction.					
	9.10	Facility to review previous studies in the examination room from the patients old CD.					
	9.11	Automatic positioning of the C-Arm corresponding to reference image.					
	9.12	Store floro facility to store fluoroscopy.					
	9.13	Stent visualization system latest version by the company.					
	9.14	Table should have stepping top for peripheral dsa for 5 or more steps programming					
	10.	**Surgical Shadow Less Light:**					
	10.1	Ceiling suspended LED arm, for Angiographic and surgical procedures.					
	11.	**Radiation Protection:**					
	11.1	Ceiling suspended tiltable lead glass for radiation protection of operators head & neck regions and lower body parts.					
	11.2	Collision tolerant.					
	11.3	Lower body radiation protection flap.					
	12.	**Accessories of Angiography System:**					
	12.1	PHYSIOLOGICAL HEMODYNAMIC MONITORING SYSTEM: (from same manufacturer of angio system or its joint venture partner)Multichannel for 2 channels IBP, Cardiac output with thermo					

			dilution method. 12 lead ECG, and Sp02					
		12.2	Digital display of all the parameters like IBP, Heart rate, cardiac output parameters.					
		12.3	Pulse oximeter probe					
		12.4	Two invasive blood pressure transducer with disposable transducer domes.					
		12.5	Interface with angio system					
		12.6	One Complete 12 lead ECG Cable set.					
		12.7	Cardiac Output (01 No)					
		12.8	Fully programmable latest model contrast medium injectors with volume and flow control and facility of contrast medium.					
		13	**Other Accessories for Angiography Suite**					
		13.1	UPS -120 KVA or more sine wave online with battery bank to support whole system and accessories with atleast 10 minutes back up					
		13.2	Lead aprons (06)					
		13.3	Lead goggles (06)					
		13.4	Thyroid protectors (06)					
		13.5	Lead gloves (06) pairs.					
		13.6	Lead glass window of size 5’ x 2.5 feet					
		14.	**Quality & Safety Standards / Radiation Protection:**					
		14.1	Knockout clause : Main angiography system should have FDA 510K approval and MDD (CE) compliance and country of manufacturing of this unit should be USA, Europe, Japan.					
		15.						
		15.1	Training of Operator for one week at site					
		15.2	Application training on system to doctors					
		16.	**Installation & Commissioning**					
		16.1	The contracting firm will install complete system including all accessories within six months starting from date of establishing LC.					
		16.2	Manufacturer and supplier shall be responsible for rectifying with all possible speed at their own expense and manage any defect or fault in the system developing at any time during installation and commissioning period.					
		17.	**Warranty & Post Warranty Agreement & Maintenance Contract:**					
		17.1	Warranty period shall be of 3 years starting from date of commissioning, covering services and all parts including X-ray tube (unlimited exposures in 3 years), Detector, software, purchased non					

			proprietor & optional items, machine accessories like UPS, , Injector, etc. Warranty should come from the manufacturer; local agent warranty is not acceptable and vendor should submit proof of manufacturer warranty. This is a knockout clause					
		17.2	A certificate shall be produced by the manufacturer guaranteeing availability of a certified and trained engineer atleast in Karachi for atleast TEN YEARS to be immediately available on site, should any need arise.					
		17.3	Maintenance of the machine / equipment during the whole period of warranty shall be responsibility of the vendor, failing which, the vendor will have to pay down time penalty as indicated in terms and condition.					
		17.4	An annual optimal uptime of 95% is considered as acceptable level of performance. Uptime shall be defined as time available to user for doing data acquisition and processing during working hours of six days a week throughout the year.					
		17.5	Compatible ultrasound/Doppler with linear probe for identification and collaboration will be included.					
		17.6	Manufacturer / supplier will guarantee the availability of spare parts and accessories for the system for at least ten years.					
		17.7	Manufacturer / supplier shall check system performance during and after every two months. Planned Preventive repair and maintenance time will not be considered as downtime.					
		17.8	Vendor will mention the rate of service charges with and without parts for the complete system, after the expiry of 3 years warranty period on yearly basis along with the bid in USD					
		17.9	Manufacturer / supplier should also confirm that in event of the services costs falling or reducing in line with the manufacturer policy worldwide due to technical innovations or other reviews, they will reduce the maintenance cost accordingly					
		17.10	Up-gradation of computing system / FMIS should be carried out as available during warranty period as desired by end user for console and workstation and after warranty within the maintenance					

		agreement cost					

	17.11 Up-gradation of computing system / FMIS should be carried out as available during warranty period as desired by end user for console and workstation and after warranty within the maintenance agreement cost **18. Optional Items:** 18.1 System Up gradation to higher version should be indicated if provided by manufacturer 18.2 Any additional option available with each manufacturer may be offered as optional **19. Cost** 19.1 Cost on C&F basis Complete Job: Supply, Installation, Testing, Commissioning and Maintenance (during maintenance period **Country of Origin: USA, EEC, Japan or Equivalent**				
02	**<u>Hand Held Fogging Machine with Motor?Blower?Nozzle Technology</u>** • Chemicals: Liquid Capacity Output Rate Materials • 1 Hp, 120VAC, 7 • amp; 240VAC, 3.5 amp • Balanced fan, 20,000 rpm • Counter-rotating vortex design • High turbulence in nozzle shears should feed liquid into fog-sized droplets (7-30 microns VMD). Nozzle should have no small orifices and resistant to plugging. • Nozzle should be able to atomize both oil-based and water-based liquids. • Machine should be used for controlling odors, sanitizing, dis-infecting, controlling flies, mosquitoes and other insects, carpet mildew control, dust suppression, humidification, flood and fire damage restoration and other innovative applications.Particle size distribution should vary with liquid viscosity, surface tension, density and output rate. 1 gallon [4 L]?Up to 10 oz [300 ml] per minute • Power head, wand, tank - aluminum Tank gasket - Buna N?Hose - vinyl?Tubing - fuel and oil resistant vinyl Fittings should be of brass • The power head can be adjusted to up or down angles as required. • Made of durable aluminum, it's light- weight, but tough. Complete Job: Supply, Installation, Testing, Commissioning and Maintenance (during maintenance period **Country of Origin: UK, USA, Japan or Equivalent**	**10**	**Units**		
3	**<u>Skin Graft Mesher</u>** • **Heavy Duty Skin Graft Mesher complete with all accessories.** **Specifications/ Features:** • Heavy Duty made of Medical Grade Stainless Steel. • Totally a self-contained instrument to expand the skin graft. • Usable with any length piece of skin. • Non-Crushing Non-Carrier based Instrument	**02**	**Units**		

	• Meshes by pinching NOT by cutting the graft. • System shall allow to mesh any graft length without using any plastic carriers. • Capable of creating a uniform pattern and maintaining graft integrity. • Ratchet handle shall operate smoothly to provide effortless meshing. • Heavy weight base to provide stability and holding the mesher firmly in place for unassisted operations. • It shall not contain blades to eliminate the need for sharpening and reduces risk of injury. • Fitted with Hand grip/Crossbar giving an extra element of steadiness during meshing and making unit easily transportable. • Platform width: 4(1/2)" or 6 (1/2)" • Variety of Ratios:- 1:1, 2:1, 3:1, 4:1 & 6:1 Complete Job: Supply, Installation, Testing, Commissioning and Maintenance (during maintenance period **Country of Origin: UK, USA, Japan or Equivalent**				
4	**<u>Dermatome Battery Operated</u>** **Specifications** Battery operated Voltage: 2400 mAh Battery Chemistry: Li-Ion(no Memory effect) Charger for Dermatome Power supply primary: 100-240v/50HZ Charge current: 1200mA Time to charge battery: 2-3 hours approx Weight Without Battery and Motor cartridge: 700-800g Total weight: Not more than 1500g Length: up to 12 Inches Width Head Type : 4.09 Inches Height : 1.5 to 2 inches (Approximately) No Vibration and shock Cutting speed 7000 strokes/Minutes Cordless, battery operated and light weight Precise thickness of the graft from 0.0 to 1.2 mm (0.000 – 0.048") in 0.1 mm (0.008") increments. Width-reducing clamps on the dermatome head for cutting of smaller graft widths. Thickness adjustment should become fixed as required Should have powerful Li-Ion batteries Should have autoclave case **Dermatome Complete Set should Include:** **1)** Dermatome **2)** Box of 1X10 Blade **3)** Dermatome Motor **4)** Dermatome Battery **5)** Width Reducing Plates (3) **6)** Charger For Battery **7)** Three Options with Charger	**03**	**Units**		

	8) Lubricating Oil **9)** Safety Funnel **10)** Safety Hooke **11)** Operating Manual **12)** Instruction Manual **13)** Service Manual **14)** DVD of Maintenance and after care Videos **15)** Screw Driver Complete Job: Supply, Installation, Testing, Commissioning and Maintenance (during maintenance period **Country of Origin: UK, USA, Japan or Equivalent**				

GRAND TOTAL: RS. _____

GRAND TOTAL IN PAK RUPEES _____

_____

_____	_____	_____
SIGNATURE	**CONTRACTOR NAME**	**DATE & SEAL**