



## **Housing & Urban Development Department**

### **D H E N K A N A L M U N I C I P A L I T Y**

#### **QUOTATION SCHEDULE**

**FOR**

***“Supplying, fitting and Fixing of LPG/CNG based Cremation furnace” (Model-IDI-GAS Cremation furnace, Capacity-1 body/45 min. to 60 min., Fuel-LPG/CNG)”***

Cost of Tender Paper :- Rs. 10,000/-

M.R. No:- Date:-

Sale of Tender Paper

From:- 06.01.2021 to 22.01.2021 during Office hours

Last Date of submission Tender Paper:-22.01.2021 upto 1.00 P.M

E.M.D:- 1 % of quoted value

Date and time of opening:- 22.01.2021 at 4.00 P.M

**EXECUTIVE OFFICER  
DHENKANAL MUNICIPALITY**

## **DETAILED CONDITION OF QUOTATION CALL NOTICE**

- i. **Quotation Paper Cost** – The prescribed Quotation schedule can be obtained from Dhenkanal Municipality during office hours from **06.01.2021** to **22.01.2021** except holidays on payment of Rs. 10,000/- (Rupees Ten thousands) only in shape of Cash (Non refundable). Deposit receipt towards Paper Cost is to be attached during submission of bid document. The bidder can also download the bid document in on line website [dhenkanalmunicipality.com](http://dhenkanalmunicipality.com) but they will also have to deposit Paper cost as mentioned above in shape of Demand draft/ pay order/ bank draft/ bankers cheque (Non-Refundable) drawn on any nationalized bank **in favour of Executive Officer, Dhenkanal Municipality payable at Dhenkanal**, during submission of bid document failing which bid submitted will be out rightly rejected.
- ii. **E.M.D :-** 1 % of quoted value in shape of demand draft/ pay order/ bank draft/ bankers cheque drawn from any nationalized bank **in favour of Executive Officer, Dhenkanal Municipality payable at Dhenkanal** Or N.S.C/F.D.R pledged in favour of Executive Officer, Dhenkanal Municipality which shall be refunded to unsuccessful bidder after finalisation of bid. No other mode of payment of E.M.D shall be accepted. Bid received without E.M.D. shall be rejected and the bid will not be opened. The E.M.D. amount of successful quotationer will be refunded after one year from date of completion of the work.
- iii. Valid Registration Certificate of the intending Agency/Firm.
- iv. The bidder must have experience of similar nature of work ULB's , or Govt. Organization during last three year and shall have completed the works. Bidder must submit self attested copy of work order, completion certificate from competent authority along with colour photos for the work executed in support of experience certificate, failing which bid will be rejected.
- v. Details of similar experience with list of Completed projects.
- vi. GSTN Clearance Certificate as prescribed by Govt. of India issued in the name of the Agency.
- vii. PAN CARD in the name of the Agency.
- viii. Affidavit for submission of quotation, correctness and authentication of document submitted.

-Sd/-  
**Executive Officer**  
**Dhenkanal Municipality**

## Technical Specification of LPG/CNG Based Cremation System BOQ

Sl. No.	Particulate	Specification	Unit Price in Rs.	Amount in Rs.
01.	IDI Furnace Silent Features	<ol style="list-style-type: none"> <li>1. Cremation should be carried out completely and quickly without creating smoke nuisance.</li> <li>2. Cremation shall take place automatically without intervention of human being.</li> <li>3. Cremation furnace shall be simple, fast and safe in operation.</li> <li>4. Having features to ensure full compliance to the environment protection obligation.</li> </ol>		
02	Technology	<ol style="list-style-type: none"> <li>1. The heat evolve form the burning o f LPG/CNG is reflected back and store in the combustion area so that inside temperature reaches high.</li> <li>2. Concentrate flame and heat area is responsible for the disposal of dead body.</li> <li>3. The pollutants are collected in wet scrubber and filter gases are leave to environment through a chimney.</li> <li>4. Furnace chamber is divided into two chamber               <ol style="list-style-type: none"> <li>i) Primary Chamber</li> <li>ii) Secondary Chamber</li> </ol> </li> </ol>		
03	Cremation Chamber	<p>The LPG Gas crematorium is built with double chamber cremation furnace with a strong cremation bed and secondary air holes.</p> <p><b>Primary Chamber :</b></p> <ul style="list-style-type: none"> <li>• Fully insulated internal refractory lining, constructed from high grade refractory brick (IDI Make) ensuring a self supporting interlocked arrangement, ho hearth design.</li> <li>• One hot hearth combustion burner (IDI Make), temperature controlled on-off, complete with internal air fans.</li> <li>• One waste ignition burner (IDI Make), temperature controlled on-off, complete with internal air fans (IDI Make).</li> <li>• One temperature control sensor</li> </ul> <p><b>Secondary Chamber :</b></p> <ul style="list-style-type: none"> <li>• Fully insulated internal refractory lining, constructed form high grade low thermal mass insulation.</li> <li>• One secondary chamber burnout burner (IDI Make), temperature controlled on-off, complete with internal air fans.</li> <li>• 76mm refractory lined stack that reduces heat penetration under every condition, preventing the possibility of fire.</li> </ul>		
04	Temperature Range	600-800 °C in Primary Chamber & 800-1100 °C in Secondary Chamber		
05	Brick Lining	<ol style="list-style-type: none"> <li>1. The casing of the Furnace will have lining of heavy duty fire bricks (IDI Make min. 42% Alumina content) minimum thickness of 90mm.</li> <li>2. In the areas of high wear (main hearth) 63% alumina tile shall be used to get high resistance to abrasion and thermal shock.</li> <li>3. Moderate heat duty firebricks of suitable sizes shall be used for min. loss of heat</li> </ol>		

06	Insulation	Calcium silicate insulation shall be used in areas around the casing between the refractories and the casing. The quality and thickness of the insulation should be such that the cremator casing should be kept a specific temperature range to cremate the body.		
07	Burners (IDI Make)	The Gas burners should be mounted at place of cremator facilitating access for comprehensive maintenance and repairs. Burners should configured for On/Off control, and should be ignited automatically and the burner system should be protected against flame failure, hereby complying with the gas regulations. IDI Make [No. of Burner = 2]		
08	Fuel Consumption	14-16 KG/Cremation		
09	Ash	7 %		
10	Material of Construction	IDI Cremation Furnace : Mild steel [IS 2062] & insulated with refractory bricks. IDI Cremation Trolley : Casted with refractory cement.		
11	Auxiliary Load	9 KW		
12	IDI Cremation Trolley	Trolley and stretcher is provide for easy loading of Dead body. With lowering and lifting arrangement. Trolley is prepared from M.S Steel. (Manual or auto)		
13	Ash Collection	The arrangement for ash collection form combustion chambers shall be locking arrangement shall be provided on the opening for ash collection		
14	Space Required	10 x 22 sq.ft		
15	Door	Opening/closing is manual		
16	LPG/CNG Gas Line	It is mounted and welded with proper tools and accessories		
17	IDI Control Panel	It is consist of supply on/off switch, Digital Temperature Controller with back up control, Motor starter, Ampere meter, Fuse, MCCB, Flame monitor etc.		
18	Duration of Burning	45-90 minute		
19	IDI Wet Scrubber	There are three steps of wet scrubber as given below : 1. Condenses the smoke through high-pressure cold air so the heavy ash particles gets settle down in the chamber and gases pass through second stage. 2. Washes the smoke through high pressure water sprinkled over it and goes to third stage. 3. Excess carbon particles mix with water and hot gases released through chimney.		
20	Chimney	1. 300 mm Dia. X 6mm Thick x 20 Ft Length MS Pipe 2. MS Cone 1000mm base Dia. X 3000mm Height x 10mm thick 3. 1200 mm x 1200 mm x16mm thick Bottom Flange 4. Flanges 310mm (I.D.) x 25mm Thick 5. 22mm Dia. Half Thread High Tension Nut/Bolts with one spring washer and two plain washers. 6. Earthing, Red Light Flasher 7. Foundation Bolts/Nuts 35mm Dia. X 1500mm Long 8. Steel Core Wire Rope 10mm Dia.		

-Sd/-

**Executive Officer**  
**Dhenkanal Municipality**