

### Technical Specifications

| SL. No | Description and Technical Specification of the item   | QTY      | UNIT | Delivery |
|--------|---|----------|------|----------|
| 1      | E NICKRFE-3 SMAW ELECTRODE 2.4/2.5MM<br><br>ASME SEC II.C SFA-5.11 ENiCrFe-3(NON-SYNTHETIC)<br>SMAW Electrode AS PER WCPI 225/02<br><br>Diameter - 2.4mm /2.5 mm<br>length - 300/350 mm LONG.     | 3,000.00 | KG   | 90 DAYS  |
| 2      | ENICKRFE-3 SMAW ELECTRODE DIA 3.15/3.2 mm<br><br>ASME SEC II.C SFA-5.11 ENiCrFe-3(NON-SYNTHETIC)<br>SMAW Electrode AS PER WCPI 225/02<br><br>Diameter - 3.15 /3.2 mm<br>length - 300/350 mm LONG. | 3,500.00 | KG   | 60 DAYS  |



**WELDING CONSUMABLE PURCHASE INSTRUCTION FOR**  
**SMAW ELECTRODE ENiCrFe-3**

**1.0 GENERAL:**

- 1.1 The electrodes shall comply with requirements specified in the Latest Edition and Addenda (Applicable on the date of Issue of Purchase Order) of ASME Sec.II.C.SFA-5.11, ENiCrFe-3. All tests, acceptance criteria shall be in accordance with this. Additional requirements specified in this document shall also be complied.
- 1.2 The Electrodes shall be supplied in sizes and quantities as specified in the purchase order.
- 1.3 The electrodes are intended for use in radiographic quality butt welded joints in high pressure boiler tubes and pipes. The electrode shall be suitable for joining dissimilar materials such as Super 304H to steel and steels to nickel Alloys. The electrode shall be suitable for welding joints that undergo stress relieving.
- 1.4 Every batch of electrodes shall be inspected & test certificates countersigned by Inspecting authority approved by IBR for country of origin (latest).
- 1.5 The electrode shall be of Non-Synthetic type with an alloyed core wire that nearly matches with weld metal chemistry.

**2.0 Chemical Composition:**

The chemical composition of the undiluted weld metal shall confirm to ASME SECII.C SFA-5.11, ENiCrFe-3.

**3.0 MECHANICAL PROPERTIES:**

The tension test and bend test shall meet the requirements of ASME SECII.C SFA-5.11 ENiCrFe-3.


**4.0 RADIOGRAPHIC SOUNDNESS:**

The radiographic test shall meet the requirements of ASME SECII.C SFA-5.11 ENiCrFe-3.

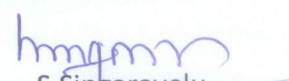
**5.0 SIZE:**

The electrodes shall be supplied in diameters and lengths as specified in the purchase order. The tolerance on diameter and length shall be as per SFA-5.11.

Prepared:

  
Suraj N  
Engineer / WTC

Reviewed & Approved:

  
S.Singaravelu  
SDGM/WTC





## 6.0 CORE WIRE & COVERING:

The electrodes shall meet the requirements of clause 3.2 of SFA-5.02.

## 7.0 EXPOSED CORE:

The electrodes shall meet the requirements of clause 3.3 of SFA-5.02.

## 8.0 IDENTIFICATION:

All electrodes shall be identified as per SFA-5.11.

## 9.0 PACKAGING:

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

9.2 Weight of each crate shall not exceed 1000kg.

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

## 10.0 TESTING & CERTIFICATION:

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

10.2 Batch /Lot classification shall be Class C1 as per SFA-5.01 Filler metal procurement guidelines of ASME Sec.II.C. (Latest Edition and Addenda)

10.3 The Level of Testing shall be Schedule J as per SFA-5.01 Filler metal procurement guidelines of ASME Sec.II.C. (Latest Edition and Addenda)

10.4 Three copies of Original Test certificates in English countersigned by Inspecting Authority (Latest) approved by IBR for country of origin giving details of following tests done in compliance with this Purchase Instruction and ASME Sec.II.C, SFA-5.11, ENiCrFe-3 shall be sent.

10.5 The Testing Authority shall certify that supplies made against the batch conform to the requirements of the Latest Edition & Addenda (Applicable on the date of issue of Purchase Order) of ASME Sec.II.C.SFA-5.11, ENiCrFe-3.

| Sl. No. | Pre –Qualification Criteria ENiCrFe-3   | Bidder remark |
|---------|---|---------------|
| 1       | <p>Bidder shall be a manufacturer of the Quoted SMAW Electrode / an authorized dealer of the same.</p> <p>If the offer is quoted by agent, letter of authorization and agreement duly signed by the manufacturer is required to consider the offer.</p>   |               |
| 2       | <p>Bidder (Principle Supplier) shall have successful experience for supplying of ENiCrFe-3 SMAW Electrode to any govt. Organizations/ PSUs/ Public Ltd./ Company/Reputed Industries /Welding industries/Welding application etc.</p> <p>Purchase orders copies/ related documents to be submitted along with offer to consider the offer.</p> <p>Note: <u>Successful experience means – supplied and accepted.</u></p>  |               |
| 3       | <p>Kindly provide the self-declaration for “successfully supplied and accepted by customer” on Principle Supplier letter head regarding document Sl . No. 2.</p> <p>In self-declaration document, kindly provide the following details:</p> <ul style="list-style-type: none"> <li>• PO number</li> <li>• PO date</li> <li>• PO items description</li> <li>• Brand Name</li> <li>• Supplied Quantity</li> <li>• Customer Name</li> <li>• Manufacturer Name</li> </ul> |               |
| 4       | Quoted Welding Consumables brand name   |               |
| 5       | Mill address (manufacturing address) offer.   |               |
| 6       | Mill capacity for SMAW Electrode (By Principle Supplier)  |               |
| 7       | Manufacturer shall submit manufacturing process flow chart (Raw material to finished product) along with offer for SMAW Electrode.  |               |
| 8       | Manufacturer/Bidder shall submit a valid ISO 9001 certificate or Quality management system certificate or Written down procedure for ISO 9001 or A valid ISO 45001 certificate or Written down procedure for Quality inspection.  |               |

| Sl. No. | PR 135420551<br>Pre –Qualification Criteria ENiCrFe-3  | Bidder Remark. |
|---------|--|----------------|
| 9       | Shall confirm to Technical Specifications as per as per WCPI - 225/02.   |                |
| 10      | Vendor should give confirmation to BHEL's Technical Specification. Any deviation from the Specification are to be mentioned in the "Bidder remark Space".<br><br>If There is no deviation vendor should indicate "No Deviation".   |                |
| 11      | Original Certified material test report in English signed by the manufacturer giving details of tests done in compliance with this WCPI - 225/02 and ASME Sec.II.C.SFA-5.11 ENiCrFe-3 shall be sent along with supply.   |                |
| 12      | The testing authority shall certify that the batch of material supplied is conforming to the requirements of the latest edition and addenda (applicable on the date of issue of purchase order) of ASME Sec.II.C. SFA-5.11 ENiCrFe-3.  |                |
| 13      | "A copy of valid IBR Approval Certificate for the brand being supplied to be submitted along with supply. It is mandatory that, Manufacturer should possess a valid IBR certificate (for the brand being supplied) during the manufacturing period.<br>or<br>"Original test certificates in English countersigned by Inspecting Authority (latest) approved by IBR for country of origin giving details of the tests done in compliance with this purchase instruction (as per WCPI - 225/02) and ASME Sec.II.C, SFA-5.11, ENiCrFe-3 shall be sent". |                |

**Annexure – A- Additional Terms and Conditions for GeM Enquiry**

The terms and condition mentioned in this document are applicable in addition to the GeM General Terms and Conditions. Bidders shall furnish pointwise confirmation/details.

| <b><i>To be filled by bidder</i></b>  |   |   |
|---|---|---|
| <b>Description of the Equipment:</b>  |   |   |
| <b>GeM Tender No. &amp; Date</b>  |   |   |
| <b>Name of the firm (Bidder)</b>  |   | :   |
| <b>Address</b>  |   | :   |
| <b><u>Contact person 1</u></b><br><b>Name:</b><br><b>Designation:</b><br><b>Office Phone:</b><br><b>Mobile:</b><br><b>e-mail:</b> |   | <b><u>Contact person 2</u></b><br><b>Name:</b><br><b>Designation:</b><br><b>Office Phone:</b><br><b>Mobile:</b><br><b>e-mail:</b> |
| <b>Offer/Quotation reference with date</b>  |   | :   |
| <b>Sl</b>   | <b>Terms and conditions</b>   | <b>Vendor's confirmation</b>  |
| 1.  | Inspection by BHEL/as per Technical specification(if any).  |   |
| 2.  | <b>Payment terms:</b> <ol style="list-style-type: none"> <li>1. Payment terms for Non MSME Suppliers: Within 90 days after CRAC</li> <li>2. Payment terms for Micro &amp; Small Enterprises (MSEs): Within 45 days after CRAC. The supplier should upload UDYAM Registration Certificate in proof of MSE.</li> <li>3. Payment terms for Medium Enterprises: Within 60 days after CRAC. The supplier should upload UDYAM Registration Certificate in proof of Medium Enterprises.</li> </ol> <p><b>Note:</b> Deviation in above payment terms is not acceptable. In case of Auto PRC/CRAC, Payment due date shall be calculated from CRAC date or material acceptance date by BHEL whichever is later.</p> |   |
| 3.  | Response to Tenders for Indigenous supplier will be entertained only if the vendor has a valid GST registration number which should clearly mentioned in the offer. Indicate the GST registration number. If any specific exemption is available, a declaration with due supporting documents need to be furnished for considering the offer.   | GST Registration No. _____  |
| 4.  | <b>Performance Bank Guarantee:</b><br>Not Applicable  |   |
| 5.  | Kindly Indicate the HSN Code for all items  | HSN CODE : _____  |
| 6.  | Rate quoted in GeM portal should be on FOR destination basis inclusive of all taxes, P&F, freight etc. Transit Insurance is under Supplier scope.<br><br>Please indicate how much GST percentage is included in quoted price.   | GST in %: _____   |

Vendor's Seal & Signature

## / On Bidder's office letter pad /

Self-Declaration

|              |  |
|--------------|--|
| Enquiry No.  |  |
| Enquiry Date |  |

In line with Government public procurement order Number P-45021/2/2017-B.E-II dated 15.06.2017, and further modified order dt. 28.05.2018, 29.05.2019 & order 04.06.2020 issued by DPIIT

I / We hereby declare that I / We are a "Local Supplier" meeting the requirement of minimum local content (..... %) defined in the above government notification for the goods against above mentioned enquiry Number.

Details of location at which local value addition will be made is as follows:

|                    |  |
|--------------------|--|
| Door No.           |  |
| Street / Address 1 |  |
| Street / Address 2 |  |
| District           |  |
| State              |  |
| Country            |  |
| PIN Code           |  |

We also understand that the false declarations will be in breach of the code of Integrity under rule 175(1)(i)(h) of the General financial rules for which a bidder or its successors can be debarred for up to two years as per Rule 151(iii) of the General Financial Rules along with such other actions as may be permissible under law.

For Company Name:

Seal:

Signature:

Date:

Place:

**Note:**

" Local Content "means the amount of value added in India which shall ,unless otherwise prescribed by the Nodal Ministry, be the total value of the item procured(excluding net domestic indirect taxes) minus the value of imported content in the item(including all customs duties) as a proportion of the total value, in percent. "Local Supplier "means a supplier or service provider whose product or service offered for procurement meets the minimum local content.

# The above declaration shall be submitted mandatorily along with the offer in company letter head with seal & signature.

(Please fill all the yellow color field)