	Technical Specifications					
SL. No	Description and Technical Specification of the item	QTY	UNIT	Delivery		
1	E 7018-1 SMAW ELECTRODE DIA 2.5 MM  ASME.SEC.II.C, SFA-5.1 E7018-1 SMAW ELECTRODE AS PER WCPI-207/09.	200,000.00	NO	Staggered delivery		
	Diameter - 2.50 mm X 350 mm LONG.					

## **Delivery schedule:**

Lot 1: 50,000 numbers within 30 Days from date of GEM Contract.

Lot 2: 50,000 numbers 31 Days to 90 Days from date of GEM Contract.

Lot 3: 1,00,000 numbers 91 Days to 150 Days from date of GEM Contract.



## BHARAT HEAVY ELECTRICALS LIMITED TRICHY-620 014

## WELDING TECHNOLOGY CENTRE

WCPI - 207
Revision No.: 09
Date: 23.02.2016

# WELDING CONSUMABLE PURCHASE INSTRUCTION (WCPI) FOR ASME SEC.II.C, SFA-5.1 E7018-1

### 1.0 SCOPE:

- 1.1 The electrodes shall comply with requirements specified in the latest edition (applicable on the date of issue of purchase order) of ASME Sec.II.C.SFA-5.1, E7018-1. 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 quantities as specified in the purchase order. The brand of SMAW Electrodes to be supplied shall be approved by the concerned IBR Authorities of the state. Every batch to be supplied should have been manufactured during the period when IBR approval for the brand was valid.

### 2.0 CHEMICAL COMPOSITION:

The chemical composition of the undiluted weld metal using this electrode shall conform to ASME SEC IIC SFA-5.1, E7018-1 for each size of electrode supplied.

## 3.0 MECHANICAL PROPERTIES:

The mechanical properties of the weld metal deposited using this electrode after stress relieving the test plate assembly at  $620\pm10^{\circ}$ C for 300 minutes shall meet the requirements of impact test as per ASME SECII.C SFA-5.1, E7018-1 and other properties as below for each size of electrode supplied.

Yield Strength at 0.2% Offset	410 MPa Minimum
Tensile Strength	540 MPa Minimum
Elongation in 50.8mm	22% Minimum

#### 4.0 RADIOGRAPHIC SOUNDNESS:

The electrode shall be suitable for radiography quality butt joint welding of boiler pressure parts of SA299, SA106GrB, SA106GrC pipe material. The radiographic test shall meet the requirements of ASME SECII.C SFA-5.1, E7018-1 for each size of electrode supplied.

#### 5.0 FILLET WELD TEST:

Fillet weld test done using this electrode shall meet requirements as per ASME SECII.C SFA-5.1, E7018-1 for each size of electrode supplied. The electrodes shall exhibit smooth running characteristics with soft and stable arc with ease of striking. The spatter level shall be negligible. Weld bead appearance shall be smooth with fine ripples and slag shall be self-peeling.

### 6.0 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-5.1 for each size of electrode supplied.

Prepared:

Surai N

Engineer/WTC

Reviewed and approved:

S. Singaravelu

SDGM / WTC



## Welding Consumable Purchase Instruction for ASME SEC.II.C, SFA-5.1 E7018-1

WCPI – 207

Revision No.: 09

7.0 CORE WIRE, COVERING, EXPOSED CORE, IDENTIFICATION, METHOD OF MANUFACTURE:

The electrodes shall meet the requirements of clause 3.2, 3.3, 3.4 of SFA 5.02 and clause 19 of SFA 5.1 for each size of electrode supplied.

8.0 MOISTURE CONTENT OF COVERING AND DIFFUSIBLE HYDROGEN CONTENT:

Moisture content of the electrode covering shall not exceed the limit specified in ASME Sec II C, SFA 5.1 E7018-1 for each size of electrode supplied. Diffusible hydrogen content of weld metal deposited using the electrode shall be maximum 4ml/100g. Test to be done as per ASME Sec IIC, SFA 5.1 E7018-1 for each size of electrode supplied.

#### 9.0 PACKAGING:

- 9.1 Electrodes packed 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. 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 to electrodes 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 3.6 of SFA-5.02.

#### 10.0 TESTING AND CERTIFICATION:

- 10.1 Each consignment of electrodes supplied shall preferably be from one batch only.
- 10.2 Batch or lot classification shall be Class C1 as per SFA-5.01 filler metal procurement guidelines of ASME Sec IIC. (Latest edition).
- 10.3 The level of testing shall be Schedule K as per SFA-5.01 filler metal procurement guidelines of ASME Sec IIC. (Latest edition).
- 10.4 Three copies of original certified material test report in English signed by the manufacturer giving details of tests done in compliance with this WCPI and ASME Sec II C, SFA-5.1, E7018-1 shall be sent.
- 10.5 The manufacturer shall certify that supplies made against the batch conforms to the requirements of the latest edition (applicable on the date of issue of purchase order) of ASME Sec IIC SFA-5.1, E7018-1.
- 10.6 A copy of valid IBR approval certificate for the brand being supplied shall be sent along with every consignment.
- 10.7 Every packet supplied shall be exhibited with details in the below mentioned format through a seal or securely affixed label.

"Certified by	
(Mention the concerned IBR	authority of the state)
Under periodic check test da	nted: XX-XX-XXXX.
Brand approval valid till	: XX-XX-XXXX."

Pre –Qualification Criteria – PR 0138508340	Bidder remark
Bidder shall be a manufacturer of the Quoted item 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.	
(Specify: Manufacturer/Authorized Dealer)	
Bidder (Principle Supplier) shall successfully experiences for supplying of welding consumables (SMAW Electrode) to any govt. Organization/PSUs/Public Ltd./Company/Reputed Industries etc.	
Purchase order copies or related document to be submitted along with offer to consider the offer.	
Note: Successful experience means – supplied and accepted.	
Quoted Welding Consumables brand name.	
Mill address (manufacturing address).	
Mill capacity quoted welding shall be provided along with offer.	
Manufacturer shall submit manufacturing process flow chart (Raw material to finished product).	
	Bidder shall be a manufacturer of the Quoted item 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.  (Specify: Manufacturer/Authorized Dealer)  Bidder (Principle Supplier) shall successfully experiences for supplying of welding consumables (SMAW Electrode) to any govt. Organization/PSUs/Public Ltd./Company/Reputed Industries etc.  Purchase order copies or related document to be submitted along with offer to consider the offer.  Note: Successful experience means – supplied and accepted.  Quoted Welding Consumables brand name.  Mill address (manufacturing address).  Mill capacity quoted welding shall be provided along with offer.

Sl. No.	Pre –Qualification Criteria - 0138508340	Bidder remark
7	Manufacturer (Principle Supplier) shall submit a valid ISO 9001 certificate or Quality management system certificate or Written down procedure for SMAW electrode inspection or ISO 45001 certificate or Written procedure for ISO 9001 or Written procedure for SMAW electrode manufacturing.	
8	Shall confirm to Technical specification as per Tender.	
9	Vendor should give confirmation to BHEL's Technical Specification.  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	Quoted Diameter and length details.	
11	Kindly arrange to provide seal and sign on WCPI Copy for confirmation.	

## <u>Annexure – A- Special Conditions for GeM Enquiry</u>

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.

	To bo fi	Had be hidden		
Dosci	ription of the item/Equipment:	<u>lled by bidder</u>		
	Tender No. & Date			
Name of the firm (Bidder)		:		
Addr		· · · · · · · · · · · · · · · · · · ·		
Addi		•		
Conta	act person 1	Contact person 2		
Name	e:	Name:		
_	nation:	Designation:		
	e Phone:	Office Phone:		
Mobi		Mobile:		
e-ma	il:	e-mail:		
SI	Terms and conditions/Deta	ils required	Vendor's confirmation	
1.	Indicate the MSME status of the bidder. MIMSME.	CRO/SMALL/MEDIUM/Non-		
i	<b>Note:</b> Udyam certificate to be uploaded in Priority Sector Lending(PSL) ONLY" in Udya this tender.	•	<del>-</del>	
2.	Payment terms shall be as per clause 9 Additional Terms & Conditions for this ter for the payment terms relevance to your M			
	Note: GeM CRAC date shall be taken as mater			
3.	, , , , , , , , , , , , , , , , , , , ,			
	Additional Terms & Conditions. Confirm you	*		
4.	Response to Tenders for Indigenous supp	-	GST	
	the vendor has a valid GST registration nu		No	
	registration number. If any specific exemp			
	with due supporting documents need to be offer.	e turnished for considering the		
5.	Performance Bank Guarantee: Not Applic	able		
6.	HSN Code for the quoted items		HSN	
	·		CODE :	
7.	Rate quoted in GeM portal should be on FC			
	all taxes, P&F, freight etc. Transit Insura		GST in %:	
_	Please indicate how much GST percentage is included in quoted price.			
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. <b>Vendor to confirm</b> .			
9.	Applicable Annexures to be uploaded alor		dicated in Annexure-1	
10.	(Check List). Supplier to upload duly filled, signed and stamped Annexures.  There will not be any RA (Reverse Auction). Hence suppliers to quote their best price while			
10.	submitting their offer itself.	on, hence suppliers to quote	men best price wille	

## **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			
В	GSTN No. the Supplier (Place			
	of Execution of Contract / Purchase Order)			
С	Details of Contact person for	Name: Mr./ Ms.		
	this Tender	Designation:		
		Telephone No:		
		Mobile No:		
		Email ID:		
D	EMD DETAILS	Not applicable		
E	DESCRIPTION		APPLICABILITY (BY BHEL)	ENCLOSED BY BIDDER
i.	Whether <b>Pre - Qualification Crit</b> and provided proper supporting do	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 <b>Udyam certificate</b> Tender (applicable in case of MSMI		Applicable/ Not Applicable	YES / NO
vi.	Offer forwarding letter / tender as per Annexure – 2	submission letter	Applicable/ Not Applicable	YES / NO
vii.	Submission of <b>Certificate of No Deviation</b> 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 <b>Authorized Signatory</b> as per Annexure – 5		Applicable/ Not Applicable	YES / NO
х.	Declaration by <b>Authorized Signatory</b> regarding <b>Authenticity</b> of submitted Documents Annexure – 6		Applicable/ Not Applicable	YES / NO
xi.	Submission of <b>Non-Disclosure Ce</b> Annexure – 7	Applicable/ Not Applicable	YES / NO	

xii.	Submission of <b>Integrity Pact</b> 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. <b>Related Firms &amp; their areas of Activities</b> as per Annexure – 10	Applicable/ Not Applicable	YES / NO
XV.	Declaration for <b>relation in BHEL</b> as per Annexure – 11	Applicable/ Not Applicable	YES / NO
xvi.	Declaration reg. <b>minimum local content</b> 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.	<b>Power of Attorney</b> for submission of tender as per Annexure – 15	Applicable/ Not Applicable	YES / NO
XX.	<b>Proforma of Bank Guarantee for Earnest Money</b> 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)

### OFFER FORWARDING LETTER / TENDER SUBMISSION LETTER

(To be typed and submitted in the Letter Head of the Company/Firm of Bidder) Offer Reference No: ..... Date: ..... To, (Write Name & Address of Officer of BHEL inviting the Tender) Dear Sir, Sub: Submission of Offer against GeM Bid No: ..... Having examined the tender documents against your GeM Bid No. and having \_ dated \_\_ understood the provisions of the said tender documents and having thoroughly studied the requirements of BHEL related to the work tendered for, in connection with supply of \_\_\_\_ (items description), we hereby submit our offer for supply of enquired items in accordance with terms and conditions mentioned in the tender documents, at the prices quoted by us and as per the indicated delivery schedule. I/We further agree to execute all the works referred to in the said Tender documents upon the terms and conditions contained or referred to therein and as detailed in the appendices annexed thereto. **Authorised Representative of Bidder** Signature: Name: Address:

Place: Date:

## **CERTIFICATE OF NO DEVIATION**

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

(To be typed and submitted in the Letter Head of the Company/Firm of Bidder)			
То,			
(Write Name & Address of Officer of BHEL inviting the Tender)			
Dear Sir,			
Sub: Declaration by Authorised Signatory Ref: 1) GeM Bid Specification No:			
I/We, hereby certify that all the information and data furnished by me with regard to the above Tender Specification are true and complete to the best of my knowledge. I have gone through the specifications, conditions, stipulations and all other pertinent issues till date, and agree to comply with the requirements and Intent of the specification.			
I further certify that I am authorised to represent on behalf of my Company/Firm for the above mentioned tender and a valid Power of Attorney to this effect is also enclosed.			
Yours faithfully,			
(Signature, Date & Seal of Authorized Signatory of the Bidder)			
Date:			
Enclosed: Power of Attorney			

## **DECLARATION BY AUTHORISED SIGNATORY OF BIDDER**

(To be typed and submitted in the Letter Head of the Company/Firm of Bidder)
То,
(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 & submit	ted in the	e Letter Hea		pany/Firm of I	Bidder) 
	nderstand that BHEL, Trich r Information Security Pol	•	mitted to In	formation Sec	curity Manage	ment System as
providin	I/We M/s ig Supply/services formation Security Policy o	to	BHEL, . hereby un	Trichy	against	GeM Bio
> 7	To maintain confidentialit execution of the Contract. The documents & informat not be in the business inte	ion shall	not be reve	aled to or sha		-
Date:			(1	•	date & seal y of the bid	of Authorized der)

#### **DECLARATION**

	DECLA	KATION
To,		Date:
10,		
(Writ	e Name & Address of Officer of BHEL invi	iting the Tender)
_	C: /M	
	Sir/ Madam,	
Sub:	Details of related firms and their are	a of activities
regist	e find below details of firms owned by outered for same item with BHEL, cable)	ur family members that are doing business/ (NA, <i>if not</i>
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	
Noto	y I cortify that the above information	s is two and I agree for nonal action
	e: I certify that the above information  BHEL in case any of the above inform	mation 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)						
То,						
(Write Name & Address of Officer of BHEL inviting the Tender)						
Dear Sir,						
Sub: <u>Declaration for relation in BHEL</u> 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:						
<ol> <li>The Proprietor, Partner(s), Director(s) of our Company/Firm DO NOT have any relation or relatives employed in BHEL</li> </ol>						
OR						
2. The Proprietor, Partner(s), or Director(s) of our Company/Firm HAVE relation/relatives						

- i.
- ii.

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

#### Note:

1. Attach separate sheet, if necessary.

employed in BHEL and their particulars are as below:

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.

## **ANNEXURE - 15**

## **POWER OF ATTORNEY for SUBMISSION OF TENDER**

(To be typed on non-judicial stamp paper of minimum Rs. 100/- and Notarized)

Attorney of M/s		hereina	ven below herewith to be true and law after called 'Company', for submitt cute all papers and to do necessary law	ing
acts on behalf of Comp in	any with M/s Bh	arat Heavy Electi	ricals Ltd, Central Procurement Cell (CP connect	C), ion
No:	, dat	ed		
may be lawfully done b	y the said attorne of the powers	ney and by or on sconferred here	n all acts, deeds, things or proceedings behalf of the company and in the name in and the same shall be binding on	e of
IN WITNESS WHEREOF manner hereinafter app		•	ny has been hereunto affixed in the	
Dated at	, this	day of		
Director/CMD/Partner/F	Proprietor			
			Signature of Mr (Attorney	′)
		Atte	ested by: Director/CMD/Partner/Propriet	or
Witness				