



An ISO 9001
Company

Bharat Heavy Electricals Limited

(High Pressure Boiler Plant)

Tiruchirappalli – 620014, TAMIL NADU, INDIA

CAPITAL EQUIPMENT/ MATERIALS MANAGEMENT

ENQUIRY

NOTICE INVITING TENDER

Phone: +91 431 257 76 53

Fax : +91 431 252 07 19

Email : skaruna@bheltry.co.in

Web : www.bhel.com

TWO PART BID

Tender to be submitted in two parts.

Enquiry
Number:

2621100155

Enquiry
Date:

29.09.2011

Due date for submission
of quotation:

29.10.2011

You are requested to quote the Enquiry number date and due date in all your correspondence. This is only a request for quotation and not an order.

Please note that under any circumstances both delayed offer and late offers will not be considered. Hence vendors are requested to ensure that the offer is reaching physically our office before 14.00 hrs on the Date of tender opening.

Item	Description	Quantity	Delivery (Item required at BHEL on)
10	Manufacture and Assembly of SEMI U Type LPG Burner for Pre-heat Boiler Headers of Different Sizes as per the technical specification, general guidelines instructions & commercial conditions applicable (to be downloaded from web site www.bhel.com or http://tenders.gov.in)	01 Lot	20.12.2011

Important points to be taken care during submission of offer

1. Checklist to be filled and enclosed along with the offer failing which, the offer will not be considered for evaluation.
2. Subsequent to the hosting of this Enquiry, any corrigendum to the Enquiry that may be hosted in the BHEL Web-site as well as Government Tenders-portal shall be viewed by the vendors regularly to know the details of corrigendum. In case if any vendor without seeing the corrigendum quoted as per original Enquiry and intimate that they have wrongly quoted will not be considered and rejected. However as per the appropriate Policy of BHEL action will be taken on them in this regard.

BHEL's General guidelines / instructions (refer MM/CE/GT/001) including bank guarantee formats and list of consortium banks, commercial terms check-list can be downloaded from BHEL web site <http://www.bhel.com> or from the Government tender website <http://tenders.gov.in> (public sector units > Bharat Heavy Electricals Limited page) under Enquiry referred above.

Tenders should reach us before 14:00 hours on the due date
Tenders will be opened at 14:30 hours on the due date
Tenders would be opened in presence of the tenderers who have submitted their offers and who may like to be present

Yours faithfully,
For BHARAT HEAVY ELECTRICALS LIMITED

Manager / MM / Capital Equipment

S.KARUNANIDHY

Manager

MM / Capital Equipment
BHEL TRICHY-620 014

Manufacture, Assembly of SEMI 'U' Type LPG Burners for preheat Boiler headers of different sizes.

Burner to be supplied with pressure regulating station in the following sequence. Y-Type Strainer, Flash Back Arrestor, Pressure Regulator, 3/4" Inner SS Braided Hose with LH thread, Needle\Control Valve,

BURNER: Ring Type LPG Venturi Mix Burner

Design Standard: IS 14612

Burner Ribbon Diameter: Vendor to select the single 'U' shape burner for **BUTT welding operation** according to size of pipe from

219mm,273mm,323mm,355mm,368mm,406mm,457mm,508mm,559mm,610mm, 660mm ,711mm,823mm,864mm

Sl. No.	Pipe Size	Quantity	Remarks
1	219mm & 273mm	5 Sets	Each set should consists of all common items
2	323mm & 355mm	5 Sets	
3	368mm & 406mm	5 Sets	
4	457mm & 508mm	5 Sets	
5	559mm & 610mm	5 Sets	
6	660mm & 711mm	5 Sets	
7	823mm & 864mm	5 Sets	

Thickness of the pipes for butt weld operation : min 20mm & maxi 80mm

Material to be heated: Carbon steel/Alloy Steel

(Specific Heat Capacity: 0.14KCal\Kg)

Fuel: LPG as per IS 6044

Rate of Feeding: 650mm/min

Flame: Turbulent & Broad

Flame Height: Vendor to specify

Pre heating Temperature: 250 Deg C (Base Temperature is 27 deg C)

Material of Construction: Vendor to specify

Heating is to occur through minimum impingement and least carbon deposit or carburizing of the parent metal.

Proper supports to be provided for the rigid positioning of the burner.

The vendor shall provide all calculations (considering flue gas losses, etc) deriving the burner capability\rating.

COMMON ITEMS

Y-Type Strainer

Mesh Filtration Level: .25mm

End connections: 3/4" To Suit supplied interconnection

Material: Mesh of SS, Body of brass, PTFE Seals

Working Pressure 2 Kgf/sqcm

Pressure Rating : 150 Class

Flame Arrestor\Flashback arrestor

End connections: 3/4" To Suit supplied interconnection

Make: United\Vanaz\Comap Only

Material: Brass
Design Standard: IS 11006

LPG Pressure Regulator

End connections: 3/4" To Suit supplied interconnection
Make: United\Vanaz\Comap Only
Flow: Vendor to specify
Input Range: 2 kgf/sqcm
Regulated Range 0-1.05 kg/sqcm (0-15 Psi)
Inbuilt pressure gauge to be provided to monitor regulated pressure (pressure gauge specification enclosed below).
Pressure Gauge
Design Standard: IS 3624
Make: WAAREE, FEIBIG, H-GURU, G-GURU, ODIN Only
Material: Stainless Steel
Dial Size: 50mm
Range: 0-50 Psi (0-3.5 kgf/sqcm)
Pointer stopper and over pressure safety to be provided.

Hose

3/4" Inner SS Braided neoprene Hose
Length: 15m
End Connections: 3/4" BSP Female Swivel Nut
Conforming to flame proof standards.

Flameproof Needle\Control Valve to be provided to shut off and control flame
Material: Brass
Make: Comap\Vanaz\United Only

The complete pressure regulating station, hose and burner should be fabricated and assembled prior to dispatch. The vendor shall prove out the functionality of the above burner system to BHEL's specified requirements (each burner to be proved out). The burners and pressure regulating station is to be installed with proper supports. All interconnecting pipe fittings, nipples, reducer, connectors, seals safety accessories, etc. will be in the vendors scope. All bought out items specified above are in the vendors scope. The pressure regulating system is to be connected to 3/4" female end connection in BHEL's LPG Distribution System. All joints should be mated with respective fasteners, LPG Grade gasket. All weldings, joints and fabrication should be of proper alignment and weld (No leakage at pressure test of 4 Kgf/sq.cm).

VENDOR's SCOPE

Y-Type Strainer
Flash Back Arrestor
Pressure Regulator
3/4" SS double Braided Hose
Needle\Control Valve
Burner
Interconnecting pipes, fittings, seals and gaskets.
Supports\Clamping for burner and pressure regulating station.

BHEL's SCOPE

BHEL will supply LPG as per IS:6044 at 2 kg/sqcm for installation and commissioning.

Note :

1) Material of fittings should be Brass fittings of proper grade and pressure rating. 2) Working medium: LPG (all bought out items should be certified for LPG working) 3) The vendor should issue 12 months warranty for Workmanship and for bought out items 4) Technical Specifications, Drawings of Burner, Strainer, Regulator, SS Hose and Control Valve are to be provided with the offer including bough out items (Vendor shall fabricate the burner system only after the approval of drawings by BHEL authority). 5) Offers without proper technical information and drawings will be rejected. 7) Vendor may visit BHEL Trichy site to evaluate the work content. 8) Vendor shall provide proof for experience in construction of similar items for use in LPG systems. 9) Combined Price of all Items will be considered. All Y-type strainers, pressure regulators, flashback arrestors supplied should be same.
