

Technical Specifications

SL. No	Description and Technical Specification of the item	QTY	UNIT	Delivery
1	E 71T-1C FCAW WIRE DIA 1.6 MM ASME SEC.II.C, SFA-5.20 E71T-1C (ASME SEC.II.C, SFA-5.20M, E491T-1C) ASME SEC.II.C, SFA-5.20 CARBON STEEL FCAW WIRE E71T-1C DIA.1.60 MM X 12.5/15 Kg SPOOLS as per WCPI-502/06. The wire is intended to be used in fillet welding of tube to fin and also butt welding applications. Fillet weld test as per ASME SEC IIC shall be performed and test results reported. Diffusible hydrogen content shall be less than 4ml/100 grams. The mechanical properties shall be reported after PWHT condition 610 degree celsius $\pm$ 10 degree celsius with soaking of 2.5 minutes per mm (minimum 30 minutes).	15,000.00	KG	Staggered delivery

Delivery schedule:

Lot 1: 6000 Kg within 30 Days from date of GEM Contract.

Lot 2: 6000 Kg 31 Days to 90 Days from date of GEM Contract.

Lot 3: 3000 Kg 91 Days 120 Days from date of GEM Contract.



BHARATH HEAVY ELECTRICALS LIMITED
TIRUCHIRAPALLI-620 014
WELDING TECHNOLOGY CENTRE

Doc. Number: WCPI – 502
Revision No.: 06
Date: 01.10.2013

WELDING CONSUMABLE PURCHASE INSTRUCTION FOR
FCAW WIRE AS PER ASME SEC II C SFA-5.20M E491T-1C

1.0 GENERAL:

- 1.1 The wire shall comply with the requirements specified in the latest edition and addenda (applicable on the date of issue of purchase order) of ASME Sec.II.C.SFA-5.20M, E491T-1C. All tests, acceptance criteria shall be in accordance with this. Additional requirements specified in this document shall also be complied.
- 1.2 The wires shall be supplied in sizes and quantities as specified in the purchase order.
- 1.3 The wires are intended for use as a welding electrode for welding carbon steel by FCAW process with 100% CO₂ with radiographic quality in high pressure boiler components in single & multi-pass welding.

2.0 CHEMICAL COMPOSITION:

The chemical composition of the weld metal deposited using wire with CO₂ shielding shall conform to ASME SEC.II.C SFA-5.20M, E491T-1C.

3.0 MECHANICAL PROPERTIES:

Mechanical properties of the wire shall conform to ASME SEC.II.C SFA-5.20M, E491T-1C with 100% CO₂ shielding.

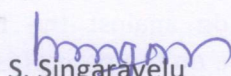
4.0 RADIOGRAPHIC SOUNDNESS & USABILITY:

- 4.1 The wire when used as an electrode in FCAW with 100% CO₂ shall deposit a weld metal that flows freely, produce notch free weld interface and posses good slag detachability. The wire shall produce a soft and stable arc, very low spatter and fumes.
- 4.2 The resultant weld metal shall be smooth, uniform, finely rippled with no visible evidence of cracks, porosity or other defects and shall meet the radiographic soundness requirements as per ASME SECIIC SFA- 5.20M, E491T-1C.
- 4.3 Diffusible hydrogen level in the weld metal deposited using the wire shall be ≤ 4 ml.

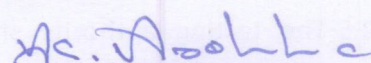
5.0 SIZE:

The wire shall be supplied in diameter 1.2mm or 1.6mm as specified in the purchase order. The tolerance on diameter shall be as per SFA-5.02.

Prepared:


S. Singaravelu
DGM / WTC

Reviewed & Approved:


Dr. K. Asokkumar
AGM/WTC



6.0 FORM & WEIGHT:

The wire shall be precision layer wound in ISO 644 : S300/BS300/B300 plastic spools as per SFA-5.02 and the net weight of wire shall be 10/12.5/15Kg. The spools shall meet the clause 4.3.4 of SFA-5.02.

7.0 FINISH & UNIFORMITY:

The wire shall meet the requirements of clause 4.2 of SFA-5.02. The wire as shipped shall be essentially free from lubricants, residue or rust that would cause buildup and stoppage in welding nozzles.

8.0 WINDING REQUIREMENTS:

The wire shall meet the requirements of clause 4.4 of SFA-5.02.

9.0 IDENTIFICATION:

The wire shall meet the requirements of clause 4.5.2 & 4.5.5 of SFA-5.02.

10.0 MARKING:

The wire shall meet the requirements of clause 4.6 of SFA-5.02.

11.0 PACKAGING:

11.1 The wire should be completely devoid of moisture or any other foreign material with adequate sealing in suitable cartons to ensure no deterioration in the wire quality during transportation by sea or long duration storage.

11.2 The cartons shall be packed in waterproof boxes with crates so as to protect them from damage during shipment and storage under normal conditions. Weight of each crate shall not exceed 1000kg. The cartons shall have product information as per clause 4.6 of SFA-5.02

12.0 TESTING & CERTIFICATION:

12.1 Each consignment of wires supplied shall be from one batch only.

12.2 Batch /lot classification shall be Class T1 as per SFA-5.01 filler metal procurement guidelines of ASME Sec.II.C. (Latest edition and addenda).

12.3 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).

12.4 Three copies of original test certificates in English countersigned by inspecting authority (latest) approved by IBR of the country of origin giving details of the tests done in compliance with this purchase instruction and ASME SECIIC SFA- 5.20M, E491T-1C shall be sent. In addition, test certificate shall contain purchase order number, quantity and customer name.

12.5 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.IIC, SFA-5.20M, E491T-1C.

Sl. No.	Pre –Qualification Criteria – PR 0138928491	Bidder remark
1	If Bidder is a manufacturer, Confirm “Yes or, No” in bidder remark.	
2	Bidder shall be a manufacturer of the Quoted items or an authorized dealer of the same. If the offer is quoted by agent, letter of authorization or agreement duly signed by the manufacturer is required to consider the offer. Tender Enquiry details must available on Letter of authorization or agreement to consider the offer.	
3	Quoted Welding Consumables Brand Name	
4	Quoted Product Catalogue	
5	Manufacturing Plant Address / Mill Address	
6	Manufacturer/Bidder shall submit manufacturing process flow chart (Raw material to finished product) along with offer for Quoted Item.	
7	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 .	
8	Manufacturing Plant capacity for quoted material.	

Seal and Sign of Authorized Person

Sl. No.	Pre –Qualification Criteria – PR 0138928491	Bidder remark
9	Bidder should confirm and full fill the WCPI- 502 /06. Any deviation from the Specification are to be mentioned in the “Bidder remark Space”. If There is no deviation vendor should indicate “No Deviation”.	
10	Seal and sign the WCPI- 502/06 for confirmation.	
11	WCPI- 502/06 (Diameter 1.6 mm & Spool Weight.: 15 Kg / 12.5 Kg) Diameter details and Spool Wt. details	
12	Present IBR certificate status to be provided .	
13	Manufacturer shall have successfully supplied FCAW Wire spools any govt. Organizations/ PSUs/ Public Ltd. Company/Reputed Industries/company etc. Purchase orders copies/ related documents to be submitted along with offer to consider the offer. Note: Successfully supplied means – supplied and accepted	

Seal and Sign of Authorized Person

Annexure – A- Special Conditions for GeM Enquiry

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

<u>To be filled by bidder</u>		
Description of the item/Equipment:		
GeM Tender No. & Date		
Name of the firm (Bidder) :		
Address :		
<u>Contact person 1</u> Name: Designation: Office Phone: Mobile: e-mail:		<u>Contact person 2</u> Name: Designation: Office Phone: Mobile: e-mail:
Sl	Terms and conditions/Details required	Vendor's confirmation
1.	Indicate the MSME status of the bidder. MICRO/SMALL/MEDIUM/Non-MSME. Note: Udyam certificate to be uploaded in proof of above. If it is indicated as "For availing benefits of Priority Sector Lending(PSL) ONLY" in Udyam certificate, then no MSME benefit will be considered for this tender.	
2.	Payment terms shall be as per clause 9 of Buyer Added Bid Specific Additional Terms & Conditions for this tender. Confirm your acceptance for the payment terms relevance to your MSME status indicated above. Note: GeM CRAC date shall be taken as material acceptance date.	
3.	Liquidated Damages shall be as per clause 18 of Buyer Added Bid Specific Additional Terms & Conditions. Confirm your acceptance.	
4.	Response to Tenders for Indigenous supplier will be entertained only if the vendor has a valid GST registration number. Please 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 No. _____
5.	Performance Bank Guarantee: Not Applicable	
6.	HSN Code for the quoted items	HSN CODE : _____
7.	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. Please indicate how much GST percentage is included in quoted price.	GST in %: _____
8.	All the terms and conditions in Buyer Added Bid Specific Additional Terms & Conditions of this tender are read, understood and agreed by the vendor without any deviation. Vendor to confirm.	
9.	Applicable Annexures to be uploaded along with offer documents are indicated in Annexure-1 (Check List). Supplier to upload duly filled, signed and stamped Annexures.	
10.	There will not be any RA (Reverse Auction). Hence suppliers to quote their best price while submitting their offer itself.	

Vendor's Seal & Signature

CHECK LIST

NOTE: - Suppliers are required to fill in the following details in their Letterhead and no column should be left blank

A	Name and Address of the Supplier		
B	GSTN No. the Supplier (Place of Execution of Contract / Purchase Order)		
C	Details of Contact person for this Tender	Name: Mr./ Ms. Designation: Telephone No: Mobile No: Email ID:	
D	EMD DETAILS	Not applicable	
E	DESCRIPTION	APPLICABILITY (BY BHEL)	ENCLOSED BY BIDDER
i.	Whether Pre - Qualification Criteria is understood and provided proper supporting documents.	Applicable/ Not Applicable	YES / NO
ii.	Whether all pages of the Tender documents including annexures, appendices etc are read and understood	Applicable/ Not Applicable	YES / NO
iii.	Audited Balance Sheet and profit & Loss Account for the last three years	Applicable/ Not Applicable	YES / NO
iv.	Copy of PAN Card & GST registration	Applicable/ Not Applicable	YES / NO
v.	Submission of Udyam certificate as specified in Tender (applicable in case of MSME supplier)	Applicable/ Not Applicable	YES / NO
vi.	Offer forwarding letter / tender submission letter as per Annexure – 2	Applicable/ Not Applicable	YES / NO
vii.	Submission of Certificate of No Deviation as per Annexure – 3	Applicable/ Not Applicable	YES / NO
viii.	Declaration regarding Insolvency/ Liquidation/ Bankruptcy Proceedings as per Annexure – 4	Applicable/ Not Applicable	YES / NO
ix.	Declaration by Authorized Signatory as per Annexure – 5	Applicable/ Not Applicable	YES / NO
x.	Declaration by Authorized Signatory regarding Authenticity of submitted Documents Annexure – 6	Applicable/ Not Applicable	YES / NO
xi.	Submission of Non-Disclosure Certificate as per Annexure – 7	Applicable/ Not Applicable	YES / NO
xii.	Submission of Integrity Pact as specified in Tender as per Annexure – 8	Applicable/ Not Applicable	YES / NO
xiii.	Declaration confirming knowledge about Site Conditions as per Annexure – 9	Applicable/ Not Applicable	YES / NO

xiv.	Declaration reg. Related Firms & their areas of Activities as per Annexure – 10	Applicable/ Not Applicable	YES / NO
xv.	Declaration for relation in BHEL as per Annexure – 11	Applicable/ Not Applicable	YES / NO
xvi.	Declaration reg. minimum local content in line with revised public procurement as per Annexure – 12	Applicable/ Not Applicable	YES / NO
xvii.	Declaration regarding compliance to Restrictions under Rule 144 (xi) of GFR 2017 as per Annexure – 13	Applicable/ Not Applicable	YES / NO
xviii.	Bank Account Details for E-Payment as per Annexure – 14	Applicable/ Not Applicable	YES / NO
xix.	Power of Attorney for submission of tender as per Annexure – 15	Applicable/ Not Applicable	YES / NO
xx.	Proforma of Bank Guarantee for Earnest Money as per Annexure – 16	Applicable/ Not Applicable	YES / NO

NOTE: Strike off 'YES' or 'NO', as applicable. Tender not accompanied by the prescribed **above applicable documents** are liable to be summarily rejected.

DATE:

**Sign. of the AUTHORISED SIGNATORY
(With Name, Designation and Company seal)**

CERTIFICATE OF NO DEVIATION

(To be Typed & submitted in the Letter Head of the Company/Firm of Bidder)

To,

(Write Name & Address of Officer of BHEL inviting the Tender)

Dear Sir,

Subject: **No Deviation Certificate**

Ref: 1) GeM Bid No:

2) All other pertinent issues till date

We hereby confirm that we have not changed/ modified/materially altered any of the tender documents as downloaded from the website/ issued by BHEL and in case of such observance at any stage, it shall be treated as null and void.

We also hereby confirm that we have neither set any Terms and Conditions and nor have we taken any deviation from the Tender conditions together with other references applicable for the above referred GeM Bid.

We further confirm our unqualified acceptance to all Terms and Conditions, unqualified compliance to Tender Conditions.

We confirm to have submitted offer in accordance with tender instructions and as per aforesaid references.

Thanking you,

Yours faithfully,

**(Signature, date & seal of
authorized representative of the
bidder)**

Date:

Place:

UNDERTAKING

(To be typed and submitted in the Letter Head of the Company/Firm of Bidder)

To,

(Write Name & Address of Officer of BHEL inviting the Tender)

Dear Sir/Madam,

Sub: DECLARATION REGARDING INSOLVENCY/ LIQUIDATION/ BANKRUPTCY PROCEEDINGS

Ref: GeM Bid Specification No:

I/We, _____ declare that, I/We am/are not admitted under insolvency resolution process or liquidation under Insolvency and Bankruptcy Code, 2016, as amended from time to time or under any other law as on date, by NCLT or any adjudicating authority/authorities

**Sign. of the AUTHORISED SIGNATORY
(With Name, Designation and Company seal)**

Place:

Date:

DECLARATION BY AUTHORISED SIGNATORY OF BIDDER

(To be typed and submitted in the Letter Head of the Company/Firm of Bidder)

To,

(Write Name & Address of Officer of BHEL inviting the Tender)

Dear Sir,

Sub: **Declaration by Authorised Signatory regarding Authenticity of submitted documents.**

Ref: 1) GeM Bid No. & Date:

2) All other pertinent issues till date

I/We, hereby certify that all the documents submitted by us in support of possession of "Qualifying Requirements" are true copies of the original and are fully compliant required for qualifying / applying in the bid and shall produce the original of same as and when required by Bharat Heavy Electricals Limited.

I / We hereby further confirm that no tampering is done with documents submitted in support of our qualification as bidder. I / We understand that at any stage (during bidding process or while executing the awarded contract) if it is found that fake / false / forged bid qualifying / supporting documents / certificates were submitted, it would lead to summarily rejection of our bid / termination of contract. BHEL shall be at liberty to initiate other appropriate actions as per the terms of the Bid / Contract and other extant policies of Bharat Heavy Electricals Limited.

Yours faithfully,

**(Signature, Date & Seal of Authorized
Signatory of the Bidder)**

Date:

NON-DISCLOSURE CERTIFICATE

(To be Typed & submitted in the Letter Head of the Company/Firm of Bidder)

I/We understand that BHEL, Trichy is committed to Information Security Management System as per their Information Security Policy.

Hence, I/We M/s who are submitting offer for providing Supply/services to BHEL, Trichy against GeM Bid No..... hereby undertake to comply with the following in line with Information Security Policy of BHEL, Trichy.

- To maintain confidentiality of documents & information which shall be used during the execution of the Contract.
- The documents & information shall not be revealed to or shared with third party which shall not be in the business interest of BHEL, Trichy.

(Signature, date & seal of Authorized Signatory of the bidder)

Date:

DECLARATION

Date: _____

To,

(Write Name & Address of Officer of BHEL inviting the Tender)

Dear Sir/ Madam,

Sub: Details of related firms and their area of activities

Please find below details of firms owned by our family members that are doing business/ registered for same item with BHEL, _____ (NA, if not applicable)

1	Material Category/ Work Description	
	Name of Firm	
	Address of Firm	
	Nature of Business	
	Name of Family Member	
	Relationship	
2	Material Category/ Work Description	
	Name of Firm	
	Address of Firm	
	Nature of Business	
	Name of Family Member	
	Relationship	
...		

Note: I certify that the above information is true and I agree for penal action from BHEL in case any of the above information furnished is found to be false.

Regards,

(_____)

From: M/s

Supplier
Code:

Address:

DECLARATION FOR RELATION IN BHEL

(To be typed and submitted in the Letter Head of the Company/Firm of Bidder failing which the offer of Bidder is liable to be summarily rejected)

To,

(Write Name & Address of Officer of BHEL inviting the Tender)

Dear Sir,

Sub: Declaration for relation in BHEL

Ref: 1) GeM Bid Specification No:

I/We hereby submit the following information pertaining to relation/relatives of Proprietor/Partner(s)/ Director(s) employed in BHEL

Tick (✓) any one as applicable:

1. The Proprietor, Partner(s), Director(s) of our Company/Firm DO NOT have any relation or relatives employed in BHEL

OR

2. The Proprietor, Partner(s), or Director(s) of our Company/Firm HAVE relation/relatives employed in BHEL and their particulars are as below:

i.

ii.

**(Signature, Date & Seal of
Authorized Signatory of the Bidder)**

Note:

1. Attach separate sheet, if necessary.
2. If BHEL Management comes to know at a later date that the information furnished by the Bidder is false, BHEL reserves the right to take suitable against the Bidder/Contractor.

**DECLARATION REGARDING MINIMUM LOCAL CONTENT IN LINE WITH
REVISED PUBLIC PROCUREMENT (PREFERENCE TO MAKE IN INDIA), ORDER
2017 DATED 04TH**

JUNE, 2020 AND SUBSEQUENT ORDER(S)

(To be typed and submitted in the Letter Head of the Entity/Firm providing certificate as applicable)

To,

(Write Name & Address of Officer of BHEL inviting the Tender)

Dear Sir,

Sub: Declaration reg. minimum local content in line with Public Procurement (Preference to Make in India), Order 2017-Revision, dated 04th June, 2020 and subsequent order(s).

Ref: 1) GeM Bid Specification No:

2) All other pertinent issues till date

We hereby certify that the items/works/services offered by.....
(specify the name of the organization here) has a local content of _____ % and this meets the local content requirement for '**Class-I local supplier**' / '**Class II local supplier**' ** as defined in Public Procurement (Preference to Make in India), Order 2017-Revision dated 04.06.2020 issued by DPIIT and subsequent order(s).

The details of the location(s) at which the local value addition is made are as follows:

- | | |
|----------|----------|
| 1. _____ | 2. _____ |
| 3. _____ | 4. _____ |

Thanking you,
Yours faithfully,

**(Signature, Date & Seal of
Authorized Signatory of the
Bidder)**

**** - Strike out whichever is not applicable.**

Note:

1. Bidders to note that above format, duly filled & signed by authorized signatory, shall be submitted along with the techno-commercial offer.
2. In case the bidder's quoted value is in excess of Rs. 10 crores, the authorized signatory for this declaration shall necessarily be the statutory auditor or cost auditor of the company (in the case of companies) or a practising cost accountant or practicing chartered accountant (in respect of suppliers other than companies).
3. In the event of false declaration, actions as per the above order and as per BHEL Guidelines shall be initiated against the bidder.

DECLARATION REGARDING COMPLIANCE TO RESTRICTIONS UNDER RULE 144 (xi) OF GFR 2017

(To be typed and submitted in the Letter Head of the Entity/ Firm providing certificate as applicable)

To,

(Write Name & Address of Officer of BHEL inviting the Tender)

Dear Sir,

Sub: Declaration regarding compliance to Restrictions under Rule 144 (xi) of GFR 2017

Ref: 1) GeM Bid Specification No:
2) All other pertinent issues till date

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India. I certify that _____ (**SPECIFY THE NAME OF THE ORGANIZATION HERE**), is not from such a country/ has been registered with the Competent Authority (*attach valid registration by the Competent Authority, i.e., the Registration Committee constituted by the Dept. for Promotion of Industry and Internal Trade (DPIIT).*)

I hereby certify that we fulfil all requirements in this regard and is eligible to be considered.

Thanking you,

Yours faithfully,

**(Signature, Date & Seal of
Authorized Signatory of the Bidder)**

Note: Bidders to note that in case above certification given by a bidder, whose bid is accepted, is found to be false, then this would be a ground for immediate termination and for taking further action in accordance with law and as per BHEL guidelines.