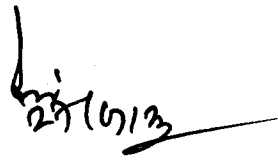


GOVERNMENT OF MANIPUR
FIRE SERVICE DEPARTMENT

TENDER NOTICE
Imphal, the 27th June, 2013.

No.1/3/ESTT/13-FS : Sealed Tenders superscribed with the words in red ink on "TENDER OF FIRE EQUIPMENTS" due on 26.07.2013 for Fabricated Mini Water Tender(QRV) Water Mist Technology and purchase of High Pressure Pump-1600 LPM are invited from the reputed firms as required by the Manipur Fire Service Department. Tenders should reach the Office of the undersigned on or before 25.07.2013.

The details along with Terms & Conditions of the Tender shall be obtainable from the office of the undersigned on weekdays & normal office hours and on request of the same can be seen in the office of the SENIOR RESIDENT COMMISSIONER and the JOINT RESIDENT COMMISSIONER, Manipur Bhavan Govt. of Manipur located at New Delhi - 21, Kolkata -20 & Deputy Resident Commissioner Guwahati Manipur Bhavan, Rajgarh Road, Guwahati -781003 and also can get from the website of www.manipur.gov.in.



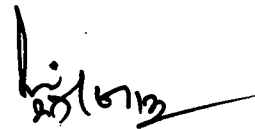
(Kh. Chandramani Singh) IPS
Director,
Manipur Fire Service,
Imphal

--

ANNEXURE – I

LIST OF FIRE APPLIANCES/EQUIPMENTS ETC.

1. Fabricated Mini Water Tender(QRV) based on Water Mist Technology.
2. High Pressure Pump 1600 LPM.



**Director,
Manipur Fire Service,
Imphal**

--

**TECHNICAL SPECIFICATION FOR MINI WATER TENDER (ORV) BASED ON
WATER MIST TECHNOLOGY TO BE FABRICATED ON A SMALL
COMMERCIAL PICK UP TYPE VEHICLE HAVING A PAYLOAD OF MINIMUM
ONE TON CAPACITY.**

Tenderers/Firms who have their own fabrication units for at least 5 years experience can participate for fabricated Mini Water Tender(QRV) based on Water Mist Technology on a small commercial pick up type vehicle having a payload of minimum one ton capacity for Fire Service use. Credentials in this regard should also be submitted/enclosed.

1.1 The specification covers the requirements of design, manufacture, testing, supply of MINI WATER TENDER (QRV) BASED ON WATER MIST TECHNOLOGY-350 LTRS CAPACITY mounted on a prime mover of pay load capacity of 1 ton.

2. The Tender shall be suitable for fire fighting and capable of being deployed in narrow lanes in urban and rural areas.

3. **DESCRIPTION:**

3.1 The vehicle shall comprise of the following components.

3.2 Water Mist Fire Fighting System.

3.2.1 The water mist fire fighting system shall have a filling volume of 300 litres of Water and 50 litres of Foam. (Total 350 Ltrs. maximum). It should have minimal requirements of space and weight while optimizing on manpower requirement and minimizing the water and other collateral damage to negligible in comparison to conventional water tender. The Unit design shall incorporate foam induction system which provides variable foam dosing and suction of water from an external source for direct fire fighting or filling of the tank.

3.2.2 **Specification/Details of the Unit.**

Weight of empty 300 ltrs. Unit	<150 kgs.(Max)
Max. Measurements of the unit (in mm)	As compact as possible
Usable Water capacity	300 Ltrs.
Usable Foam capacity	50 Ltrs.
No. of deliveries	2 Nos.

Contd..P/2..

h
2016

3.2.3 Main Extinguishing Gun.

Flow rate	22 Lts/Min($\pm$ 5%)
Weight of extinguisher gun	2 kgs Max.
Gun Dimensions	As compact as possible.
Working pressure on the nozzle	100 bars Max. with nominal reaction
Throw	Jet-not less than 15 mtrs.($\pm$ 10%) Spray : not less than 6m ($\pm$ 10%)
Hose reel	60 Mtrs (standard) on manual drum.
Max. set operating pressure	100 bars.
Starter	Electric starter with provision of pull cord over ride.
Level Indicator	Mechanical.

4. MAIN PUMP:

The pump should be capable of suction of water from tank or open source and to maintain adequate discharge rate and pressure for operation of nozzle at optimum efficiency.

Max. Pressure	100 Bars.
Min. flow	38 l/mn.
Power of the engine	Not less than 13 BHP.
Fuel	Unleaded Petrol.

5. ENGINE:

- 5.1 The prime mover for pump shall be 4-stroke Petrol driven engine and shall have compatible electrical and lubrication system. The engine should preferably be on 12V battery for which adequate charger shall also be provided. Suitable electronic instruments shall be provided on the body of engine/panel for fuel level, battery and temperature.

Contd..P/3..

2076

6. **FOAM INDUCTION :**

A suitable means shall be provided for induction of foam from tank so that proportion for single or double delivery remains constant and foam from tank so that proportion for single or double delivery remains constant and foam quality is maintained size of foam tank - 50 lts(Min).(included in the water tank and rested from the water tank which will remain with 300 litres). Max. induction - 6% (from 0.5 to 6 adjustable).

7. **Accessories :**

- Electric starter (Enabling the Unit to be Electrically started) 1
- Additional hose length of 30 mts. With Drum 1 Per Set.
- Aqueous film forming foam (AFFF) 50 ltrs filled in the foam Tank and 50 ltrs spare).
- Tool kit comprising of 1 no ustable spanner 12". 1 No. cutting plier, 1 set of flat spanners, 1 set of adjustable screw driver, 1set of suction key and other special tools as per the requirement of the unit.

8. **DESIGN & DEVELOPMENT :**

8.1 Equipment details.

8.2 The Water Mist Fire Fighting System will be a self driven fire fighting unit operated with inbuilt Petrol Engine coupled to a pump and attached with a reducer & hose pipes, Mist generating Guns.

8.3 The Water mist system shall be capable of carrying 300 liters of Water and Foam tank of 50 made of GRP shape T (in order to reduce the gravity centre of the vehicle) and for AFFF a separate system to pump and mix the required ratio, which can be discharged in the form of a mist from a gun.

8.4 The discharge gun shall be of light weight having stainless steel nozzle capable of producing Water Mist with the ability to control the discharge in short burst and long shots.

8.5 The size of mist particle shall be in the range of 150 to 300 microns.

8.6 A suitable pressure reducer with a safety valve, capable of reducing to a low pressure not more than 100 bars & jerk free working pressure shall be incorporated. The main vessel shall be corrosion free.

Contd..P/4..

h
2076

8.7 The foam required shall be aqueous film forming foam (AFFF).

8.8 The unit shall have adequate provisions for safety of the system.

9. **SAFETY DEVICES :**

9.1 The following safety device shall form part of equipment.

I) The system shall be provided with pressure safety valve.

II) The system will have proper heat & exhaust outlet for the engine without causing any interference to the operator while operating the unit.

III) Any other safety device which is felt to be necessary to be a part of the equipment.

10. **MAIN WATER TANK.**

10.1 The water tank shall be made of GRP giving a free corrosion for life and a lightweight of the WATER MIST SYSTEM, having useable water storage capacity of 350 Ltrs.(300 for water and 50 Ltrs. capacity for foam) properly baffled into segment to reduce water surge. The water tank shall be T shaped and the thickness of the water tank should be of 5mm minimum. A man hole of 330 mm avec overflow pipe and an optical level of water should be part of the tank. The tank should resist to the flame and be anti ignition complying with the International standards.

11. **GUN :**

11.1 The gun shall be provided with a suitable stainless steel filter. The discharge rate of main gun shall not be less than 20 ltrs./Min. at pressure not exceeding 100 bars. The second gun should have a flow rate not exceeding 20 LPM. The design of gun shall be such that there is no appreciable re-coil pressure and the throw shall not be less than 15 mts (Jet Mode) and shall not be less than 6 meters (Spray mode). The second gun shall have an attachment for discharging fo foam with suitable aeration facility.

12. **HOSES :**

12.1 The hoses provided in the system shall be high quality and shall be capable of holding the temperature range -20⁰ to + 55⁰ C. The material specification, working pressure, test pressure and cracking pressure should be indicated for each type of hose. The minimum length of each hose should be 60M.

Contd..P/5..

hi
29/6

12.2 The seals and O-rings used in the system should be of synthetic material like Nitrile rubber or equivalent.

13. **MARKING :**

Marking shall give details of capacity, manufacturer's name, month/year of manufacturing of the system etc.

14. **Test of acceptance of Fire Fighting System :**

Physical dimensions, performance & weight check of equipment as given different items above shall form part of test of acceptance.

15. **WORKMANSHIP AND FINISH :**

15.1 All parts of the appliances shall be of good workmanship and shall have streamlined finish.

15.2 The appliance is to be painted P.O. Red with Fire Service insignia of 10 cm. lettering "**MANIPUR FIRE SERVICE**" in single line on both sides of the appliance in "**YELLOW**".

15.3 Before final painting of Mini Water Tender two coats of anti corrosion and primer coat will be applied.

16. **INSTRUCTION BOOK & ACCESSORIES :**

16.1 Instruction Book for the guidance of the user containing both operating and normal maintenance procedures should be supplied. The Book shall also include an itemized and illustrated spare parts list giving reference number of all the wearing parts.

Contd..P/6..

hi
20/6

TERMS & CONDITIONS

Own technical details along with the drawing and the printed leaflets/pamphlets of the items mentioning its make, etc. are to be furnished invariably by the Tenderers.

The relevant specifications mentioned can be seen/obtained from the website of www.manipur.gov.in.

Tenderers shall submit their Quotations in TRIPLICATE giving complete technical details of the equipments clause by clause

The items of stores offered shall conform to appropriate Indian Standard Specifications wherever the same exist and the items of stores bearing ISI(BIS) Certification Marks shall be given reference.

The Tenders received will be opened at 11.00 Hrs on 26.07. 2013 in presence of such Tenderers or their authorized representatives as are present at Manipur Fire Service H.Q., Imphal – 795 001.

Free Samples when asked for should be sent :

Spares for at least 3 (three) years in respect of fast wearing out parts for the items of stores offered are to be furnished with respective prices.

Fuel consumption at variable stages of Pump performance and also for the operation of the appliances are to be shown/given.

Contd..P/7..

*h
20/6*

DELIVERY :

Delivery of the items of stores is December, 2013. The earlier guaranteed/monthly/weekly rate of supply is to be furnished. For and delay beyond the expiry of the delivery date, the contractor shall be liable to pay damage, in terms and conditions of the contract applicable.

It is to be confirmed that the stores are strictly to specifications/drawings and that deviations, if any, desired from the specifications/drawings, be clearly indicated wherever applicable.

The Tender must be accompanied by Earnest Money of Rs.20,000/- (Rupees twenty thousand) only in Bank Draft drawn in favour of the undersigned along with the recent/valid Income Tax and Sales Tax clearance certificates. Tenderers who have registered themselves as Small Scale Industry in any State of the Union should enclose with their quotations. A copy of the Registration Certificate issued by the concerned Industries & Commerce Department being attested by a Gazetted Officer should be furnished. If any firm quoting rate contract fixed by D.G.S. & D may also be indicated and a copy of the rate furnish. Documentary proof of registration with D.G.S. & D should also be given if applicable.

The prices quoted should be inclusive of VAT . The rate quoted should be **valid for atleast a period of 6 (six) months from the date of opening of the Tender**. If during this period, the rate quoted in the Tender is revised or withdrawn, the Tender is not only liable for rejection but the Tenderer will also be liable to any loss to the Government in this regard.

Contd..P/8..

hi
28/6

Tenderers should quote rates on F.O.R. Imphal inclusive of Risk Insurance. Rates on F.O.R., Imphal shall be deemed to include, cost of freight, transportation, Central Sales Tax, Octroi and Local Sales Tax. Rates quoted should be distinctly shown in figure and words.

Successful Tenderers will be requested to furnish a security deposit calculated at 10 (ten) percent of value of the supplies contracted for and to execute an **agreement.** The stamp duty on the agreement should be borne by them.

No person making a Tender shall be allowed to withdraw his tender after acceptance of his tender. In case of such withdrawal if the Tender is accepted the Tenderer fails to pay security deposit and execute an agreement within 30 (thirty) days of notice of such acceptance, the Tenderer is liable to forfeit to the Government the amount of Earnest Money deposited by him in respect of such Tender and this will be without prejudice to other rights and remedies of the Government.

The Courts of Imphal shall alone have jurisdiction to decide any dispute arising out of or in respect of the contract.

Tenders should be superscribed **"TENDER OF FIRE EQUIPMENTS"** due on 26.07. 2013 in red ink, sealed and addresses to **BY NAME to the Director, Manipur Fire Service, Imphal -795001 and should reach him before 15.00 Hrs. on 25.07.2013.** Tenders received after that date, due to postal delay or whatever the case may be, will not be considered. **The power should also show the name and address of the Tenderer.**

No erasures, interlinations or alterations will be allowed.

The equipments offered should be guaranteed for a minimum period of one year.

No application for assistance to get quota for raw materials will be entertained. Tenderers should make their own arrangements to procure the same and to supply the goods in time.

Contd..P/9.

hs
28/6

In case of imported items of stores, the tendering firms should give the details of Ex-work, F.O.R., C.I.F., and F.O.R. rates. The break-up of the differences in these rates should also have to be accounted for.

The contractor shall make his own arrangements for obtaining import licences if needed, in respect of articles tendered for supply under these contract, from the authorized concerned and in no case will his application in this regard be forwarded.

The firm, in the trade, who have already executed the jobs vide the list above mentioned should only need to send in their offers.

Stage inspections and acceptance tests of the appliances/equipments and the other items of stores will be carried out by the undersigned or by his duly authorized representative from time to time.

The Director, Manipur Fire Service, Imphal does not bind himself the right to select from any Tender only such articles as may be considered expedient to accept.

Each article tendered for in Annexure - I will be considered as a separate and distinct tender in itself and rates for each items should be quoted separately.

No Tender will be considered which does not bear the Tenderer's signature and address at the bottom of each page of the Tender documents on which the rates are entered.

No representation for enhancement of rates once accepted will be considered during the currency of the contract.

If any successful Tenderer wishes that some other conditions quoted by him should also be accepted, he should specially raise the issue as soon as the supply orders reach him and get the same accepted or clarified.

Contd..P/10..

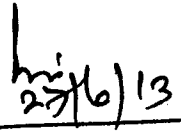
h
20/6

In the case of items of stores rejected does not being in accordance with the approved samples or as have been received in damaged conditions, the contractor should be prepared to take them back and replace them by correct materials within a week without additional cost to the Government.

Director, Manipur Fire Service has the right to decide or finalise for any deviation or dispute arising on Technical Specifications.

In matters of dispute regarding the supply not being in conforming with the approved quality or the performance of the items of stores, the decision of the Director, Manipur Fire Service, Imphal shall be final.

Successful Tenderers should not demand advance for execution of the work. Full payment will be made only when the items of stores ordered are received in full and in good condition at Imphal.



**Director,
Manipur Fire Service,
Imphal**

--