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PI-832797010

NIT conditions for rate contract procurement of EM-12K wire

1. Enquiry-2 part bid.
2. Inspection term: At BHEL Bhopal (QC FBM-LF3). TC/GC is required along with supply.
3. Enquiry technical term- as per BHEL technical specification
4. Material code- AA7714103230
5. Material category-771010
6. PMD- NST01 item-230
7. BHEL enquiry item- Welding wire Em12k to SFA-5.17 of ASME SEC-IIIC 2017 as per technical spec FBM/WD&T/TS16 REV00
8. Ordering quantity- Qty-20,000kg
9. Delivery condition- 8-10 weeks from date of PO placement.
10. Material is to be supplied against RC after PO placement. The PO quantity may vary depending on BHEL requirement. The RC would be valid for at least 1 year.
11. The standard/minimum supply quantity in PO shall be 5,000kg. On mutual agreement, minimum supply quantity may be increased or decreased. Vendor to ensure that each lot of supply in one PO shall be of same batch.
12. Quantity tolerance for each supply +/-1%.
13. Scope of supply- suitably packed to avoid transit damage. TC/GC is required along with supply.
14. Vendor to provide detailed product data sheet along with enquiry for technical evaluation.
15. BHEL shall reserve the right to short close the contract at any time, should there be any change in change in production schedule, customer requirements, other contractual issues with customer, sudden slump in market prices, poor performance rating, and quality related issues or diminishing of demand.
16. Open tender process to be followed. PQR is attached herewith

17. Value - F


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FABRICATION DIVISION
Welding Development & Technology
BHEL, BHOPAL

Technical Specification No: FBM/WD&T/TS16 Rev 00

Technical Specification of carbon steel electrodes (solid) for submerged arc welding

P.I No.		Date: 23, May 2019		
S. No	Description	Requirement**	Offered/ Deviations	Remarks
1	Scope	This specification prescribes requirements for carbon steel electrodes (solid) for submerged arc welding.	Vendor to note	
2	General Requirements	1. The solid electrode shall be suitable for radiographic quality welding of low and medium carbon steel material like SA-516 Gr-70 using submerged arc welding. 2. The electrode shall be in annealed condition.	Vendor to Confirm	
2.1	Classification of electrode	EM12K as per SFA 5.17 of ASME Sec II C.	Vendor to Confirm	
2.2	Tensile strength of electrode (solid)	500-575 MPa	Vendor to provide Test Certificate	
2.3	Microhardness of electrode (solid)	215 HV _(0.5) (max.)	Vendor to provide Test Certificate	
2.4	Chemical composition of electrode (solid)	As per EM12K of Table 1 of SFA 5.17 of ASME Sec II C.	Vendor to provide Test Certificate	
2.5	Size of electrode	3.2 ± 0.06 mm	Vendor to Confirm	
2.6	Spool type	Coils with support	Vendor to Confirm	
2.7	Weight of Spool	25 kgs (approx.)	Vendor to Confirm	
2.8	Spool inside diameter (in mm)	ID : 300, +15, - 0	Vendor to Confirm	
2.9	Finish and Uniformity	As per clause 16.2 of SFA 5.17 of ASME Sec II C.	Vendor to Confirm	
2.10	Standard package forms	As per clause 16.3 of SFA 5.17 of ASME Sec II C.	Vendor to Confirm	
2.11	Winding Requirement	As per clause 16.4 of SFA 5.17 of ASME Sec II C. Also, wire (electrode) shall be in layer winding & not random winding.	Vendor to Confirm	
2.12	Electrode Identification	As per clause 16.5 of SFA 5.17 of ASME Sec II C.	Vendor to Confirm	
2.13	Packaging	As per clause 16.6 of SFA 5.17 of ASME Sec II C.	Vendor to Confirm	

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P.I No.		Date: 23, May 2019		
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2.1.4	Marking of Packages	As per clause 16.7 of SFA 5.17 of ASME Sec II C.	Vendor to Confirm	
3 Tests Required for electrode (solid) quoted				
3.1	The following tests may be done at BHEL Bhopal :			
3.1.1	Chemical Analysis of electrode (solid)	As per clause 10 of SFA 5.17 of ASME Sec II C.	Vendor to Confirm	
3.1.2	Radiographic test	As per clause 11 of SFA 5.17 of ASME Sec II C.	Vendor to Confirm	
3.1.3	*Tensile test	As per clause 12 of SFA 5.17 of ASME Sec II C.	Vendor to Confirm	
3.1.4	*Impact test (Charpy): 5 Samples at -20 °F on 2 mm V-notch	Average of three samples (Discarding Highest and lowest values): 27 J min. Two of the values used for computing average shall ≥ 27 J Single Value (Min): 20 J	Vendor to Confirm	
3.2	Welding parameters for test	The parameters for welding will be as follows: Current: 350-500 A Voltage: 30 - 36 V Electrode extension: 25 ± 6 mm Travel speed: 250 - 450 mm/min	Vendor to Confirm	
3.3	Post Weld Heat Treatment (PWHT)	As per clause 9.4 of SFA 5.17 of ASME Sec IIC.	Vendor to Confirm	
3.4	All the test mentioned at clause 3.1.2 to 3.1.4 of this specification to be done on a test coupon using EM12K electrode (as required in this specification) and TPD 80 (neutral fused flux) or any other similar flux available with BHEL Bhopal.			
3.5	* The test mentioned at clause 3.1.3 and 3.1.4 to be done after carrying out PWHT as mentioned at clause 3.3 of this specification.			



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Date: 23, May 2019

S. No	Description	Requirement**	Offered/ Deviations	Remarks
4	1. BHEL reserves the right to call free sample spool of minimum 25 kgs for further technical evaluation within 7 days of intimation by BHEL via e-mail.. 3. The test results (for clause 2.2 to 2.3 and 3.1.1 to 3.1.4 of this specification) of BHEL will be final.		Standard Catalogue and Test Certificate to be provided	

****All ASME standards referred in this specification shall be of Ed 2017**

Prepared By:

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Approved By:

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Sr. Engr. (WD&T, FWM)

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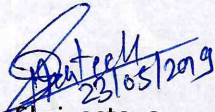
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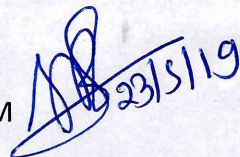
PI-832797010 Dated- 23/05/2019

Date- 23/05/2019

A. Technical Criteria:

- 1.) Only those makes and brands of EM-12k welding wire shall be eligible for this enquiry for which at least 5000kg (size-approx. 3.15mm in diameter) has been supplied in last 5 year. Details to be furnished -PO copy and invoice copy with price jacketed to be submitted along with offer.
- 2.) OEM has to take responsibility of quoted product. In case any trader or agent is participating on behalf of OEM, they have to furnish in writing/email from OEM for guarantee of quoted product.
- 3.) Vendor to furnish valid authorization from OEM.
- 4.) Only indigenous vendors are eligible for this enquiry.
- 5.) BHEL reserves the right to verify information provided by vendor. In case the information provided by vendor is found to be false/incorrect, the offer shall be rejected.


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B. FINANCIAL CRITERIA:

Indian bidders shall submit Audited financial results for the past three financial years (2016-17, 2017-18, 2018-19) and Foreign bidders shall submit D&B report covering past three financial years. The financial results shall be verified and evaluated to examine the financial health of the company. BHEL reserves the right to accept or reject the OEMs based on the assessment of their financial capability.	
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Vendor to furnish unpriced past PO's executed for other customers with detailed record. Also furnish annual turnover of company.	
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OR

PRE QUALIFICATION CRITERIA

1.0 FINANCIAL CRITERIA:

A) Average annual financial turnover of bidder, during the last three financial years (ending on 31-03-2019) should not be less than Rs. lakhs (or) equivalent in foreign currency. The bidder has to submit audited financial accounts for last three years in support of meeting the above criteria.

Notes:-

- i. Other income shall not be considered for arriving at annual financial turnover/sales.
- ii. Bidder has to submit copies of PAN card, Certificate of Incorporation from the Registrar of Companies/ Partnership Deed/ Proprietorship documents etc. as applicable.
- iii. In case audited financial statements are not available for latest financial year, then the applicable audited statements of preceding three financial years shall be considered
- iv. For evaluation of foreign bidder, exchange rate (TT selling rate of SBI) as on scheduled date of tender opening (Part-I bid in case of two-part bid) shall be considered.

2.0 i. Bidder should have executed orders during past ____ years, ending on LAST DATE OF BID SUBMISSION. Executed work in above mentioned areas must qualify .

- ii. The following minimum documents shall be submitted in support of the requirements: a) Unpriced purchase order copy b) Commissioning certificate / job completion certificate / performance certificate from end customer.

3.0 ADDITIONAL REQUIREMENTS

3.1 **For Indian vendors:** (a) The bidder should have established office in India (b) Bidder should submit copy of valid PAN number allotted by Govt. Of India.

3.2 **For Foreign vendors:** (c) In case of bidders from outside India, in addition to documents in support of above, they shall also provide business information report / credit rating report incorporating the rating of the company by international credit rating agencies viz DUN & BRADSTREET ETC etc along with technical offer. Such ratings reports shall not be older than 1 year from the date of submission of offer. Agency agreement needs to be submitted by foreign bidder in case of associating with an Indian entity