



INVITATION TO TENDER

Ref : OS/19-20/DE/2434/18/042

Date : 13.08.2019

Sub : Cold Forming of Ellipsoidal Dished Ends against S.O. 2434.

Dear Sir,

Sealed tenders are invited for the subject work in **two part bid** system from vendors who are experienced in execution of similar jobs.

1. VENDOR'S SCOPE OF WORK :

a) Cold Forming of the following dished ends with Cut to Size Blank Plates supplied in 3 segments as per applicable Drawings, QAP / ITP and specifications. Details of the Dished Ends to be formed are given in Annexure. II.

<u>Sl. No.</u>	<u>S.O. No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit Wt.</u>	<u>Total Wt.</u>
1	2434	2:1 Ellipsoidal Dished End - Left	2 Nos.	5.999 MT	11.998 MT
2	2434	2:1 Ellipsoidal Dished End - Right	2 Nos.	5.999 MT	11.998 MT
TOTAL			4 Nos.		23.996 MT

b) Assembly & Welding of these segments to form blanks of required size, Cutting & Beveling, DP check on outside and inside surface of the Knuckle Area & SF etc.

c) Welding is to be carried out by qualified welders with NACE electrodes as per WPS / ITP / QAP including 100% Radiography. Electrodes to be procured from EIL / BHEL approved vendors. Approved vendors List enclosed. Welding is to be carried out along with Production Test Coupons which will be supplied by BHEL. **Welder Qualification to be carried out as per EIL procedure.**

d) All NDE Examination shall be as per QAP / ITP.

e) Intermediate normalizing, if required, is to be carried out after initial pressing as per applicable standards & specifications and Loading of Dished ends into the furnace shall be offered to BHEL for witnessing. After normalizing, HT chart shall be submitted to BHEL for acceptance before taking up final pressing.

f) Collection of blanks from HPVP shops, Visakhapatnam, Transportation of (i) Blanks from BHEL . HPVP to Vendor works and (ii) Formed Dished ends back to Visakhapatnam including transit insurance and Delivery at HPVP shops.

g) Offering for Stagewise & Final Inspection and obtaining inspection clearance.

h) One dished end shall be formed and offered for inspection. After its inspection clearance, balance quantity shall be taken up for pressing.

i) Though not mentioned specifically, any activity which is required for completion of the work is deemed to be included in the scope of bidders.

2. LOCATION OF WORK SPOT :

Cold Forming of Dished ends shall be carried out **at Vendor's Works.**

3. BHEL's SCOPE :

i) Issue of Drawings, QAP/ ITP, WPS, etc.

ii) Issue of Cut to Size Blank Plates in 3 segments

iii) Loading of Blank Segments and unloading of finished Dished ends at BHEL . HPVP, Visakhapatnam

iv) Final Stress Relieving / Normalizing of formed Dished ends

Contd...2

4. INSPECTION :

Inspection shall be carried out at Vendor's works by M/s. BHEL / M/s. BHEL Authorized Inspection Agency / M/s Petrofac / M/s EIL.

5. DELIVERY :

Finished Documents along with relevant inspection documents and all other certificates are to be delivered to HPVP, Visakhapatnam within **6 weeks from the date of issue of blank segments.**

6. PRICE :

The prices shall be quoted for the detailed scope of work in the Schedule of Rates enclosed at Annexure. I. The prices shall be fixed & firm without any escalation during the entire period of contract and till completion of the work.

The quoted price shall be inclusive of all applicable taxes & duties except GST. Income tax shall be deducted at applicable rates from the vendor's bills. GST shall be reimbursable to the vendor as detailed in the Clause . 7.

7. GOODS & SERVICES TAX (GST) :

Bidders shall make a note of the following points of GST before submission of their offer: -

- Vendors shall have to mention their GSTIN no. (15 Digits) in their Technical Bid. If any specific exemption is available, a declaration with due supporting documents need to be furnished for considering the offer.
- Semi-finished goods are to be delivered by the Vendors in BHEL, HPVP premises within a maximum period of one year from the date of issue of the material, failing which the whole transaction will be considered as Supply and Sale and GST is required to be paid along with interest (calculated @ SBI Base Rate + 6%) along with penalty, if any, from the date of Challan on the whole value of materials. Hence vendors shall have to ensure that materials issued to them are returned within 365 days.
- After fabrication, the vendors shall have to deliver the Semi-Finished Goods by fulfilling the following formalities:
GST invoice should be raised by the vendors by paying GST on job work charges at applicable rates and by incorporating the HPVP GSTIN no. in the invoice for availing the reimbursement of GST from HPVP.
The vendor shall also have to enter in their GST Return -1 (GSTR-1) the details of invoice raised for payment of GST so as to enable HPVP to avail input credit.

8. REVERSE AUCTION :

BHEL reserves the right to opt for Reverse Auction at its discretion instead of opening the price bids submitted in sealed envelope and any information regarding the reverse auction shall be decided after technical evaluation and shall be intimated to the bidders at appropriate time.

The bidders are advised to give their acceptance for participation in RA. Non-acceptance to participate in RA may result in non-consideration of their bids in case BHEL decides to go for RA.

In case BHEL decides to go for RA, only those bidders who give their acceptance will be allowed to participate in RA and these bidders shall have to necessarily submit ~~Online~~ Sealed Bid in the RA. Non-submission of ~~Online~~ Sealed Bid by the bidder will be considered as tampering of the tendering process and will invite action by BHEL as per extent guidelines in vogue.

9. VALIDITY OF OFFER :

The offer shall be valid for a period of **3 months** from the last date for tender submission.

10. RISK PURCHASE :

In case the contractor fails to execute the work within the scheduled time or due to any other reasons, BHEL-HPVP reserves the right to get the same completed through some other party at the risk & cost of the contractor and any additional expenditure incurred due to the same shall be charged to the contractor.

11. Other Terms & Conditions shall be as per Annexure . III enclosed.

12. GENERAL :

a) The bidders shall study the Tender documents, Drawings, Quality Documents and all other relevant documents in detail for understanding the scope of work and the processes involved before submission of offer. One complete set of drawings shall be made available in the office of DGM (Outsourcing) and the same can be referred during working hours.

For any clarifications required on this tender document, scope of work etc., the bidders shall depute their authorized representatives to BHEL, Visakhapatnam with prior intimation to get clarifications from concerned authorities between 09:00 AM and 04:00 PM

b) Bidders shall confirm their acceptance to all the terms & conditions of the tender enquiry. Any deviations to the tender terms & conditions are not acceptable and BHEL reserves the right to reject such offers without further correspondence.

c) BHEL reserves the right to modify or cancel the tender enquiry at any stage without assigning any reasons thereof.

13. The following documents shall form part of the tender enquiry: -

- i) Schedule of Rates : Annexure - I
- ii) Details of Dished Ends to be formed : Annexure . II
- iii) General Terms & Conditions : Annexure . III
- iv) Acceptance to tender terms & conditions : Annexure . IV
- v) General Terms & Conditions of RA (Reverse Auction) : Annexure . V
- vi) TDC for E 7018 (NACE) SMAW Electrodes & Approved VendorsqList : Annexure . VI
- vii) GST Compliance for Indigenous Suppliers : Annexure . GST

14. TENDER SUBMISSION :

Techno-commercial bids shall be submitted along with the **tender document duly signed by the bidder on all the pages**. Techno-Commercial Bid and Price bid shall be placed in two separate envelopes and both shall be kept in another Big envelope.

Tenders completed in all respects shall be sent to the **Outsourcing Tender Box**, Reception Counter, Adm. Building, BHEL . HPVP, Visakhapatnam, PIN - 530012 so as to reach on or before **14.00 Hrs. on 27.08.2019** duly **super scribing** the Subject, Tender Ref. No. and Technical / Price Bid on the envelopes.

TENDERS RECEIVED AFTER THE DUE DATE & TIME ARE NOT ACCEPTABLE.

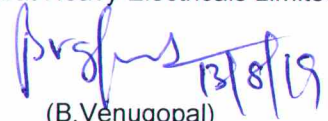
Note : Offers sent in any other form will be treated as invalid and will be summarily rejected.

15. OPENING OF TENDERS:

Techno-commercial Bids will be opened on **27.08.2019 at 14.00 Hrs.** at Customer Cell, Adm. Building, BHEL – HPVP, Visakhapatnam. The price bids of the techno-commercially qualified bidders will be opened in presence of representatives of the bidders and the date & time of opening of price bids will be intimated later. The bidders may depute their representatives at the time of opening of technical / price bids.

In case of opting for reverse auction, the same will be intimated in advance at appropriate time.

for Bharat Heavy Electricals Limited,



(B.Venugopal)
Manager (OS)

SCHEDULE OF RATES

Sl. No.	S.O.	Description of Item	Unit	Qty.	Unit Rate (in ₹)	Total Amount (in ₹)
1.0		Cold Forming of 2:1 Ellipsoidal Dished ends with the free issue Blank Segments including Heat Treatment, DP check on outside and inside surface of KR & SF as per applicable Drawings, QAP, Specifications etc. including Formation of Blanks from Cut-to-Size segments, Co-ordination with officials for Stagewise & Final inspection and obtaining necessary inspection clearance along with relevant documentation and delivery of finished dished ends at BHEL-HPVP, Visakhapatnam as per the detailed scope of work mentioned in the tender.				
1.1	2434	<u>2:1 Ellipsoidal Dished Ends (Left) - 5998.30 kg each</u> ID 5500 × 16 (min) thk. from a blank of Dia 6650 mm x 22 mm thk.	Nos.	2		
1.2		<u>2:1 Ellipsoidal Dished Ends (Right) - 5998.30 kg each</u> ID 5500 × 16 (min) thk. from a blank of Dia 6650 mm x 22 mm thk.	Nos.	2		
		TOTAL		4		
Total Amount (in Words) :						

Notes :

- i) **L1 status will be evaluated on total quoted value.**
 - ii) The quantity indicated above is tentative and may vary on both sides subject to the requirement at the time of ordering / execution. However, payment shall be made for the actual quantity only.
 - iii) The prices shall be fixed & firm without any escalation during the entire period of contract and till completion of work.
 - iv) The quoted price shall be inclusive of all applicable taxes & duties except GST. However, GST shall be reimbursed by BHEL on submission of proof of GST payment.
 - v) The bidders are advised to go through all the drawings & documents before quoting the tender.
 - vi) BHEL reserves the right to go for Reverse auction as per the applicable guidelines instead of opening price bids.
 - vii) Tenderer should quote the amount in figures & words. It may be noted that corrections, overwriting etc. are not allowed. If there is a discrepancy between amount in figures & words, the amount in words shall prevail unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail. If there is an error in the total corresponding to the addition or subtraction of sub-totals, the sub-totals shall prevail and total shall be corrected accordingly.
- In case of mismatch between rate and amount in figures, rate in figures shall be taken into consideration for further evaluation and processing.

Signature of the Bidder with Stamp

ANNEXURE-II

Ref : OS/19-20/DE/2434/18/042

Date : 13.08.2019

Details of Dished Ends to be formed

Sl. No.	S.O. No.	Description of Item	Type of Dished Ends	Drawing No.	Rev. No.	D'Ends Qty. (No's)	Blank Size	D'end Size (mm)	Thk (mm)		Matl. Specification	Weight / Blank	Total Weight
									Nom	Min			
1	2434	Left D'Ends for Amine Flash Drum	2:1 Ellipsoidal Dished Ends	4-PV-010-U0012	0	2	Dia 6650 mm X 22 Thk.	ID 5500 × 16 (min) thk.	22	16	SA516Gr60 (NACE+HIC)	5998.3	11996.6
2		Right D'Ends for Amine Flash Drum		4-PV-010-U0013	0	2	Dia 6650 mm X 22 Thk.	ID 5500 × 16 (min) thk.	22	16	SA516Gr60 (NACE+HIC)	5998.3	11996.6
						4							23993.2

GENERAL TERMS & CONDITIONS**1. TECHNICAL DELIVERY CONDITIONS :**

The work should conform to the technical data given in our drawings, GMS, Shipping List Specifications, QAP, WPS etc.

2. PARTY'S SCOPE :

The scope of the party shall be as follows: -

- a) All welding equipments, baking oven, tools, jigs and fixtures, measuring instruments duly calibrated, handling facilities, testing facilities etc.
- b) All materials other than those mentioned under "Free Issue Materials", which are required for completion of the work.
- c) All consumables such as electrodes, gases, grinding wheels etc.

Note : Electrodes of specification mentioned in the drawings / WPS and of EIL/BHEL approved brands only shall be used.

3. REVISION OF DRAWINGS :

There may be minor changes in the drawings during execution. In such a case, party should accommodate the same without any extra claim.

4. WELDING QUALIFICATION : Qualification of required number of Welders is party's responsibility at their cost.**5. X-RAY :**

All welding shall be of X-ray quality where specified on drawings. Inspection would specify the quantum of X-ray based on drawings / code requirement. Party should strictly follow the WPS and QAP supplied by BHEL during welding. Getting the welds radiographed and getting them cleared by inspection is the responsibility of the party.

6. RECTIFICATIONS / REJECTIONS :

Any rectification due to defective work, if required, shall be done by the party free of charge with a suitable technology approved before hand by BHEL in writing. The cost of material, if any used for rectification work / rejection work, will be estimated by BHEL and the same shall be debited to party's account. In case any rectification / rework is to be carried out due to defective material supplied by BHEL, the replacement material and consumables will be supplied by BHEL free of Cost.

7. SECURITY DEPOSIT :

Vendors shall have to submit a Bank Guarantee (BG) / Fixed Deposit Receipt (FDR) for **10%** of the order value in case of **HPVP ADM site** or **25%** of the material cost in case of Vendor works towards Security Deposit and safe custody of materials within one week from the date of issue of Order. The BG/FDR shall be valid for the contract period with a claim period of 3 months. This BG/FDR shall be released to the contractor after completion of work and on acceptance of the same by BHEL / Owner and on submission of Performance BG for 10 % of the order value covering for the defects liability period. If PBG is not submitted, 10% of the order value shall be deducted towards PBG from final bill.

8. RAW MATERIALS ISSUE :

Raw materials shall be issued with appropriate processing allowance and invisible wastage over the theoretical requirement of raw materials (**Plates, Sheets, Sections and Pipes**).

9. TRANSFER / RETURN OF LEFT OVER MATERIALS :

Party should maintain proper records for receipt & use of all free issue materials. The left over materials & scrap as per the material accounting statement shall be returned to HPVP stores along with finished job. Material Transfer Vouchers (MTV) from one order to another or from one vendor to another and Material Return Vouchers should be submitted immediately after transfer / return. The material reconciliation statement shall be submitted by the contractor after verification and certification by BHEL along with the final bill **within 30 days from the date of completion of work**. Otherwise, recovery for the balance materials shall be made from any of their pending bills without further intimation.

10. MATERIAL RECONCILIATION :

Orders issued to the vendors have to be completed in all respects including Material Accounting within a maximum of **180 days** from the **date of issue of the first material** from BHEL - HPVP stores. This is a statutory requirement under Central Excise Rules and must be strictly complied with.

Maximum of 0.5 % on the requirement of materials (**Plates, Sections and Pipes**) is admitted towards **process allowance and invisible wastage**.

Scrap quantity is permissible up to a **maximum of 1% on Structural (Beams, Channels, Angles, Rods, Pipes etc.), 2% on Sheets, 3% for Plates** on the theoretical requirement of materials.

If wastage and scrap is beyond the above limits, it should be fully justified with cutting diagrams etc. which are to be approved in advance by BHEL. **Otherwise, the cost of raw materials beyond approved limits will be recovered from the contractor as per BHEL recovery rates including applicable taxes & duties.**

Material reconciliation including return of balance materials, off-cuts is to be completed within 20 days from the date of completion of the order. The material reconciliation statement shall be submitted by the contractor after verification and certification by BHEL-HPVP along with the final bill **within 30 days from the date of completion of work**. Otherwise, recovery for the balance materials shall be made from any of their pending bills without further intimation,

Repeated occurrence of inordinate delays in returning and settling the material accounting will entail BHEL the right to terminate the contract forthwith or impose a temporary suspension on further loading at the discretion of BHEL.

11. SCRAP & OFFCUT NORMS :

Sl. No.	Description	Scrap Size (in mm)	Off-Cut (in MM)
1.	CS/AS Sheets & Plates	Below 500 × 250	500 × 250 & above
2.	Rolled sections Rod, angles etc. (other than -tubes, pipes)	Below 1000	1000 & above
3.	Tubes & Pipes	Below 500	500 & above
4.	Universal column	Below 1000	1000 & Above
5.	SS Sheets & Plates	Below 500 × 250	500 × 250 & above
6.	SS Structural, Rods, Tubes, Pipes	Below 250	250 & above
7.	Non – ferrous: sheets & plates, rods & tubes	Below 500 × 250 (S & PL), Below 250 (Rods & Tubes)	500 × 250 & above, 250 & above
8.	Big size Scrap	(2500 & above) × (150 to 249)	-

12. INSPECTION :

Party shall contact our Quality Control Dept. for stages of inspection before commencement of job and should strictly follow the stages of inspection as per QAP.

13. WORKMANSHIP GUARANTEE :

The vendors should give workmanship guarantee for fabricated items for a period of 18 months from the date of last delivery of the order. Any defects due to incomplete work, faulty workmanship found in the fabricated items after delivery during the defects liability period shall be rectified / replaced by the vendor free of cost. Otherwise, the expenditure incurred towards the same will be recovered from the pending bills of vendors.

14. WORK PROGRESS :

The fabricator shall furnish a weekly report on the progress of work along with the status of availability of free issue materials and requirement of further materials, if any.

Outsourcing dept. personnel will visit vendor's works from time to time to assess and review the work progress. Free access shall be provided to BHEL or its inspection agency at all reasonable times of the day / night.

In case the progress is not satisfactory or supplies are delayed abnormally beyond the contractual delivery date, BHEL-HPVP, Visakhapatnam reserves the right to cancel the order in part or full or get the balance job in as is where is condition completed elsewhere by another agency at the risk and cost of Fabricator. The value of the work carried out by the party will be assessed by BHEL and the same shall be final. No compensation will be given to the fabricator in case of cancellation of order or diversion of balance job even if the jobs have been processed partly.

15. DELIVERY :

Finished items should be handed over to the Logistics dept. on party's delivery challans along with Job completion certificate / Final Inspection Report from inspection agency / HPVP-QC department.

16. PENALTY :

If delivery exceeds the stipulated delivery schedule, penalty 1/2 % of the total value of order per week or part there of subject to a maximum of 10% on the total value of the order will be levied. However, time taken for the following will not be considered as delay on the part of the Sub-Contractor.

- 1) Intermediate operations, if any, carried out by BHEL.
- 2) Waiting time for BHEL / Third party Inspection beyond a normal time of 3 days.

17. PAYMENT TERMS :

100% payment will be made against delivery of the finished items duly inspected & cleared by Inspection authority along with all inspection documents to Logistics Dept. Payment shall be made within **45 days** from the date of submission of RA Bill.

Only one bill will be admitted for orders with value less than Rs. 5 lakhs and a maximum of two bills are allowed for orders of value more than Rs. 5 lakhs. In such cases, the first bill value shall be restricted to a maximum of 50 % of the order value and a minimum of 50% of the total DUs of the order.

Vendors shall have to submit the bills in the formats specified by HPVP-Outsourcing and the bills submitted in the specified format along with necessary supporting documents are only admitted for processing. The following documents shall be submitted along with the Final Bill: -

1. No Claim Certificate from the contractor
2. No Dues Certificate from BHEL
3. Work Completion Certificate from BHEL
4. Material Reconciliation Statement submitted by the Contractor and certified by concerned authority of BHEL (if applicable)
5. Workmanship Guarantee certificate from the contractor

18. SECURITY :

All the documents of BHEL inclusive of Drawings, GMS and Standards made available to the fabricator should be kept in strict confidence and under no circumstance be made available to others or allow others to make use of them. Such documents shall be returned to BHEL on demand after completion of the job. This secrecy clause is binding on the employees of the fabricators also. Violation of the same may lead to suspension of business with the vendor and necessary legal action.

19. SUB-LETTING :

In general, sub-letting of jobs will not be permitted. But in special circumstances, this may be allowed. In such case, the party should obtain written approval from BHEL-HPVP, Visakhapatnam before sub-letting.

20. FACTORY RULES AND REGULATIONS :

Party shall abide by all the rules and statutory regulations in force from time to time as per factories act. It shall be party's responsibility to ensure the safety of their workmen and fulfilling the ESI, PF and other relevant statutory regulations.

21. SAFETY :

- a) Contractor shall adhere to safe construction practices, guard against hazardous & unsafe working conditions and shall comply with the safety rules of BHEL and local authorities. He shall maintain First Aid facilities for all his employees and labour. Contractor's responsibility includes supply of welder kit, all safety items such as safety belts, white and colour glasses, goggles, safety helmets, safety shoes etc.
- b) *Contractor and his employees shall follow all fire & safety, security regulations of BHEL.*

22. HOUSE KEEPING :

During execution of work, the contractor at all times keep the working place and storage area clean and free from accumulation of waste materials, rubbish etc.,

23. ACCIDENT / DAMAGE / CONDUCT ETC. :

Contractor will be held responsible for any disorderly conduct / misconduct, indiscipline, theft, smoking etc., on the part of his men. He will ensure summarily eviction of such men from his premises failing which BHEL would remove them from the factory on his responsibility. Any damage to and or loss of equipment, machinery, building etc., to BHEL or BHEL employees, visitors or other contractors resulting from his own or any of his men's negligence shall be liable to be made good by him. Contractor shall be solely responsible for any accident in which you or your men or your equipment may be involved during the execution of contract on account of any reason what so ever.

24. TERMINATION OF CONTRACT :

In the event of any failure on the part of the contractor, BHEL reserves the right to terminate the contract by giving a notice of 2 weeks for any of the following lapses and contractual violations: -

- a) Failure to make labour payments in time as per the rules
- b) Failure to progress the job according to the agreed schedule
- c) Failure to mobilize adequate man power, tools & tackles and consumables in time
- d) Failure to adhere to Quality Standards of BHEL
- e) Refused to co-operate with other agencies working in the same area
- f) Failure to resolve labour disputes like strikes etc., within 7 days of occurrence
- g) Failure to comply with statutory regulations applicable at BHEL

BHEL shall also be free to intervene and take necessary remedial measures. All costs incurred with interest and overheads shall be recovered from contractor by such foreclosing or off-loading any part of the contract work.

25. DISPUTES :

Head of BHEL- HPVP Unit will be the final authority for any disputes arising out of this contract. The disputes / arbitration / settlement of contractual or legal issues shall be under the Jurisdiction of Visakhapatnam Court.

- 26.** For this procurement, Public Procurement (Preference to Make in India), Order 2017 dated 15.06.2017 & 28.05.2018 and subsequent Orders issued by the respective Nodal Ministry shall be applicable even if issued after issue of this NIT but before finalization of Contract / PO / WO against this NIT.

In the event of any Nodal Ministry prescribing higher or lower percentage of purchase preference and / or local content in respect of this procurement, same shall be applicable.

Signature of Bidder with Stamp

Ref : OS/19-20/DE/2434/18/042

Date : 13.08.2019

Acceptance to the Tender Terms & Conditions

I / We hereby confirm that the Tender documents, Drawings, Quality documents etc. have been studied in detail and we have fully understood the scope of work.

I / We accept to all the Terms and Conditions of the Tender Enquiry and the prices quoted are in accordance with the same.

I / We give our acceptance to participate in reverse auction, in case BHEL decides to opt for reverse auction for this tender.

Tender documents duly signed on all the pages by the Owner / authorized representative of the bidder are attached herewith.

Signature of the Bidder with Stamp

GENERAL TERMS AND CONDITIONS OF RA (REVERSE AUCTION)

BHEL reserves the right to go for Reverse Auction (RA) (Guidelines as available on www.bhel.com) instead of opening the sealed envelope price bid, submitted by the bidder. This will be decided after techno-commercial evaluation. Bidders have to give their acceptance with the offer for participation in RA. Non-acceptance to participate in RA may result in non . consideration of their bids, in case BHEL decides to go for RA.

Those bidders who have given their acceptance to participate in Reverse Auction will have to necessarily submit ~~Process~~ compliance formq(to the designated service provider) as well as ~~Online sealed bidq~~in the Reverse Auction. Non-submission of ~~Process~~ compliance formqor ~~Online sealed bidq~~by the agreed bidder(s) will be considered as tampering of the tender process and will invite action by BHEL as per extant guidelines for suspension of the business dealings with suppliers/ contractors (as available on www.bhel.com).

The bidders have to necessarily submit online sealed bid less than or equal to their envelope sealed price bid already submitted to BHEL along with the offer. **The envelope sealed price bid of successful L1 bidder in RA, if conducted, shall also be opened after RA and the order will be placed on lower of the two bids (RA closing price & envelope sealed price) thus obtained. The bidder having submitted this offer specifically agrees to this condition and undertakes to execute the contract on thus awarded rates.**

If it is found that L1 bidder has quoted higher in online sealed bid in comparison to envelope sealed bid for any item(s), the bidder will be issued a warning letter to this effect. However, if the same bidder again defaults on this count in any subsequent tender in the unit, it will be considered as fraud and will invite action by BHEL as per extant guidelines for suspension of business dealings with suppliers / contractors (as available on ww.bhel.com).+

As a reminder to the bidders, system will flash following message (**in RED Colour**) during the course of ~~online sealed bidq~~

%Bidders to submit online sealed bid less than or equal to their envelope sealed bid already submitted to BHEL+

Signature of the Bidder with Stamp



**BHARAT HEAVY ELECTRICALS LIMITED
HEAVY PLATES & VESSELS PLANT
VISAKHAPATNAM**

TDC . E7018N
Rev. No. 03
Date: 09-02-2019

WELDING TECHNOLOGY DEPARTMENT

TECHNICAL DELIVERY CONDITIONS FOR E7018 (NACE) SMAW ELECTRODES

A) SCOPE :

Material is to be supplied along with Batch Test Certificate incorporating with a certificate of compliance as we certify that the supply made against this batch Test certificate conform to all requirements as per ASME SEC-II Part 9C+ (latest edition and addenda) and NACE SP0472 (applicable on the date of issue of purchase order) in all respects and reported for the following properties guaranteed as mentioned respectively.

B) TEST REQUIREMENTS :

The base metal for weld test assembly and testing procedure to be employed for verifying compliance to section (B) of this TDC document shall be as specified in ASME SEC-II Part 9C+ (Latest Edition and Addenda) SFA 5.1, E7018 and as per NACE- TM-02-84, NACE TM 0177 & NACE SP0472 standard requirements.

B.1 CHEMICAL COMPOSITION:

Chemistry of undiluted weld metal as per ASME SEC-II Part 9C+ (Latest Edition and Addenda) SFA 5.1 E7018 & shall match with the requirements of A. No.1 of QW-442 of ASME SEC-IX (Latest Edition & Addenda) and additionally meeting the following stipulations:

Sulphur %	0.01 Max
Phosphorus %	0.015 Max.
Nickel %	0.2 Max.

B.2 RADIOGRAPHIC SOUNDNESS:

The electrode shall be suitable for radiography quality butt joint welding of NACE Vessels of SA516 Gr.60 HIC resistant + NACE MR103 Compliant + NACE SP0472 Plate Material. The radiographic test shall meet the requirements of ASME SEC-II Part 9C+ (Latest Edition and Addenda) SFA 5.1 E7018

B.3 MECHANICAL PROPERTIES:

B.3.1 Mechanical properties of undiluted weld metal deposited using this electrode after Post-weld heat treated condition at $630 \pm 10^{\circ}\text{C}$ for 2 hrs. as per ASME SEC-II Part 9C+ and shall meet the requirements as below

Yield Strength at 0.2 % Offset	400 MPa Minimum
Tensile Strength	490 MPa Minimum
Elongation	25% Minimum

B.3.2 Hardness of undiluted weld metal in as-welded condition shall not exceed 200BHN

B.3.3 Average CVN impact energy taken on five specimens after PWHT at $630 \pm 10^{\circ}\text{C}$ for 2 hrs. shall be 5.0 Kg-m / 49 Joules minimum when tested at minus 30°C . No single specimen value shall be less than 3.6 Kg-m / 35 Joules minimum.

B.3.4 Hydrogen induced cracking (HIC) & Sulphide Stress Corrosion Cracking (SSCC) test on undiluted weld metal in as-welded condition as per NACE-TM- 02-84 standard & using the acidified test solution specified in NACE standard TM 0177 and shall meet the following:

- Crack length ratio (CLR) m5%
- Crack Sensitivity Ratio (CSR) 1%

C) SIZE, CORE WIRE, COVERING, EXPOSED CORE, IDENTIFICATION :

C.1 The electrode shall be supplied in diameters and lengths as specified in the purchase order. The tolerance on diameter and length shall be as per SFA-5.02.

C.2 The electrodes shall meet the requirements of clause 3.2, 3.3, 3.4 of SFA-5.02

D) FILLET WELD TEST :

Fillet weld test done using this electrode shall meet the requirements specified in ASME SEC-II Part 5, SFA 5.1, E7018

E) MOISTURE CONTENT OF COVERING :

Moisture content of the electrode covering shall not exceed the limit specified in ASME SEC-II Part 5, SFA 5.1 E7018

F) PACKAGING :

F.1 Electrodes in standard quantity shall be wrapped tightly in a corrugated paper with moisture proof packing in polythene bags and sealed. These shall be further packed either in hermetically sealed containers or in cardboard packets and then packed with polythene bags and sealed.

F.2 The number of electrodes per packet shall be such that the net weight of each packet does not exceed 5Kg. Packets shall be further packed in cardboard cartons each weighing not more than 25Kg. The cartons shall be packed in waterproof boxes with crates so as to ensure no damage during shipment and normal storage conditions.

F.3 Weight of each crate shall not exceed 1000Kg.

F.4 Markings of packages shall be as per clause 4.6 of SFA-5.02

G) TESTING & CERTIFICATION :

G.1 Each consignment of electrodes supplied shall be from one batch only.

G.2 Lot/Batch classification shall be Class C1 as per SFA-5.01 filler metal procurement

guidelines of ASME SEC-II Part 9+(Latest Edition and Addenda).

- G.3** The level of testing shall be Schedule-K of section 5.0 & Table 1 of SFA 5.01 Filler metal procurement guidelines of ASME SEC-II Part 9+(Latest Edition and Addenda).
 - G.4** Batch Test Certificate (BTC) incorporating with a certificate of compliance as "We certify that the supply made against this batch Test certificate conform to all requirements as per SFA 5.1 E7018 of ASME SEC-II Part 9+(Latest Edition and Addenda) and addenda and NACE SP0472 (applicable on the date of issue of purchase order) and meets additional requirements specified in this TDC document" shall be sent.
 - G.5** The batch(es) to be supplied shall be tested by NABL approved lab and shall have EIL approved (like CEIL TPI agency) Third party inspection approval for the batch supplied and the same BTC shall be sent prior to dispatch of the material.
- H) Any deviation from TDC shall be clearly specified vide offer. Offer shall specify whether the offered brand fully meet the TDC requirements or not. Otherwise, it will be treated that all TDC requirements are met with.**

LIST OF PMD VENDORS – E7018 NACE

AWS	E7018 NACE	Group	08-consumables		
SIZE	3.15, 4, 5MM	MATERIAL CODE	182411101730 (PCS); 182411101740 (PCS); 182411101750 (PCS);		
MATERIAL GROUP	WELD ELEC				
MATERIAL GROUP DESCRIPTION	E7018 NACE SMAW ELECTRODE				
TDC NO. -VIZAG	E7018N REV. 3 DT. 09.02.2019	SFA NO.	5.1		

Mat Group	Vendor No	Vendor Name	Size Detail	Brand	country	EMAIL	PHONE1	contact person	Address	Website
WELD ELEC		HONAVAR ELECTRODES PVT. LTD.	3.15, 4, 5	ULTIMATE-18NC	INDIA	honavarelectrodes@gmail.com; honavarmarketing@gmail.com	022-25020317	p venkata rao/Area Manager Mob: 9866224859	H.O: 305-309, 3RD FLOOR, DAMJISHAMJI INDUSTRIAL COMPLEX, 9 LBS MARG, KURLA (WEST), MUMBAI - 400 070; TEL -91-22-2502 0317 / 2502 1238 / 65008821; FAX - 91-22- 2510 0048; EMAIL: hal@vsnl.com; Website: www.honavarelectrodes. net	
WELD ELEC		D&H secheron Electrodes Pvt. Ltd	3.15, 4, 5	SUPRATHER ME (MOD)	INDIA	sales@dnhsecheron.net; dnhchn@dnhsecheron.net;	0731-4229222; 0-96850-91106	SHIV CHATURVEDI - 9685091121		

WELD ELEC		LINCOLN ELECTRIC	3.15, 4, 5	JETWELD LH70	INDIA	mohamed_aleem@lincolnelectric.in; Klpandey@lincolnelectric.in; sankaranarayana@lincolnelectric.in; 'info@lincolnelectric.in'		9940537816 – Mohamed aleem		
WELD ELEC		GEE LIMITED	3.15, 4, 5	Gricon Green (SPL) NC	INDIA	mpdhanuka@geelimited.com; srinivas@geelimited.com; hyderabad@geelimited.com	02522 281176, 02522 281188	C SRINIVAS/Regional Manager - 9848115444 M.P. DHANUKA - 9820504504 Executive Director- Technical & Marketing	Regd. Off & Works: Plot No.B -12,MIDC,Kalyan-Bhiwandi Road,Saravli,Kalyan(West)-421311 Thane,Maharashtra,India. Tel : +91-02522-281176/88/90 Fax :+91-02522-281199 E-mail : sales@geelimited.com; Website : www.geelimited.com	
WELD ELEC		ANAND ARC LIMITED	3.15, 4, 5	ANANDTHERME (N)	INDIA	mkverma@anandarc.com		D KRISHNAMURTHY - DIRECTOR -MARKETING; mk verma - 7045918330/GM-MARKETING	New No. 22, Old no. 31, Railway colony, III street, Aminjikarai, Chennai - 600029, Tel-044-23746379, 044-23741841, Fax - 044-23741841	

WELD ELEC		ADOR WELDING LIMITED	3.15, 4, 5		INDIA	sankararao@adorians.com; ninadthigale@adorions.com	9553553355	P SANKAR-SR. AREA SALES MANAGER-9553553355; NINAD THIGALE - TECH MARKETING & PRODUCT DEVELOPMENT - 9552554150 ; hari ganesh - Vendor development	CORPORATE MARKETING OFFICE, P.B. NO. 2, CHINCHWAD, PUNE, 411019	
WELD ELEC		VOESTALPINE BOHLER WELDING	3.15, 4, 5	BOHLER FOX N EV50-1 (SPL)):	INDIA	naveenkumar@voestalpine.com; suresh.prakash@voestalpine.com; parwati.shivanagi@voestalpine.com	2381271759; 9818471482; 7290024560	Naveen kumar/National sales manager - 9818471482; Suresh prakash/Regional sales Manager/south - 7290024560	B.201,UNIVERSAL BUSINESS PARK, CHANDIVLI FARM ROAD, OFF SAKI VIHAR ROAD, SAKI NAKA, MUMBAI, 400072	DEALER: M/s. SAANVI ENTERPRISES

GST COMPLIANCE FOR INDIGENOUS SUPPLIERS

1. In Response to Tenders for Indigenous supplier will be entertained only if the vendor has a valid GSTIN which should be clearly mentioned in the offer. If any specific exemption is available, a declaration with due supporting documents need to be furnished for considering the offer.
2. Supplier shall mention their GSTIN in all their invoices and invoices shall be in the format as specified/prescribed under GST laws. Invoices shall necessarily contain Invoice number (in case of multiple numbering system is being followed for billing like SAP invoice no, commercial invoice no etc., then the Invoice No which is linked/uploaded in GSTN network shall be clearly indicated), item description as per PO, Quantity, Rate, Value, applicable taxes with nomenclature (like IGST, SGST, CGST & UTGST) separately, HSN/ SAC Code, etc.
3. All invoices shall bear the HSN Code for each item separately (Harmonized System of Nomenclature)/ SAC code (Services Accounting Code).
4. A declaration to the effect that all invoice particulars are/were uploaded in the GSTN network/ portal & all tax liability as per GST rules and regulations have been and will be discharged, shall be mentioned in the invoice. If not mentioned in the invoice, a separate declaration shall be submitted as per the requirement of BHEL.
5. All documents like Test Certificate, LR copy, Guarantee/Warrantee certificate, work completion certificate, any other document mentioned in PO, shall be sent along with the vehicle/consignment where ever applicable. For all consignments received within the calendar month, input credit will be availed within that month in line with monthly returns filing cycle. In case of any discrepancy in the document or non-submission of documents mentioned in the PO, then BHEL will not be able to accept or account the material, in such case availing of tax credit will be deferred to next month or so.
6. In case of discrepancy in the data uploaded by supplier in the GSTN portal or in case of any shortages or rejection in the supply, then BHEL will not be able to avail the tax credit and will notify the supplier of the same. Supplier has to rectify the data discrepancy in the GSTN portal or issue credit note (details to be uploaded in GSTN portal) for the shortages or rejections in the suppliers, within the calendar month notified by BHEL.
7. For any such delay in availing of tax credit for reasons attributable to supplier (as mentioned above), interest (calculated @ SBI Base Rate + 6%) along with penalty if any will be deducted for the delayed period i.e. from the month of receipt till the month tax credit is availed, from the running bills.
8. Under GST regime, BHEL has to discharge GST liability on LD recovered from suppliers/contractors. Hence applicable GST shall also be recoverable from suppliers/contractors on LD amount. For this Debit note will be issued by BHEL indicating the respective supply invoice number.
9. This is to inform that GST portion of invoice, shall be released only upon Vendor declaring such invoice in his GSTR-1 and receipt of goods and Tax invoice by BHEL and Confirmation of payment of GST thereon by vendor on GSTN portal. Alternatively, BG of appropriate value may be obtained from vendor which shall be valid At least one month after the confirmation of date of payment of GST by vendor on GSTN portal and receipt of Tax invoice and receipt of goods, whichever is later. Above is subject to receipt of goods/service and tax invoice thereof along with vendor declaring invoice in his return and paying GST within timeline prescribed for availing ITC by BHEL.
10. That in case vendor delays Declaring such invoice in his return and GST credit availed by BHEL is denied or reversed subsequently as per GST law, GST amount paid by BHEL towards such ITC reversal as per GST law shall be recoverable from vendor/contractor along with interest levied/ leviable on BHEL.

Note : The above will be followed strictly for processing vendor payments to ensure GST Compliance.

Signature of the Bidder with Stamp