

Technical Specifications

SL. No	Description and Technical Specification of the item	QTY	UNIT	Delivery
1	<p>ER70S-A1 GMAW WIRE DIA.1.6mm:</p> <p>Diameter= 1.6 mm Each Spool Wire Weight = 12.5 / 15 Kg.</p> <p>ASME SEC.II.C, SFA-5.28, ER70S-A1 LOW ALLOY STEEL BARE SOLID WIRE for GMAW process as per WCPI-152/08.</p> <p>Each spool Wire weight 12.5/15 Kg PRECISION LAYER WOUND PLASTIC SPOOLS.</p> <p>Note: TPI inspection is mandatory. Inspecting Authority (under the Indian Boiler Regulations, 1950) sign and seal is required on test certificate.</p>	2000	NO	60 days
2	<p>ER90S-B91 GMAW WIRE DIA 1.6 mm:</p> <p>Diameter= 1.6 mm Each Spool Wire Weight = 12.5 / 15 Kg.</p> <p>ASME SEC.II.C, SFA-5.28 ER90S-B91 ALLOY STEEL BARE SOLID WIRE SPOOL FOR</p> <p>GMAW PROCESS AS PER WCPI-161/11.</p> <p>Each spool Wire weight 12.5/15 Kg PRECISION LAYER WOUND PLASTIC SPOOLS.</p> <p>Note: TPI inspection is mandatory. Inspecting Authority (under the Indian Boiler Regulations, 1950) sign and seal is required on test certificate.</p>	1000	NO	60 days
3	<p>ER90S-B3 GMAW WIRE DIA. 2 mm:</p> <p>Diameter = 2 mm</p> <p>Each Spool Wire Weight = 10 Kg /12.5 Kg</p> <p>ASME SEC.II.C, SFA-5.28, ER90S-B3 LOW ALLOY STEEL BARE SOLID WIRE FOR GMAW as per WCPI-154/08.</p> <p>Diameter 2.0 MM X 10/12.5 Kg PRECISION LAYER WOUND PLASTIC SPOOLS.</p> <p>Note: TPI inspection is mandatory. Inspecting Authority (under the Indian Boiler Regulations, 1950) sign and seal is required on test certificate.</p>	500	NO	60 days

<p>4</p>	<p>ER80S-B2 GMAW WIRE DIA. 2 MM :</p> <p>Diameter = 2 mm</p> <p>Each Spool Wire Weight = 10 Kg /12.5 Kg</p> <p>ASME SEC.II.C, SFA-5.28, ER80S-B2 LOW ALLOY STEEL BARE SOLID WIRE FOR</p> <p>GMAW as per WCPI-153/08.</p> <p>Diameter 2.0 MM X 10/12.5 Kg PRECISION LAYER WOUND PLASTIC SPOOLS.</p> <p>Note: TPI inspection is mandatory. Inspecting Authority (under the Indian Boiler Regulations, 1950) sign and seal is required on test certificate.</p>	<p>500</p>	<p>NO</p>	<p>60 days</p>
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Sign. of the AUTHORISED SIGNATORY
(With Name, Designation and Company seal)

Sl. No.	Pre –Qualification Criteria 0147718106	Bidder remark
1	If Bidder is a manufacturer, Kindly comment in bidder remark.	
2	<p>Bidder shall be a manufacturer of the Quoted items or an authorized dealer of the same.</p> <p>If the offer is quoted by authorized dealer, letter of authorization or agreement duly signed by the manufacturer is required to consider the offer.</p> <p>Tender Enquiry details must available on Letter of authorization or agreement to consider the offer.</p>	
3	Quoted Welding Consumables Brand Name/Product 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	Bidder/Manufacturer 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 for GMAW Wire	
8	Manufacturing Plant/Mill capacity for quoted material.	

Seal and Sign of Authorized Person

Sl. No.	Pre –Qualification Criteria 0147718106	Bidder remark
9	<p>Any deviation from the Specification are to be mentioned in the “Bidder remark Space”.</p> <p>If There is no deviation vendor should indicate “No Deviation”.</p>	
10	Shall confirm to Technical Specifications	
11	<p>Diameter details</p> <p>Each Spool Wire weight</p>	
12	<p>TPI inspection is mandatory. Inspecting Authority (under the Indian Boiler Regulations, 1950) sign and seal is required on test certificate.</p> <p>For reference - Inspecting Authority list enclosed.</p>	
13	Seal and Sign on WCPI for Technical Specification Confirmations.	

Seal and Sign of Authorized Person

INSPECTING AUTHORITIES

Sl. No.	Name of Inspecting Authority	Area of Operation
1.	Director of Boilers, Andhra Pradesh	Andhra Pradesh
2.	Chief Inspector of Boiler, Arunachal Pradesh	Arunachal Pradesh
3.	Chief Inspector of Boilers, Assam	Assam
4.	Chief Inspector of Boilers, Bihar	Bihar
5.	Chief Inspector of Boilers, Chhattisgarh	Chhattisgarh
6.	Chief Inspector of Boilers, Daman & Diu and Dadra & Nagar Haveli	Daman & Diu and Dadra & Nagar Haveli
7.	Chief Inspector of Boilers, Delhi	N.C.T.D.
8.	Chief Inspector of Boilers, Goa	Goa
9.	Director of Boilers, Gujarat	Gujarat
10.	Chief Inspector of Boilers, Haryana	Haryana & Chandigarh
11.	Chief Inspector of Boilers, Himachal Pradesh	Himachal Pradesh
12.	Chief Inspector of Boilers, Jharkhand	Jharkhand
13.	Director of Boilers, Karnataka	Karnataka
14.	Director of Boilers, Kerala	Kerala
15.	Director of Boilers, Madhya Pradesh	Madhya Pradesh
16.	Director of Boilers, Maharashtra	Maharashtra
17.	Chief Inspector of Boilers, Meghalaya	Meghalaya

Sl. No.	Name of Inspecting Authority	Area of Operation
18.	Chief Inspector of Boilers, Manipur	Manipur
19.	Chief Inspector of Boilers, Mizoram	Mizoram
20.	Chief Inspector of Boilers, Nagaland	Nagaland
21.	Director of Boilers, Odisha	Odisha
22.	Director of Boilers, Punjab	Punjab
23.	Chief Inspector of Boilers, Puducherry	Puducherry
24.	Chief Inspector of Boilers, Rajasthan	Rajasthan
25.	Director of Boilers, Tamil Nadu	Tamil Nadu
26.	Director of Boilers, Telangana	Telangana
27.	Chief Inspector of Boilers, Tripura	Tripura
28.	Director of Boilers, Uttar Pradesh	Uttar Pradesh
29.	Chief Inspector of Boilers, Uttarakhand	Uttarakhand
30.	Director of Boilers, West Bengal	West Bengal
31.	Chief Inspector of Boilers, Andaman & Nicobar Islands	Andaman & Nicobar Islands
32.	M/s LRQA Inspection Services India LLP (Formerly, M/s Lloyd's Register Marine and Inspection Services India LLP) Solitaire Corporate Park, Unit No. 1241, Building No. S-12, 4 th Floor, Guru Hargovindji Marg, Andheri-Ghatkopar Link Road, Andheri(East), Mumbai-400 093	Whole of India

Sl. No.	Name of Inspecting Authority	Area of Operation
33.	Bureau Veritas (India) Private Limited 72 Business Park, 8th floor, Marol Industrial Area, Opposite Seepz Gate No. 2, MIDC CrossRoad "C", Andheri - (East), Mumbai - 400 093, INDIA	Whole of India
34.	M/s Apave TIV India Private Limited, Lakhani's Centrium, 6th Floor, Plot No. 27, Sector 15, CBD Belapur, Navi Mumbai – 400614 Maharashtra	Whole of India
35.	M/s TUV India Pvt. Limited (TUV Nord Group) 801, Raheja Plaza-1, L.B.S. Marg, Ghatkopar(West), Mumbai-400 086	Whole of India
36.	M/s Intertek India Pvt. Limited E-20, Block-B1, Mohan Co-operative Industrial Area, Mathura Road, New De lhi-110 044	Whole of India
37.	M/s TUV SUD South Asia Pvt. Ltd. TUV SUD House, Off Saki Vihar Road, Saki Naka, Andheri (East), Mumbai-400 072	Whole of India
38.	M/s HSB International (India) Private Limited, Unit 404, 4 th Floor, "Ozone", Vikram Sarabhai Mills Compound, Sarabhai Road, Vadodara-390 003 Gujarat	Whole of India
39.	M/s DNV Business Assurance India Pvt. Ltd., Equinox Business Park, Tower 3, 3 rd Floor,, LBS Marg, Kurla (W), Mumbai-400070	Whole of India
40.	M/s IRCLASS Systems and Solutions Pvt. Ltd., Industrial Services, 6th floor, 52-A Adi Shankaracharya Marg, Powai, Mumbai-400072	Whole of India


Sl. No.	Name of Inspecting Authority	Area of Operation
41.	M/s Certification Engineers International Limited, Engineers India Bhawan, First Floor, Plot No. 85, Sec-11, Kharghar, Raigad Dist., Navi Mumbai-410 210 Maharashtra	Whole of India
42.	M/s TUV Rheinland (India) Private Limited, Graphix Tower (Ground Floor), Plot No. 13A, Sector-62, Noida-201301, Uttar Pradesh	Whole of India
43.	M/s TUV Nord Systems GmbH Co.KG Langemarckstr 20, D-451141 Essen, GERMANY	All countries except India
44.	M/s Japan Inspection Company Limited RBM Higasghi Yaesu Bldg. 10F, No. 2-9, I-Chome, hatchobori, Chou-ku Tokyo, 104-0032, Japan	All countries in Asia except India
45.	M/s S.G.S. Korea Company Ltd. Industrial Division, 50, sinsan-ro 29 beon-gil Saha-gu, Busan, Korea (49439)	Korea & Japan
46.	M/s Bureau Veritas SA, La defense, 8, Cours du Triangle, 92800 Puteaux France	All countries except India
47.	M/s LRQA Verification Limited, 1 Trinity Park, Bickenhill Lane, Birmingham B37 7ES, United Kingdom	All countries except India
48.	M/s TUV Rheinland AG Am Grauen Stein, D-51105 Koln, Germany	All countries except India

Sl. No.	Name of Inspecting Authority	Area of Operation
49.	M/s OOO “TekhnoLogicheskieEnergosistime” Office 18, Floor-1, 109, Vezelskaya, Belgorod, 308015 Russia	Europe including Russia,USA and China
50.	M/s ARISE Boiler Inspection & Insurance Company Risk Retention GroupGrand Bay 1,7000 South Edgerton Road Suite 100, Breeksville OH 44141 USA	USA & Canada
51.	M/s TU V SUD Industrie Service GmbH Westendstr, 199 80686 Munich Germany	All countries except India
52.	M/s TU V Thuringen e.v., Service Centre Erfurt, Melchendorfer Str. 64 99096 Erfurt, Germany	Europe & China
53.	M/s SGS-CSTC Standards Technical Services Co. Ltd. 9 th Building No. 69, KangQiao Industrial Park, Block 1159, KangQiao East Road, Pudong District, Shanghai-201 319 China	China
54.	M/s Intertek Inspection Services UK Limited 5 th Floor, 35 Perrymount Road, Haywards Heath, West Sussex, RH16 3BW, United Kingdom	All countries except India
55.	M/s Apave S.A. (Formerly, M/s ABSG Consulting Inc.) 6 rue du General Audran, 92400 Courbevoie, France	All countries except India
56.	M/s The Hartford Steam Boiler Inspection and Insurance Company, One State Street, P.O. Box 5024, Hartford, CT 06102-5024 U.S.A.	All countries except India
57.	M/s SGS-TU V Saar GmbH Am TUEV 1, D-66280 Sulzbach Germany	Europe

Sl. No.	Name of Inspecting Authority	Area of Operation
58.	M/s Swiss Approval Korea Co. Ltd., 1108, 21, Centum 6-ro, Haeundae-gu, Busan, Republic of Korea	South Korea
59.	M/s Certification Engineers International Limited, Engineers India Bhawan, First Floor, Plot No. 85, Sec-11, Kharghar, Raigad Dist., Navi Mumbai-410 210 Maharashtra	All countries except India
60.	M/s TUV-Thuringen-Promservice LLC, 5 Koroleva str., Office 13, Nakhabino work settlement, Moscow Region, 143430 Russia	Belarus, Belgium, China, Czech Republic, Iran, Poland, Romania, Russia, South Korea, Turkey, Ukraine, Uzbekistan, Kazakhstan

Note: As per IBR-1950, Regulation 4H(2)(v), an Inspecting Authority may also work as a Competent Authority for in-house certification of welders.

TPI inspection is mandatory.
Inspecting Authority (under the Indian Boiler Regulations, 1950) sign and seal is required on test certificate.

	BHARATH HEAVY ELECTRICALS LIMITED TIRUCHIRAPALLI-620 014 WELDING TECHNOLOGY CENTRE	Doc. Number:	Revision:
		WCPI – 152	08
		Date: 02/09/2009	
<u>Welding Consumable Purchase Instruction</u>		Page 01 of 04	

**PURCHASE INSTRUCTION OF BARE LOW ALLOY STEEL
SOLID WIRE FOR GAS METAL ARC WELDING TO
ASME SEC.II.C, SFA-5.28 CLASS: ER 70S-A1.**

1.0 SCOPE:

1.1 This Purchase Instruction prescribes the requirements for Bare Low Alloy Steel Solid Wire for Gas Metal Arc Welding that conforms to ASME Section II.C.SFA-5.28, Class: ER 70S-A1.

2.0 GENERAL:

2.1 The Wire 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-5.28, ER 70S-A1 and all tests, Acceptance Criteria shall be in accordance with this. Additional requirements specified in this document shall also be complied.

2.2 The Wire shall be precision layer wound in plastic spools and shall be supplied in sizes and Quantities as specified in the Purchase Order.

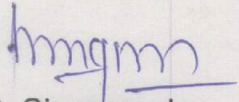
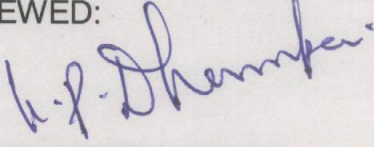
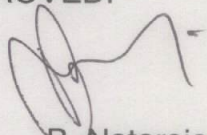
2.3 The Wires are intended for use as a Welding Electrode for butt-welding of tubes in pulsed GMAW process with Argon plus 5% to 20% Co₂ gas shielding in Automatic Straight Tube Butt Welding machine ~~and Orbital TIG Welding with 100 % Argon shielding for Radiography Quality high pressure boiler components.~~

2.4 The manufacture's Material Safety Data Sheet for the product shall be sent along with the consignment.

2.5 Every batch of electrode shall be inspected & test certificates countersigned by Inspecting Authority approved by IBR for country of origin (Latest).

3.0 CHEMICAL COMPOSITION:

3.1 The chemical composition of the Wires shall conform to the following Analysis.

PREPARED:  S. Singaravelu SM / WTC	REVIEWED:  Dr.K.P. Dhandapani SDGM/WTC	APPROVED:  B. Natarajan AGM/WTC & TE
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Carbon	0.12 % Max	Molybdenum	0.40 – 0.65%
Manganese	1.30% Max	Copper	0.35% Max
Silicon	0.30 – 0.70%	Nickel	0.20% Max
Sulphur	0.025% Max.	Phosphorus	0.025 % Max
Other Elements Total	0.50 Max		

4.0 USABILITY AND RADIOGRAPHIC SOUNDNESS:

- 4.1 The Wire when used as electrode in Gas Metal Arc Welding with Argon plus 5% to 20% Co₂ shielding in Automatic Straight Tube Butt Welding machine ~~and in Orbital Tig Welding with 100% Argon shielding~~ shall deposit Weld metal that flows freely, uniformly without sputtering or other defects and shall exhibit excellent wetting characteristics. The resultant Weld metal shall be smooth and uniform with no visible evidence of cracks/porosity or other defects and shall meet Radiographic Soundness requirements specified in ASME Sec.II.C.SFA-5.28, ER 70S-A1.
- 4.2 Weld metal produced using the wire with 95 % Argon plus 5% Co₂ /100 % Argon shielding shall meet tensile requirements after PWHT at 620±15°C with one hour soaking as follows.

Tensile Strength	515 Mpa (Minimum)
Yield Strength	400 Mpa (Minimum)
% Elongation	19 (Minimum)

- 4.3 The base metal for weld test assembly and testing procedure to be employed for verifying compliance to 4.1 & 4.2 above shall be as specified in ASME Sec.II.C.SFA-5.28, ER 70S-A1.

5.0 FORM, SIZE, FINISH AND IDENTIFICATION:

5.1 FORM & SIZE:

The Wire shall be supplied in diameters 0.8 mm, 1.2 mm or 1.6 mm as specified in the Purchase Order. The tolerance on diameter shall be + 0.01, -0.04mm..

FORM:

The Wire shall be supplied in plastic spools of dimensions and weight as given below. Spools shall be such material and design so as to provide adequate protection against damage or distortion of themselves and of the wire due to normal handling or use. Spools shall be sufficiently clean and dry to maintain cleanliness of the wire. Spools shall electrically insulate the wire from wire feed spindle.



Barrel Inner Dia. (Bore dia.)	50.5 mm.+2.5,-0 mm	16 mm +1, -0 mm
Spool Outer Dia. (Flange OD) Max	305 mm	100 mm
Spool Width	103 mm +0,-3 mm.	46 mm + 0, -2 mm
Distance between axes	44.5 mm ± 0.5 mm	-----
Driving Hole Diameter	10 mm + 1,-0 mm	-----
Net Weight	10/12.5/15 Kg.	700 /1000 gm.

5.2 FINISH & UNIFORMITY:

The Wire shall be uniformly copper coated and shall have a smooth & glossy finish that is free from slivers, depressions, scratches, scales, seams, laps, drawing fluids and foreign matter that would adversely affect the welding characteristics, the operation of Welding equipment, or properties of Weld metal. The copper coating shall be well adhered without any flaking so as to ensure against any rusting during long storage and also ensuring good electrical conductivity.

5.3 Each Spool shall contain one continuous length of wire from single heat of metal and no splices are permitted.

5.4 WINDING:

The Wire shall be precision layer wound on spools so that kinks, waves, sharp bends, overlapping or wedging are not encountered, leaving the wire free to unwind without restriction. The outside end of the wire (The end with which welding is to begin) shall be identified so that it can be located readily and shall be fastened to avoid unwinding.

5.5 The spooling shall be rigid without any intermeshing of wire layers. The outer most layer of spooled wire shall not be closer than 3.0 mm to the outside of flanges.

5.6 The cast helix and temper of wire on spools shall be such that the filler wire will feed in an uninterrupted manner in an automatic high output welding system.

5.7 IDENTIFICATION:

Adhesive labels containing following product information shall be securely affixed in prominent location on the outside of at least one flange of the spool.

- a) ASME Specification & Classification designation.
- b) Brand Name.
- c) Batch Number/Heat Number.
- d) Size and Net Weight.



6.0 PACKAGING:

- 6.1 The spools completely devoid of moisture shall be packed in moisture proof cartons so as to prevent any rusting or any deterioration in weld quality during long storage.
- 6.2 The cartons shall have product information as required [REDACTED] legibly marked so as to be visible from outside of each carton.
- 6.3 The appropriate precautionary information as specified in ANSI Z 49.1 latest edition (as minimum) or its equivalent shall be prominently displayed in legible print on all packages including unit packages.
- 6.4 Spools shall be packed in wooden crates lined with waterproof material so as to ensure against damage during shipment and normal storage conditions. The net weight of each crate shall not exceed 1000 Kg.

7.0 TESTING & CERTIFICATION:

- 7.1 Each consignment of wire spools shall be from one batch only.
- 7.2 Batch /Lot classification shall be "Class S1" [REDACTED] of SFA-5.01 Filler metal procurement guidelines of ASME Sec.II.C. (Latest Edition & Addenda)
- 7.3 The Level of Testing shall be "Schedule J" [REDACTED] of SFA-5.01 Filler metal procurement guidelines of ASME Sec.II.C. (Latest Edition & Addenda)
- 7.4 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 for compliance to this Purchase Instruction and ASME Sec.II.C, SFA-5.28, ER70S-A1 shall be sent.
- 7.5 The Testing Authority shall certify that supplies made against the batch conforms to the requirements of the Latest Edition & Addenda (Applicable on the date of issue of Purchase Order) of ASME Sec.II.C.SFA-5.28 ER 70S-A1.

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Note : Clause 7.4 :

TPI inspection is mandatory.

Inspecting Authority (under the Indian Boiler Regulations, 1950) sign and seal is required on test certificate.

TPI inspection is mandatory.

Inspecting Authority (under the Indian Boiler Regulations, 1950) sign and seal is required on test certificate.

	BHARATH HEAVY ELECTRICALS LIMITED	Doc. Number: WCPI – 161
	TIRUCHIRAPALLI-620 014	Revision No.: 11
	WELDING TECHNOLOGY CENTRE	Date:26/11/2021

**WELDING CONSUMABLE PURCHASE INSTRUCTION FOR
LAS WIRE ASME.SEC.II.C SFA-5.28, ER90S-B91**

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-5.28, ER90S-B91. 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 butt-welding of tubes in pulsed GMAW process with Argon plus 5% to 20% CO₂ gas shielding in automatic straight tube butt welding machine and orbital TIG welding machine with 100 % Argon shielding for radiographic quality high pressure boiler components.

2.0 CHEMICAL COMPOSITION:

The chemical composition of the wire shall conform to ASME SEC.II.C SFA-5.28, ER90S-B91 and additionally Mn+Ni≤1.2% maximum and Nitrogen content ≥ (0.5xAl+0.03%) minimum.

3.0 MECHANICAL PROPERTIES:

Mechanical properties of the wire shall conform to ASME SEC.II.C SFA-5.28, ER90S-B91 with 95% argon + 5% CO₂ Gas shielding. Hardness of weld metal & HAZ shall be 195 HV to 320 HV.

4.0 RADIOGRAPHIC SOUNDNESS & USABILITY:

4.1 The wire when used as an electrode in GMAW with Argon plus 5% to 20% CO₂ or orbital welding with 100% Argon shall deposit a weld metal that flows freely, uniformly without sputtering or other defects and shall exhibit excellent wetting characteristics.

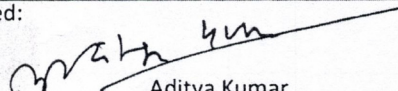
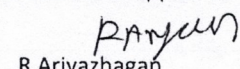
4.2 The resultant weld metal shall be smooth, uniform with no visible evidence of cracks, porosity or other defects and shall meet the radiographic soundness requirements as per ASME SEC.II.C SFA 5.28 ER90S-B91.

5.0 SIZE: Wire diameter 1.6 mm is also acceptable

The wire shall be supplied in diameter 0.8/0.9/1.0 mm as specified in the purchase order. The tolerance on diameter shall be as per SFA-5.02.

6.0 FORM & WEIGHT:

The wire shall be precision layer wound in S300 and/or S100 plastic spools as mentioned in the purchase order and the net weight of the wire shall be 10/12.5/15Kg and 700-1000g respectively. The spools shall meet the clause 4.3.4 of SFA-5.02.

Prepared:  Aditya Kumar Sr. Engineer / WTC	Reviewed and Approved.  R Arivazhagan Sr. Manager /WTC
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7.0 FINISH & UNIFORMITY:

The wire shall meet the requirements of clause 4.2 of SFA-5.02.

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 electrode 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 electrodes supplied shall preferably be from one batch only.

12.2 Batch /lot classification shall be Class S1 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 K as per SFA-5.01 filler metal procurement guidelines of ASME Sec.II.C (Latest edition and addenda).

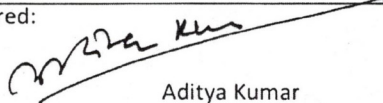
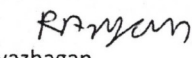
12.4 Three copies of original certified material test report in English signed by the manufacturer giving details of tests done in compliance with this WCPI and ASME Sec.II.C.SFA-5.28, ER90S-B91 shall be sent.

12.5 A copy of valid IBR approval certificate for the brand being supplied shall be sent along with every consignment or Original certified material test report in English countersigned by Inspecting Authority (Latest) approved by IBR for country of origin giving details of tests done for compliance to this Purchase instruction and ASME Sec.II.C.SFA-5.28, ER90S-B91.

12.6 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-5.28, ER90S-B91.


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aditya k

Prepared:  Aditya Kumar Sr. Engineer / WTC	Reviewed and Approved.  R Arivazhagan Sr. Manager /WTC
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Note : Clause 12.5
TPI inspection is mandatory.
Inspecting Authority (under the Indian Boiler Regulations, 1950) sign and seal is required on test certificate.

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	BHARATH HEAVY ELECTRICALS LIMITED TIRUCHIRAPALLI-620 014 WELDING TECHNOLOGY CENTRE	Doc. Number:	Revision:
		WCPI – 154	08
<u>Welding Consumable Purchase Instruction</u>		Date: 02/09/2009	
		Page 01 of 04	

**PURCHASE INSTRUCTION OF BARE LOW ALLOY STEEL
 SOLID WIRE FOR GAS METAL ARC WELDING TO
 ASME SEC.II.C, SFA-5.28 CLASS: ER 90S-B3.**

1.0 SCOPE:

1.1 This Purchase Instruction prescribes the requirements for Bare Low Alloy Steel Solid Wire for Gas Metal Arc Welding that conforms to ASME Section II.C.SFA-5.28, Class: ER 90S-B3.

2.0 GENERAL:

2.1 The Wire 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-5.28, ER 90S-B3 and all tests, Acceptance Criteria shall be in accordance with this. Additional requirements specified in this document shall also be complied.

2.2 The Wire shall be precision layer wound in plastic spools and shall be supplied in sizes and Quantities as specified in the Purchase Order.

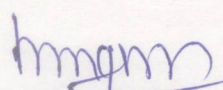
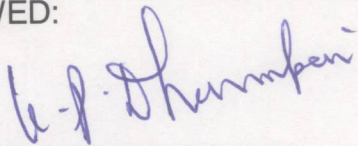
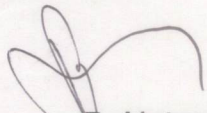
2.3 The Wires are intended for use as a Welding Electrode for butt-welding of tubes in pulsed GMAW process with Argon plus 5% to 20% Co₂ gas shielding in Automatic Straight Tube Butt Welding machine ~~and Orbital TIG Welding with 100 % Argon shielding~~ for Radiography Quality high pressure boiler components.

2.4 The manufacture's Material Safety Data Sheet for the product shall be sent along with the consignment.

2.5 Every batch of electrode shall be inspected & test certificates countersigned by Inspecting Authority approved by IBR for country of origin (Latest).

3.0 CHEMICAL COMPOSITION:

3.1 The chemical composition of the Wires shall conform to the following Analysis.

PREPARED:  S. Singaravelu SM / WTC	REVIEWED:  Dr.K.P. Dhandapani SDGM/WTC	APPROVED:  B. Natarajan AGM/WTC & TE
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Note: TPI inspection is mandatory.
 Inspecting Authority (under the Indian Boiler Regulations, 1950) sign and seal
 is required on test certificate



Carbon	0.07-0.12 %	Chromium	2.30 -2.70 %
Manganese	0.40-0.70%	Molybdenum	0.90 – 1.20%
Silicon	0.40 – 0.70%	Copper	0.35% Max
Sulphur	0.025% Max.	Nickel	0.20% Max
Phosphorus	0.025 % Max	Other Elements Total	0.50 % Max

4.0 USABILITY AND RADIOGRAPHIC SOUNDNESS:

4.1 The Wire when used as electrode in Gas Metal Arc Welding with Argon plus 5% to 20% Co₂ shielding in Automatic Straight Tube Butt Welding machine ~~and in Orbital Tig Welding with 100% Argon shielding~~ shall deposit Weld metal that flows freely, uniformly without sputtering or other defects and shall exhibit excellent wetting characteristics. The resultant Weld metal shall be smooth and uniform with no visible evidence of cracks/porosity or other defects and shall meet Radiographic Soundness requirements specified in ASME Sec.II.C.SFA-5.28, ER 90S-B3.

4.2 Weld metal produced using the wire with 95 % Argon plus 5% Co₂ /100 % Argon shielding shall meet tensile requirements after PWHT at 690±15°C with one hour soaking as follows.

Tensile Strength	620 Mpa (Minimum)
Yield Strength	540 Mpa (Minimum)
% Elongation	17 (Minimum)

4.3 The base metal for weld test assembly and testing procedure to be employed for verifying compliance to 4.1 & 4.2 above shall be as specified in ASME Sec.II.C.SFA-5.28, ER 90S-B3.

5.0 FORM, SIZE, FINISH AND IDENTIFICATION:

5.1 FORM & SIZE:

Wire diameter 2 mm is also acceptable.

The Wire shall be supplied in diameters 0.8 mm, 1.2 mm or 1.6 mm as specified in the Purchase Order. The tolerance on diameters shall be + 0.01, -0.04mm.

5.2 FORM:

The Wire shall be supplied in plastic spools of dimensions and weight as given below. Spools shall be such material and design so as to provide adequate protection against damage or distortion of themselves and of the wire due to normal handling or use. Spools shall be sufficiently clean and dry to maintain cleanliness of the wire. Spools shall electrically insulate the wire from wire feed spindle.

Note: TPI inspection is mandatory.
Inspecting Authority (under the Indian Boiler Regulations, 1950) sign and seal is required on test certificate



Barrel Inner Dia. (Bore dia.)	50.5 mm.+2.5,-0 mm	16 mm +1,-0 mm
Spool Outer Dia. (Flange OD) Max	305 mm	100 mm
Spool Width	103 mm +0,-3 mm.	46 mm + 0,-2 mm
Distance between axes	44.5 mm ± 0.5 mm	-----
Driving Hole Diameter	10 mm + 1,-0 mm	-----
Net Weight	10/12.5/15 Kg.	700 /1000 gm.

5.3 FINISH & UNIFORMITY:

The Wire shall be uniformly copper coated and shall have a smooth & glossy finish that is free from slivers, depressions, scratches, scales, seams, laps, drawing fluids and foreign matter that would adversely affect the welding characteristics, the operation of Welding equipment, or properties of Weld metal. The copper coating shall be well adhered without any flaking so as to ensure against any rusting during long storage and also ensuring good electrical conductivity.

5.4 Each Spool shall contain one continuous length of wire from single heat of metal and no splices are permitted.

5.5 WINDING:

The Wire shall be precision layer wound on spools so that kinks, waves, sharp bends, overlapping or wedging are not encountered, leaving the wire free to unwind without restriction. The outside end of the wire (The end with which welding is to begin) shall be identified so that it can be located readily and shall be fastened to avoid unwinding.

5.6 The spooling shall be rigid without any intermeshing of wire layers. The outer most layer of spooled wire shall not be closer than 3.0 mm to the outside of flanges.

5.7 The cast helix and temper of wire on spools shall be such that the filler wire will feed in an uninterrupted manner in an automatic high output welding system.

5.8 IDENTIFICATION:

Adhesive labels containing following product information shall be securely affixed in prominent location on the outside of at least one flange of the spool.

- a) ASME Specification & Classification designation.
- b) Brand Name.
- c) Batch Number/Heat Number.
- d) Size and Net Weight.



6.0 PACKAGING:

- 6.1 The spools completely devoid of moisture shall be packed in moisture proof cartons so as to prevent any rusting or any deterioration in weld quality during long storage.
- 6.2 The cartons shall have product information as required in 5.8 above legibly marked so as to be visible from outside of each carton.
- 6.3 The appropriate precautionary information as specified in ANSI Z 49.1 latest edition (as minimum) or its equivalent shall be prominently displayed in legible print on all packages including unit packages.
- 6.4 Spools shall be packed in wooden crates lined with waterproof material so as to ensure against damage during shipment and normal storage conditions. The net weight of each crate shall not exceed 1000 Kg.


7.0 TESTING & CERTIFICATION:

- 7.1 Each consignment of wire spools shall be from one batch only.
- 7.2 Batch /Lot classification shall be "Class S1" [REDACTED] of SFA-5.01 Filler metal procurement guidelines of ASME Sec.II.C. (Latest Edition & Addenda)
- 7.3 The Level of Testing shall be "Schedule J" [REDACTED] of SFA-5.01 Filler metal procurement guidelines of ASME Sec.II.C. (Latest Edition & Addenda)
- 7.4 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 for compliance to this Purchase Instruction and ASME Sec.II.C, SFA-5.28, ER90S-B3 shall be sent.
- 7.5 The Testing Authority shall certify that supplies made against the batch conforms to the requirements of the Latest Edition & Addenda (Applicable on the date of issue of Purchase Order) of ASME Sec.II.C.SFA-5.28 ER 90S-B3.

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Clause 7.4: Note: TPI inspection is mandatory.
Inspecting Authority (under the Indian Boiler Regulations, 1950) sign and seal is required on test certificate

Note: TPI inspection is mandatory.
 Inspecting Authority (under the Indian Boiler Regulations, 1950) sign and seal
 is required on test certificate

	BHARATH HEAVY ELECTRICALS LIMITED TIRUCHIRAPALLI-620 014 WELDING TECHNOLOGY CENTRE	Doc. Number:	Revision:
		WCPI – 153	08
<u>Welding Consumable Purchase Instruction</u>		Date: 02/09/2009	
		Page 01 of 04	

**PURCHASE INSTRUCTION OF BARE LOW ALLOY STEEL
 SOLID WIRE FOR GAS METAL ARC WELDING TO
 ASME SEC.II.C, SFA-5.28 CLASS: ER 80S-B2.**

1.0 SCOPE:

1.1 This Purchase Instruction prescribes the requirements for Bare Low Alloy Steel Solid Wire for Gas Metal Arc Welding that conforms to ASME Section II.C.SFA-5.28, Class: ER 80S-B2.

2.0 GENERAL:

2.1 The Wire 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-5.28, ER 80S-B2 and all tests, Acceptance Criteria shall be in accordance with this. Additional requirements specified in this document shall also be complied.

2.2 The Wire shall be precision layer wound in plastic spools and shall be supplied in sizes and Quantities as specified in the Purchase Order.

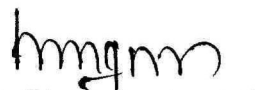
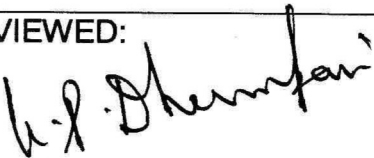
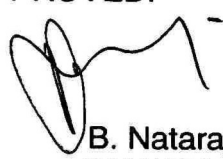
2.3 The Wires are intended for use as a Welding Electrode for butt-welding of tubes in pulsed GMAW process with Argon plus 5% to 20% Co₂ gas shielding in Automatic Straight Tube Butt Welding machine and ~~Orbital TIG Welding with 100 % Argon shielding~~ for Radiography. Quality high pressure boiler components.

2.4 The manufacture's Material Safety Data Sheet for the product shall be sent along with the consignment.

2.5 Every batch of electrode shall be inspected & test certificates countersigned by Inspecting Authority approved by IBR for country of origin (Latest).

3.0 CHEMICAL COMPOSITION:

3.1 The chemical composition of the Wires shall conform to the following Analysis.

PREPARED:  S. Singaravelu SM / WTC	REVIEWED:  Dr.K.P. Dhandapani SDGM/WTC	APPROVED:  B. Natarajan AGM/WTC & TE
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Note: TPI inspection is mandatory.
 Inspecting Authority (under the Indian Boiler Regulations, 1950) sign and seal
 is required on test certificate



Carbon	0.07-0.12 %	Chromium	1.20-1.50 %
Manganese	0.40-0.70%	Molybdenum	0.40 – 0.65%
Silicon	0.40 – 0.70%	Copper	0.35% Max
Sulphur	0.025% Max.	Nickel	0.20% Max
Phosphorus	0.025 % Max	Other Elements Total	0.50 % Max

4.0 USABILITY AND RADIOGRAPHIC SOUNDNESS:

4.1 The Wire when used as electrode in Gas Metal Arc Welding with Argon plus 5% to 20% Co₂ shielding in Automatic Straight Tube Butt Welding machine ~~and in Orbital Tig Welding with 100% Argon shielding~~ shall deposit Weld metal that flows freely, uniformly without sputtering or other defects and shall exhibit excellent wetting characteristics. The resultant Weld metal shall be smooth and uniform with no visible evidence of cracks/porosity or other defects and shall meet Radiographic Soundness requirements specified in ASME Sec.II.C.SFA-5.28, ER 80S-B2.

4.2 Weld metal produced using the wire with 95 % Argon plus 5% Co₂ /100 % Argon shielding shall meet tensile requirements after PWHT at 620±15°C with one hour soaking as follows.

Tensile Strength	550 Mpa (Minimum)
Yield Strength	470 Mpa (Minimum)
% Elongation	19 (Minimum)

4.3 The base metal for weld test assembly and testing procedure to be employed for verifying compliance to 4.1 & 4.2 above shall be as specified in ASME Sec.II.C.SFA-5.28, ER 80S-B2.

5.0 FORM, SIZE, FINISH AND IDENTIFICATION:

5.1 FORM & SIZE:

Wire diameter is 2 mm is also acceptable.

The Wire shall be supplied in diameters 0.8 mm, 1.2 mm or 1.6 mm as specified in the Purchase Order. The tolerance on diameter shall be + 0.01, -0.04mm.

5.2 FORM:

The Wire shall be supplied in plastic spools of dimensions and weight as given below. Spools shall be such material and design so as to provide adequate protection against damage or distortion of themselves and of the wire due to normal handling or use. Spools shall be sufficiently clean and dry to maintain cleanliness of the wire. Spools shall electrically insulate the wire from wire feed spindle.

Note: TPI inspection is mandatory.
Inspecting Authority (under the Indian Boiler Regulations, 1950) sign and seal is required on test certificate



Barrel Inner Dia. (Bore dia.)	50.5 mm.+2.5,-0 mm	16 mm +1,-0 mm
Spool Outer Dia. (Flange OD) Max	305 mm	100 mm
Spool Width	103 mm +0,-3 mm.	46 mm + 0,-2 mm
Distance between axes	44.5 mm ± 0.5 mm	-----
Driving Hole Diameter	10 mm + 1,-0 mm	-----
Net Weight	10/12.5/15 Kg.	700 /1000 gm.

5.3 FINISH & UNIFORMITY:

The Wire shall be uniformly copper coated and shall have a smooth & glossy finish that is free from slivers, depressions, scratches, scales, seams, laps, drawing fluids and foreign matter that would adversely affect the welding characteristics, the operation of Welding equipment, or properties of Weld metal. The copper coating shall be well adhered without any flaking so as to ensure against any rusting during long storage and also ensuring good electrical conductivity.

5.4 Each Spool shall contain one continuous length of wire from single heat of metal and no splices are permitted.

5.5 WINDING:

The Wire shall be precision layer wound on spools so that kinks, waves, sharp bends, overlapping or wedging are not encountered, leaving the wire free to unwind without restriction. The outside end of the wire (The end with which welding is to begin) shall be identified so that it can be located readily and shall be fastened to avoid unwinding.

5.6 The spooling shall be rigid without any intermeshing of wire layers. The outer most layer of spooled wire shall not be closer than 3.0 mm to the outside of flanges.

5.7 The cast helix and temper of wire on spools shall be such that the filler wire will feed in an uninterrupted manner in an automatic high output welding system.

5.8 IDENTIFICATION:

Adhesive labels containing following product information shall be securely affixed in prominent location on the outside of at least one flange of the spool.

- ASME Specification & Classification designation.
- Brand Name.
- Batch Number/Heat Number.
- Size and Net Weight.

Note: TPI inspection is mandatory.
Inspecting Authority (under the Indian Boiler Regulations, 1950) sign and seal is required on test certificate



BHARATH HEAVY ELECTRICALS LIMITED
TIRUCHIRAPALLI-620 014
WELDING TECHNOLOGY CENTRE

Doc. Number:

Rev:

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6.0 PACKAGING:

- 6.1 The spools completely devoid of moisture shall be packed in moisture proof cartons so as to prevent any rusting or any deterioration in weld quality during long storage.
- 6.2 The cartons shall have product information as required in 5.8 above legibly marked so as to visible from outside of each carton.
- 6.3 The appropriate precautionary information as specified in ANSI Z 49.1 latest edition (as minimum) or its equivalent shall be prominently displayed in legible print on all packages including unit packages.
- 6.4 Spools shall be packed in wooden crates lined with waterproof material so as to ensure against damage during shipment and normal storage conditions. The net weight of each crate shall not exceed 1000 Kg.

7.0 TESTING & CERTIFICATION:

- 7.1 Each consignment of wire spools shall be from one batch only.
- 7.2 Batch /Lot classification shall be "Class S1" [REDACTED] of SFA-5.01 Filler metal procurement guidelines of ASME Sec.II.C. (Latest Edition & Addenda)
- 7.3 The Level of Testing shall be "Schedule J" [REDACTED] of SFA-5.01 Filler metal procurement guidelines of ASME Sec.II.C. (Latest Edition & Addenda)
- 7.4 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 for compliance to this Purchase Instruction and ASME Sec.II.C, SFA-5.28, ER80S-B2 shall be sent.
- 7.5 The Testing Authority shall certify that supplies made against the batch conforms to the requirements of the Latest Edition & Addenda (Applicable on the date of issue of Purchase Order) of ASME Sec.II.C.SFA-5.28 ER 80S-B2.

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Clause : 7.4 : Note: TPI inspection is mandatory.
Inspecting Authority (under the Indian Boiler Regulations, 1950) sign and seal
is required on test certificate

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>		<u>Contact person 2</u>		
Name:		Name:		
Designation:		Designation:		
Office Phone:		Office Phone:		
Mobile:		Mobile:		
e-mail:		e-mail:		
Sl	Terms and conditions/Details required			Vendor's confirmation
1.	Indicate the MSME status of the bidder. MICRO/SMALL/MEDIUM/Non-MSME (Udyam certificate is to be uploaded in proof of above).			
2.	Any Bidder falling under MSE category shall furnish the following details & submit documentary evidence/ Govt. Certificate etc. in support of the same along with their offer.			
	Type under MSE	SC/ST Owned	Women Owned	Others (excluding SC/ST & Women Owned)
	Micro			
	SMALL			
	Note: If the bidder does not furnish the above in the tender, offer shall be processed construing that the bidder is not falling under MSE category.			
3.	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: 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.			
4.	Liquidated Damages shall be as per clause 18 of Buyer Added Bid Specific Additional Terms & Conditions. Confirm your acceptance.			

5.	Offers from Indigenous supplier will be considered only if they have a valid GST registration certificate. 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. _____
6.	Performance Bank Guarantee: Not Applicable	
7.	HSN Code for the quoted items	HSN CODE : _____
8.	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 %: _____
9.	Technical (Specification, brand, etc.) and commercial terms agreed against BHEL clarifications during the techno-commercial evaluation stage should also be honoured by the bidder, even if they aren't explicitly part of the final GeM contract. The rationale behind this is that such agreements influence the final decision and are not captured by GeM in to the GeM contract. Please confirm your acceptance.	
10.	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.	
11.	Duly filled, signed and stamped copies of the annexures as indicated in clause 31 of Buyer Added Bid Specific Additional Terms & Conditions of the enquiry are to be provided in the letter head of the Supplier. Please fill the annexures with GeM enquiry number, Item description and your company name wherever required. Also please Tick the appropriate option wherever required.	

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
xxi.	Treatment of cases regarding conflict of interest as per Annexure – 20	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.

TREATMENT OF CASES REGARDING CONFLICT OF INTEREST

The bidder notes that a conflict of interest would said to have occurred in the tender process and execution of the resultant contract, in case of any of the following situations:

i) If its personnel have a close personal, financial, or business relationship with any personnel of BHEL who are directly or indirectly related to the procurement or execution process of the contract, which can affect the decision of BHEL directly or indirectly;

ii) The bidder (or his allied firm) provided services for the need assessment/ procurement planning of the Tender process in which it is participating;

iii) Procurement of goods directly from the manufacturers/ suppliers shall be preferred. However, if the OEM/Principal insists on engaging the services of an agent, such agent shall not be allowed to represent more than one manufacturer/ supplier in the same tender. Moreover, either the agent could bid on behalf of the manufacturer/ supplier or the manufacturer/ supplier could bid directly but not both. In case bids are received from both the manufacturer/ supplier and the agent, bid received from the agent shall be ignored. However, this shall not debar more than one Authorised distributor (with/ or without the OEM) from quoting equipment manufactured by an Original Equipment Manufacturer (OEM) in procurements under a Proprietary Article Certificate.

iv) A bidder participates in more than one bid in this tender process. Participation in any capacity by a Bidder (including the participation of a Bidder as a partner/ JV member or sub-contractor in another bid or vice-versa) in more than one bid shall result in the disqualification of all bids in which he is a party. However, this does not limit the participation of an entity as a sub-contractor in more than one bid if he is not bidding independently in his own name or as a member of a JV.

The Bidder declares that they have read and understood the above aspects, and the bidder confirms that such conflict of interest does not exist and undertakes that they will not enter into any illegal or undisclosed agreement or understanding, whether formal or informal with other Bidder(s), in this regard. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process. **In case, the Bidder is found having indulged in above activities, the same will be considered as a violation of the tender conditions, and suitable action shall be taken by BHEL as per extant policies/ guidelines.**

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