

# **BIDDING DOCUMENTS**

## **CIVIL HOSPITAL KARACHI**

### **HEALTH DEPARTMENT**

### **GOVERNMENT OF SINDH**

**Contract NO:- PD-Trauma Centre-CHK/041 (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**

## **SUMMARY OF CONTENTS**

<b>S.NO</b>	<b>DESCRIPTION</b>	<b>PAGE</b>
<b>1.</b>	<b>TITLE</b>	<b>01</b>
<b>2.</b>	<b>SUMMARY OF CONTENTS</b>	<b>02</b>
<b>3.</b>	<b>FORM OF BID</b>	<b>03 TO 04</b>
<b>4.</b>	<b>BILL OF QUANTITY</b>	<b>05 TO 12</b>

# **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/041 (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 you 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 1% 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/041 (REV) 2015-16**

S.No	Specification	Qty.	Unit	Unit Price	Total Amount
(1)	(2)	(3)	(4)	(5)	(6)
01	<b><u>Hand Held Doppler</u></b> <ul style="list-style-type: none"> <li>Large Display LCD or graphic for indication of heart-rate and battery status</li> <li>Superior sound quality from high-fidelity speaker</li> <li>Extended battery life</li> <li>Enhanced probe sensitivity</li> <li>Interchangeable probe capability</li> <li>User replaceable cable</li> <li>Powered by 3 AA batteries</li> <li>Each main unit comes with choice of one probe</li> <li>Full 2years warranty</li> <li>Consisting of 5 Mhz probes bi-directional</li> <li>Interchangeable probes.</li> </ul> <p>Complete Job: Supply, Installation, Testing, Commissioning and Maintenance                      (during maintenance period  <b>Country of Origin: USA, EEC, Japan or Equivalent</b></p>	01	Unit		
02	<b><u>Bedside Internal Feeding Pump</u></b> <ul style="list-style-type: none"> <li>Flow rate: 1ml/h-300ml/h</li> <li>Preset dose Volume: 0-999ml</li> <li>Indicate total volume: 0-999ml</li> <li>Flow error: 10%</li> <li>Internal battery: 9.6V <math>\pm</math> 2V</li> <li>Power: AC220V<math>\pm</math> 22V 50Hz<math>\pm</math> 1Hz</li> <li>Power Input: 13.5 VA</li> <li>Operation Temperature: -5-40 °C</li> <li>Relative Humidity: 70%</li> <li>Alarms: Flow error / Low battery / AC power error /      Preset should be finished.</li> </ul> <p>Complete Job: Supply, Installation, Testing, Commissioning and Maintenance                      (during maintenance period  <b>Country of Origin: UK, USA, Japan or Equivalent</b></p>	05	Units		

03	<b><u>Rock'N Roller (Tube Mixer)</u></b> <ul style="list-style-type: none"> <li>• Must consist 5 rollers</li> <li>• Speed 30-50 RPM</li> <li>• Rotating and rocking action.</li> <li>• Accepts stoppered cylinder-mixing vessels.</li> <li>• Can be loaded or unloaded while rollers in motion.</li> <li>• Speed at 220V/50 Hz, 30 RPM.</li> </ul> <p>Complete Job: Supply, Installation, Testing, Commissioning and Maintenance (during maintenance period)</p> <p><b>Country of Origin: USA, EEC, Japan or Equivalent</b></p>	01	Unit		
04	<b><u>Medical Plasma Freezer 86°c ultra low temperature VIP (microprocessor control DD of chamber) sliding double door Dicom Complete</u></b> <ul style="list-style-type: none"> <li>• Atleast min. 20 to 25 installtion at Karachi.</li> <li>• Capacity: 600 to 700 Litres</li> <li>• Power: 1200 W</li> <li>• Temperature Control: Microprocessor Control</li> <li>• Temperature range: -40 ~ -86 °C</li> <li>• Voltage: 220V / 50Hz, 220V / 60Hz, 120V / 60Hz</li> <li>• Shelves: 2 to 4</li> <li>• Inner Door: Single</li> <li>• Rack Quantity: 2 inch stainless steel rack 4x4</li> <li>• Box Quantity: 320</li> <li>• Interior Dimension: 760 x 630 x 1300 (WxDxH)</li> <li>• Net Weight: Approx. 300 kg</li> <li>• Gross Weight: Approx. 325 kg</li> </ul> <p>Complete Job: Supply, Installation, Testing, Commissioning and Maintenance (during maintenance period)</p> <p><b>Country of Origin: USA, EEC, Japan or Equivalent</b></p>	01	Unit		
05	<b><u>Micropipettes 10-100ul, 100- 1000ul Adjustable, 100ul, 50ul,10ul Fixed Volume</u></b> <ul style="list-style-type: none"> <li>• FDA Approved and CE mark (pindors brand or equivalent)</li> </ul> <p>Complete Job: Supply, Installation, Testing, Commissioning and Maintenance (during maintenance period)</p> <p><b>Country of Origin: USA, EEC, Japan or Equivalent</b></p>	02	Units		
06	<b><u>Pulse Oximeter with BP</u></b> <ul style="list-style-type: none"> <li>• 7" Colour Anti-glare TFT LCD Screen (234×480 pixels)</li> <li>• NIBP, Digital SPO2, PR, Lithium Battery</li> <li>• Battery operated &gt;8 hours use</li> <li>• Powerful record storage</li> <li>• Touch Screen</li> <li>• Thermal recorder (should include at least 20 roll of paper)</li> <li>• EtCO2 (sidestream)</li> <li>• Nellcor SpO2</li> <li>• Infra-Red Ear Thermometer</li> </ul>	13	Units		

	<ul style="list-style-type: none"><li>• Rolling Stand</li><li>• Wall Mount</li><li>• Size and Weight</li><li>• Size: 160×130×260mm(W×H×D)</li><li>• Weight:(2.5 kg)(Including a lithium battery)</li><li>• Display:</li><li>• Type:7” Color Anti-glare TFT LCD</li><li>• Resolution:234×480 pixels</li><li>• Power Supply</li><li>• Input voltage:AC: 100V~240V,50Hz/60Hz</li><li>• Input power:70VA</li><li>• Fuse:T1.6AL/250V,2-F 5×20mm</li><li>• Environmental Specifications</li><li>• Operating Temperature: (5~40)°C</li><li>• Humidity : =85%(noncondensing)</li><li>• Atmospheric Pressure: (860~1060) hPa</li><li>• Transportation and Storage</li><li>• Temperature: (-20~+55) °C</li><li>• Humidity : =93%(noncondensing)</li><li>• Atmospheric Pressure: (500~1060) hPa</li><li>• Standard Configuration</li><li>• NIBP,BLT digital SPO2,PR, Lithium Battery</li><li>• Micro Stream EtCO2, Nellcor SpO2, instant Infra-Red ear thermometer</li></ul> <p>Complete Job: Supply, Installation, Testing, Commissioning and Maintenance (during maintenance period)</p> <p><b>Country of Origin: China, Taiwan or Equivalent</b></p>																																							
07	<p><b><u>Surgical Instruments Sets for Open Heart (Diamond Dust)</u></b></p> <table><tr><th>S.N O</th><th>INSTRUMENT</th><th>SIZE</th><th>QUANTITY (Material should be Titanium)</th><th>QUANTITY (Material should be Stainless Steel)</th></tr><tr><td>1</td><td>Micro Needle Holders DD Curve with lock for round shape</td><td>7”</td><td>2</td><td>2</td></tr><tr><td>2</td><td>Micro Needle Holders DD Straight with lock for round shape</td><td>7”</td><td>2</td><td>2</td></tr><tr><td>3</td><td>Micro Needle Holders DD Curve with lock for round shape</td><td>8”</td><td>2</td><td>2</td></tr><tr><td>4</td><td>Micro Needle Holders DD Straight with lock for round shape</td><td>8”</td><td>2</td><td>2</td></tr><tr><td>5</td><td>Micro Needle Holders DD with lock round shape</td><td>9”</td><td></td><td>2</td></tr><tr><td>6</td><td>Micro Forceps round shape with ring Tip DD</td><td>1mm tip 7”</td><td>1</td><td>1</td></tr></table>	S.N O	INSTRUMENT	SIZE	QUANTITY (Material should be Titanium)	QUANTITY (Material should be Stainless Steel)	1	Micro Needle Holders DD Curve with lock for round shape	7”	2	2	2	Micro Needle Holders DD Straight with lock for round shape	7”	2	2	3	Micro Needle Holders DD Curve with lock for round shape	8”	2	2	4	Micro Needle Holders DD Straight with lock for round shape	8”	2	2	5	Micro Needle Holders DD with lock round shape	9”		2	6	Micro Forceps round shape with ring Tip DD	1mm tip 7”	1	1	02	Lots		
S.N O	INSTRUMENT	SIZE	QUANTITY (Material should be Titanium)	QUANTITY (Material should be Stainless Steel)																																				
1	Micro Needle Holders DD Curve with lock for round shape	7”	2	2																																				
2	Micro Needle Holders DD Straight with lock for round shape	7”	2	2																																				
3	Micro Needle Holders DD Curve with lock for round shape	8”	2	2																																				
4	Micro Needle Holders DD Straight with lock for round shape	8”	2	2																																				
5	Micro Needle Holders DD with lock round shape	9”		2																																				
6	Micro Forceps round shape with ring Tip DD	1mm tip 7”	1	1																																				

	7	Micro Scissors Fine Blade - Dissecting	8"		2								
	8	Micro Scissor Forward	45 degree 7"		2								
	9	Micro Scissor Backward	125 degree 7"		2								
	10	Micro Foceps Dia Dust - Gerald Straight serrated	7"	2	2								
	11	Micro Foceps Dia Dust - Gerald Straight serrated	8"	2	2								
	12	Vascular Bulldog Clamp	Small		1								
	13	Vascular Bulldog Clamp	Medium		2								
	14	Vascular Bulldog Clamp	Large		1								
	15	Aortic cross clamp	Small		1								
	16	Aortic cross clamp	Medium		1								
	17	Aortic cross clamp	Large		1								
	18	Side Biting Clamp	Small		1								
	19	Side Biting Clamp	Medium		1								
	20	Side Biting Clamp	Large		1								
	21	Autoclavable Instrument Box			1								
	Complete Job: Supply, Installation, Testing, Commissioning and Maintenance (during maintenance period) <b>Country of Origin: UK, USA, Europe, Japan or Equivalent</b>												
	08	<b><u>Cylinder (for Nitrous-oxide) with Flow meter &amp; Regulator</u></b> <ul style="list-style-type: none"><li>• 1620 cft pin type</li><li>• Medical Regulator</li><li>• BOC tested</li><li>• Should have opening key</li></ul> Complete Job: Supply, Installation, Testing, Commissioning and Maintenance (during maintenance period) <b>Country of Origin: USA, Europe, Japan or Equivalent</b>								50	Units		
	09	<b><u>Cylinder (for Nitrous-oxide) with Flow meter &amp; Regulator</u></b> <ul style="list-style-type: none"><li>• 16200 cft</li><li>• Medical Oxygen Regulator with convenient cylinder trolley</li><li>• BOC tested</li></ul> Complete Job: Supply, Installation, Testing, Commissioning and Maintenance (during maintenance period) <b>Country of Origin: USA, Europe, Japan or Equivalent</b>								20	Units		
	10	<b><u>Air Fluidized Bed</u></b> <ul style="list-style-type: none"><li>• Air Fluidized bed should be especially designed to prevent and to heal the conversion of tissue caused by burns, pressure sores and other exuding wounds for whole body treatment system.</li></ul>								14	Units		



<ul style="list-style-type: none"> <li>• The patient should keep floating on a mass of microspheres which are pressurized by a conditioned airflow. The surface of the microspheres should be separated from the patient by a generously proportioned filter sheet. Bed should have dehydrating property, which means that dry air is blown through the microspheres.</li> <li>• A clean environment should maintained by the unique action of the beads and the filtered airflow. To reduce bacterial growth in the beads, the airflow should be maintained at low relative humidity.</li> </ul> <p><b>Air Fluidized Bed Should Have Following Features</b></p> <ul style="list-style-type: none"> <li>• Full Body Air Fluidized Therapy system.</li> <li>• Control system with touch screen panel for easy and user friendly operation.</li> <li>• Full medical grade stainless steel tub.</li> <li>• High pH-value (9-11) of the glass beads.</li> <li>• Microspherical granulates of sodalime glass beads of 75 – 135 <math>\mu\text{m}</math> <math>\pm 2\%</math>.</li> <li>• Integrated warming and cooling system.</li> <li>• One-sided, easy to access control unit with a CPR button on one side for easy access.</li> <li>• Alarms (visual and audible) with mute function.</li> <li>• Multifilament mesh 35 micron polyester cover.</li> <li>• Temperature range adjustable from 29°-39°C, differential <math>\pm 1^\circ\text{C}</math>.</li> <li>• Variable airflow.</li> <li>• Bed should have Built-in decontamination system.</li> <li>• 2 castors with a brake.</li> <li>• Patient weight limits 135 kg or <math>\pm 5\text{kg}</math>.</li> <li>• Temperature around 40°C or lower, audible and visible alarm, fluidization should interrupt immediately.</li> <li>• Fluidization pressure adjustable.</li> <li>• Auto restart within 30 minutes after power break.</li> <li>• Temperature and pressure sensor with incorporated detection to indicate possible defects</li> <li>• Length: 2350 to 2540 mm or more</li> <li>• Width: 940 mm or more</li> </ul> <p><b>Unit should Supplied With</b></p> <ul style="list-style-type: none"> <li>• Filter Sheet</li> <li>• Air filter for condenser</li> <li>• disposable air filter</li> <li>• 50 sheet extra of Generously proportioned multifilament mesh 35 micron polyester cover with each unit</li> <li>• International and National training facilities</li> <li>• Three years warranty with two years of free service; total five years</li> </ul> <p>Complete Job: Supply, Installation, Testing, Commissioning and Maintenance (during maintenance period)</p> <p><b>Country of Origin: USA, Europe, Japan or Equivalent</b></p>				
---	--	--	--	--

11	<p><b><u>Shower Bed Hydraulic with shower panel and all Accessories</u></b></p> <p><b>Measurement, Volume &amp; Weight:</b></p> <ul style="list-style-type: none"> <li>• Water consumption (filled with resident)</li> <li>• Electric supply Market Voltage Frequency Power consumption 230/240 V single phase AC</li> <li>• 120 V single phase AC 50 Hz</li> <li>• 60 Hz max 1200 VA max 1200 VA</li> <li>• Water supply</li> <li>• Cold water G3/4" male (customers connection)</li> <li>• Warm water G3/4" male (customers connection)</li> <li>• Operating dynamic pressure 100-600 kPa (15-87 psi)</li> <li>• Rec. dynamic pressure 200-300 kPa (29-43.5 psi)</li> <li>• Operating temperatures Max HW 80°C (176°F)</li> <li>• Min HW 38°C (100°F)</li> <li>• Max CW 25°C (77°F)</li> <li>• Recommended temperatures HW 38-65°C (100-149°F)</li> <li>• CW 10-18°C (50-64°F)</li> <li>• Recommended water flow (CW + HW) 25+25 L/min (6.6+6.6 gal US/min)</li> <li>• Minimum drain 100 L/min (26.4 gal US/min)</li> </ul> <p><b>Specifications:</b></p> <ul style="list-style-type: none"> <li>• Control panel with electronic control functions operated by touchpad or push buttons.</li> <li>• Electro-hydraulic lifting mechanism.</li> <li>• Digital display for bathwater and fill/shower temperatures.</li> <li>• Pop-up drain incl. built-in overflow and flexible drain package for wall and floor connections.</li> </ul> <p><b>System Should have:</b></p> <ul style="list-style-type: none"> <li>• Automatic filling.</li> <li>• Emergency lowering.</li> <li>• Built-in unit to control and monitor the bath's various functions.</li> <li>• Digital control of filling and showering water temperatures via an electric pressure-balanced thermostatic mixing valve.</li> <li>• Hygienic Hydromassage system.</li> </ul> <p><b>Mobile Shower Trolley:</b></p> <ul style="list-style-type: none"> <li>• Measurements and weights</li> <li>• Max total load 170 to 200 kg or more</li> <li>• Lifting stroke</li> <li>• Min lifting height (from floor to patient platform)</li> <li>• Max lifting height (from floor to patient platform)</li> <li>• Width (stretcher) 500 mm or more</li> <li>• Total width (incl. side supports in inner position) 700 mm or more</li> <li>• Total width (incl. side supports in outer position) 800 mm or more</li> <li>• Inner length (inside the mattress at the bottom) 1600 mm or more</li> <li>• Max back support angle 15°</li> <li>• Stretcher inclination 1°</li> <li>• Drainage hose length 1000 mm</li> </ul>	03	Units		
----	--	----	-------	--	--

<ul style="list-style-type: none"> <li>• Drainage hose diameter 40 mm</li> </ul> <p><b>Electrical:</b></p> <ul style="list-style-type: none"> <li>• Battery type NiMH</li> <li>• Battery voltage 24 V DC</li> </ul> <p><b>Electric, standard:</b></p> <ul style="list-style-type: none"> <li>• Safe working load 120 kg or more</li> <li>• Protection class IPX4</li> <li>• <b>Product specification</b></li> <li>• Electrically operated height adjustment with built-in soft start function.</li> <li>• Electrically operated back support adjustment (option) with built-in soft start function.</li> <li>• Two sets of removable and rechargeable batteries and battery charger.</li> <li>• Folding safety side supports with width adjustment function.</li> <li>• Double safety side support catches.</li> <li>• Ergo-access area for good ergonomics.</li> <li>• Stretcher with gentle slope for water run off</li> <li>• Flexizone for improved resident/patient comfort.</li> <li>• Integrated shower handle holders.</li> <li>• Integrated comfort grip for residents/patients.</li> <li>• Split drainage hose that enables two drainage hose lengths.</li> <li>• Dual drainage holders.</li> <li>• Drain plug.</li> <li>• Soft mattress that is easy to remove, with recessed run off channels and side reinforcements.</li> <li>• Soft head pillow.</li> <li>• Castors.</li> <li>• Brakes on all four castors.</li> <li>• Emergency stop.</li> <li>• Low battery buzzer.</li> <li>• Max patient weight 170 kg or more</li> </ul> <p><b>Hygiene Lifter for bathing:</b></p> <p><b>Technical information:</b></p> <ul style="list-style-type: none"> <li>• Protection class IPX6 (handset) IPX4 (total lift)</li> </ul> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• Detachable and removable battery</li> <li>• Automatic safety stop if lowered onto an obstacle</li> <li>• Warning lamp for low battery</li> <li>• Foldable hand rests</li> <li>• Two castors with brakes</li> <li>• Straight steering device</li> <li>• Safety belts</li> <li>• Should be Hydraulic</li> <li>• Lifting capacity 120 kg or more</li> </ul> <p>Complete Job: Supply, Installation, Testing, Commissioning and Maintenance (during maintenance period)</p> <p><b>Country of Origin: USA, Europe, Japan or Equivalent</b></p>				
---	--	--	--	--

12	<b><u>Temperature Reader Digital</u></b> <ul style="list-style-type: none"> <li>Graphic display with on-screen instructions</li> <li>50-set memory (pH, temp, date and time stamp)</li> <li>Automatic calibration and buffer recognition</li> <li>Waterproof housing</li> <li>User-replaceable single- or double-junction electrodes</li> </ul> Complete Job: Supply, Installation, Testing, Commissioning and Maintenance (during maintenance period) <b>Country of Origin: USA, Europe, Japan or Equivalent</b>	05	Units		
----	---	----	-------	--	--

**GRAND TOTAL: RS.** \_\_\_\_\_

**GRAND TOTAL IN PAK RUPEES** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
**SIGNATURE**

\_\_\_\_\_  
**CONTRACTOR NAME**

\_\_\_\_\_  
**DATE & SEAL**