

## TENDER DETAILS

<i>ENQUIRY No.</i>	<b>2612200023</b>	<i>ENQUIRY DATE</i>	<b>06.07.2022</b>
<i>DESCRIPTION</i>	<i>Mo &amp; ERNiCr3 Welding consumables as per attached Technical Annexure</i>	<i>DUE DATE</i>	<b>03.08.2022</b>

Item Sl. No.	Description	Unit	Quantity
10	TIG , ERNiCr3(Dia. 1.6 mm) as per ASM E Sec.II.C(Latest)	Kg	55
20	Dia. 2.4 mm/ 2.5mm TIG Rod 2.25Cr-1Mo as per Technical Annexure 33040/ SP/ 1002	Kg	5
30	Dia. 2.5 mm/ 2.4 mm (SM AW) E9015-B3 or E9016-B3 or E9018-B3 as per Technical Annexure 33040/ SP/ 1001	Kg	30
40	TIG Modified 9Cr-1Mo(Dia. 1.6 mm) as per Technical Annexure FBTR/ 33410/ 0002	Kg	35
50	Dia. 2.4 mm/ 2.5mm TIG Modified 9Cr-1Mo as per Technical Annexure FBTR/ 33410/ 0002	Kg	105
60	Dia. 1.6 mm TIG 9Cr-1Mo as per Technical Annexure 33040/ SP/ 1002	Kg	30
70	TIG 9Cr-1Mo (Dia. 2.4 mm/ 2.5mm ) as per Technical Annexure 33040/ SP/ 1002.	Kg	30
80	SMAW Modified 9Cr-1Mo(Dia.2.4mm/ 2.5 mm) as per Technical Annexure FBTR/ 33410/ 0001.	Kg	55
90	SMAW Modified 9Cr-1Mo (Dia. 3.2mm/ 3.15mm) as per Technical Annexure FBTR/ 33410/ 0001.	Kg	55
100	SMAW 9Cr-1Mo (Dia.2.5 mm/ 2.4mm) as per Technical Annexure PFBR/ 33040/ SP/ 1000/ R-2.	Kg	20
110	SMAW 9Cr-1Mo (Dia. 3.2 mm/ 3.15mm) as per Technical Annexure PFBR/ 33040/ SP/ 1000/ R-2.	Kg	20
<p><b><u>Tender note:</u></b></p> <p>i) <b><u>Pre-Qualification Criteria</u></b> The bidder shall meet the Pre-Qualification Criteria, without which the offer will not</p>			

- be considered for evaluation.
- i) Bidder has to submit Annex-II & Annexure-V (mandatory) with company seal & sign to consider the offer.

**ATTACHMENTS:**

**Technical Annexure - Technical Requirements**

**Annexure-II - Terms and Conditions of the Enquiry**

**Annexure-IV – Commercial details**

**Annexure-V – Pre Qualification Criteria**

**Annexure-VI – Item details & Technical Specification**

**Annexure – B – Make in India Format**

"LD clause has to be confirmed without fail." The bidder along with its associate / collaborators / sub-contractors / sub-vendors / consultants / service providers shall strictly adhere to BHEL fraud prevention policy displayed on BHEL website <http://www.bhel.com> and shall immediately bring to the notice of BHEL Management about any fraud or suspected fraud as soon as it comes to their notice.

## SPECIFICATION FOR RADIOGRAPHIC INSPECTION OF WELDS

## 1.0 SCOPE

This specification describes the procedure to be employed and its acceptance criteria for the examination of welds for internal discontinuities using radiographic techniques.

## 2.0 OBJECT

The radiographic examination will reveal defects such as crack, lack of fusion, lack of penetration, undercuts, slag inclusions, gas cavities, tungsten inclusions, worm holes etc.

## 3.0 APPLICABLE STANDARDS

- i) ASME Section V - 1983 edition
- ii) ASME-SE-94 - 1983 edition
- iii) ASME-SE-142 - 1983 edition

## 4.0 EQUIPMENT AND MATERIAL

## 4.1 Radiation Sources

X-ray equipment shall be used as radiation source wherever possible. When this is not possible suitable radioactive sources like  $\gamma$ -ray shall be used depending on the thickness under inspection as per ASME Section V.

## 4.2 Film

In general, ASME-SE-94 Class 2 films shall be used wherever possible. For welds greater than 50 mm in thickness, the manufacturer shall suitably select the film

depending on the inspection level and radiographic contrast demanded.

#### 4.3 Screens

Screen shall be as per ASME Section V.

#### 4.4 Filters

Objectionable scatter radiation shall be reduced by suitable filtration.

#### 4.5 Penetrators

The penetrators to be used shall be in accordance with ASME-SE-142. The penetrators thickness shall be as per Table 262.1 of ASME Section V.

#### 4.6 Chemical Processing and Film Viewing Facilities

This shall be as per ASME-SE-94

#### 4.7 Other Requirements

Densitometer (or) comparison step wedge films shall be provided for assuring compliance with the film density requirements.

#### 5.0 INSPECTION PROCEDURE

5.1 Weld surfaces that are to be radiographed shall be prepared by a suitable mechanical process to such a degree that the resulting radiographic contrast due to any remaining irregularities cannot mask (or) be confused with the image of any objectionable defect.

All weld surfaces shall merge smoothly into the base metal surfaces. The finished surface of the reinforcement of any

butt welds may be flush with the plate (or) may have a reasonably uniform crown within the following limit.

Reinforcement(S)  $\leq L/10 + 1$  mm where L is the width of the weld seam in mm

## 5.2 Penetrameter

The weld shall be radiographed with a technique which will have sufficient sensitivity to indicate the image of penetrameter and the specified hole as specified in Annexure-I. All other details like location of penetrameter, number of penetrameters, density of film etc shall be as per ASME Section V.

## 6.0 GEOMETRICAL UNSHARPNESS

6.1 Geometrical unsharpness shall not exceed the values specified below:

Source	Geometrical unsharpness in mm
i) X-rays upto 400 KV (or) Ir 192 (or) Tm 170	0.3
ii) Co 60	0.6

## 7.0 ACCEPTANCE CRITERIA

The following are unacceptable:

### 7.1 Class 1 Components

7.1.1 Any crack, lack of fusion, lack of penetration and undercut.

7.1.2 a) Any isolated slag inclusion if its largest dimension is equal to (or) greater than the values given below.

Wall thickness(t) in mm	length in mm
i) $t < 6$	1.5
ii) $6 < t < 10$	3.0
iii) $10 < t < 50$	$t/3$
iv) $t > 50$	20

Note:

1. Two defects are considered as a single defect if the distance between them is less than 6 times the length of the shorter one.

2. For thickness greater than 100 mm, slag inclusion located in the middle third of the wall may be tolerated, provided that their individual length does not exceed 40 mm. For this an additional examination is carried out to ensure that their shadow area does not mask other defects.

b) Any line of slag inclusions whose length total is more than 't' over a length of 12 t.

7.1.3 a) Any gas cavity if its greater dimension is equal to (or) greater than the values given below:

Wall thickness (t) in mm	Length in mm
i) $t < 6$	1.5
ii) $6 < t < 10$	2.0
iii) $10 < t < 25$	2.5
iv) $25 < t < 50$	3.0
v) $t > 50$	4.0

b) Any cluster (or) line of cavities affecting a length of weld exceeding ' $0.5 t$ ' (or)  $3\emptyset$  mm whichever is smaller.

Note: Two gas cavities are considered as one if the distance between them is less than 5 times the maximum dimension of the larger one.

7.1.4 Isolated tungsten inclusion whose greater dimension is

> 1 mm where  $t < 6$  mm

> 1.5 mm where  $t > 6$  mm

Note: Two defects shall be considered as one if the distance between them is less than 6 times the length of the shorter one.

7.1.5 Isolated warm holes except in multi pass welds with a thickness of over 10 mm.

7.2 Class 2 Components

7.2.1 Any crack, lack of fusion, lack of penetration and undercut.

7.2.2 a) Any isolated slag inclusion if its largest dimension is equal to (or) greater than the values given below:

Wall thickness (t) in mm	Length in mm
$t < 10$	5
$10 < t < 50$	$t/2$
$t > 50$	$3\emptyset$

Note:

1. Two defects are considered as a single defect if the distance between them is less than 6 times the length of the shorter one.

2. For thickness greater than 50 mm, slag inclusions located in the middle third of the wall may be tolerated, provided that their individual length does not exceed 60 mm.

b) Any lines of slag inclusions whose length total is more than 't' over a length of '12 t'.

7.2.3 a) Any gas cavity if its greater dimension is equal to (or) greater than the values given below.

Wall thickness (t) in mm	Length in mm
$t \leq 6$	2.0
$6 < t \leq 10$	2.5
$10 < t \leq 25$	3.0
$25 < t \leq 50$	4.0
$t > 50$	5.0

Note: Two gas cavities are considered as one if the distance between them is less than 5 times the maximum dimension of larger one.

b) Any cluster (or) line of cavities affecting a length of weld exceeding '0.5 t' (or) 50 mm whichever is smaller.

7.2.4 Isolated tungsten inclusions whose greater dimension is  
> 1 mm where  $t < 6$  mm  
> 1.5 mm where  $t > 6$  mm

Note: Two defects shall be considered one if the distance between them is less than 6 times the length of the shorter one.

7.2.5 Isolated warm holes except in multi pass welds with a thickness of over 10 mm.

7.3 Class 3 Components

7.3.1 Any crack, lack of fusion, lack penetration and undercut.

7.3.2 a) Any isolated slag inclusion if its largest dimension is equal to (or) greater than the values given below:

Wall thickness (t) in mm	Length in mm
$t < 6$	5
$6 < t < 50$	t
$t > 50$	60

Note: Two defects are considered as a single defect if the distance between them is less than 3 times the length of the shorter one.

b) Any lines of slag inclusions whose length total is more than 't' over a length of '4 t'.

7.3.3 a) Any gas cavity if its greater dimension is equal to (or) greater than the values given below:

Wall thickness (t) in mm	Length in mm
i) $t < 6$	2.0
ii) $6 < t < 10$	2.5
iii) $10 < t < 25$	3.0
iv) $25 < t < 50$	4.0
v) $t > 25$	5.0

Note: Two gas cavities are considered as one if the distance between them is less than 3 times the maximum dimension of the larger one.

b) Any cluster (or) line of cavities affecting a length of a weld exceeding 1.5 t (or) 60 mm whichever is smaller.

- 7.3.4 Isolated tungsten inclusions whose greater dimension is
- > 1 mm where  $t < 6$  mm
  - > 1.5 mm where  $t > 6$  mm

Note: Two defects shall be considered as one if the distance between them is less than 3 times the length of the shorter one.

- 7.3.5 Isolated worm holes except in multi pass welds with a thickness of over 10 mm.

## 8.0 EXAMINATION REPORT

- 8.1 The examination report shall at least include the following information:

- a) Identification of manufacturer, purchase order and equipment.
- b) Identification of part, weld (or) area subjected to examination including grade of steel.
- c) Thickness of radiographed area.
- d) Type and characteristics (size) of the radiation source.
- e) Type of film used and film density achieved.
- f) Type, number and thickness of screen & filters used.
- g) Type of penetrometer
- h) Location of radiation source with relation to test area and source to film distance.

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- i) Exposure time
- j) Diameter of smallest visible hole
- k) Sensitivity achieved
- l) Interpretation of film results
- m) Location of any defects revealed by inspection
- n) Any difficulties (or) unusual occurrence during the inspection
- o) Date of examination and inspectors signature

8.2 A complete set of radiographs for each job shall be retained by the manufacturer/contractor and kept for a period of at least ten years.

ANNEXURE-1  
TABLE-1 : (SINGLE WALL TECHNIQUE)

Single wall thickness in mm	Source side penetrater Designation as per ASME	Essential hole size to be seen in mm	Film side penetrater designation	Essential hole size to be seen in mm
1. Upto 6 including	5	0.25 (1T)	5	0.25 (1T)
2. Over 6 to 10	7	0.50 (2T)	7	0.50 (2T)
3. Over 10 to 13	10	0.50 (2T)	10	0.50 (2T)
4. Over 13 to 16	12	0.60 (2T)	12	0.60 (2T)
5. Over 16 to 19	15	0.76 (2T)	12	0.60 (2T)
6. Over 19 to 22	17	0.86 (2T)	15	0.76 (2T)
7. Over 22 to 25	20	1.02 (2T)	15	0.76 (2T)
8. Over 25 to 31	25	1.28 (2T)	17	0.86 (2T)
9. Over 31 to 38	30	1.52 (2T)	20	1.02 (2T)
10. Over 38 to 50	35	1.78 (2T)	25	1.28 (2T)
11. Over 50 to 63	40	2.04 (2T)	30	1.52 (2T)
12. Over 63 to 75	45	2.28 (2T)	35	1.78 (2T)
13. Over 75 to 100	50	2.54 (2T)	40	2.04 (2T)
14. Over 100 to 150	60	3.04 (2T)	45	2.28 (2T)
15. Over 150 to 200	80	4.06 (2T)	50	2.54 (2T)
16. Over 200 to 250	100	5.08 (2T)	60	3.04 (2T)
17. Over 250 to 300	120	6.10 (2T)	80	4.06 (2T)
18. Over 300 to 400	160	8.12 (2T)	100	5.08 (2T)
19. Over 400 to 500	200	10.16 (2T)	120	6.10 (2T)

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TABLE-II (DOUBLE WALL TECHNIQUE)

Nominal single wall thickness  (mm)	DWDI Technique		DWSI Technique	
	Source side penetrameter designation	Essential hole to be seen (mm)	Film side penetra- meter des- ignation	Essential hole to be seen (mm)
1. Upto 3 incl.	5	0.25 (1T)	5	0.25 (1T)
2. Over 3 to 6	5	0.50 (2T)	5	0.25 (1T)
3. Over 6 to 8	7	0.50 (2T)	5	0.50 (2T)
4. Over 8 to 10	10	0.50 (2T)	7	0.50 (2T)
5. Over 10 to 16	12	0.60 (2T)	10	0.50 (2T)
6. Over 16 to 22	-	-	12	0.60 (2T)
7. Over 22 to 25	-	-	15	0.76 (2T)

33040/SP/1001

SPECIFICATION FOR 2Cr-Mo ELECTRODES

Electrodes shall conform to E9015-B3 or E9016-B3 or E9018-B3 of SFA 5.5 specification with the following modified requirements.

A. MODIFIED REQUIREMENTS

1) Chemical Composition of the Deposited Weld Metal

Elements	C	Cr	Mo	Mn	Si	S max	P max	Cu max
Composition % by weight	0.05 to 0.08	2.0 to 2.5	0.9 to 1.2	0.6 to 0.9	0.2 to 0.5	0.02	0.02	0.25

ii) Soundness Test

Radiographic examination shall be carried out on weld pad prepared in flat position for each electrode size. The test shall conform to SFA 5.5 requirements.

iii) All Weld Metal Tension & Impact Tests (ASTM A 370 or equivalent)

After subjecting the weld to a heat treatment of 700°C for 2 hours (rate of heating and cooling as per SFA 5.5 specification) the all weld metal tension and impact tests shall meet the following requirements. These tests shall be done for each electrode size with welding executed in flat position.

Tensile Test at Ambient Temperature

Ultimate Tensile Strength : Min 620 MPa

Yield Strength  $E_{0.2\%}$  : Min 530 MPa

% elongation on  $L = 5.65\sqrt{A}$  : Min 20

% reduction in area shall be reported

Charpy U Impact Strength at 20°C : Min 10  $\text{daJ/cm}^2$   
(As per ASTM E 23 or equivalent) (3 specimens shall be tested)

RT NDT Temperature

This value as determined in accordance with ASME Section III Class 1 shall be reported for 3.2 mm electrode size only (Heat treatment and welding position as above).

Tensile Test at 500°C (ASTM E 21 or equivalent)

Ultimate Tensile Strength : Min 430 MPa

Yield strength  $E_{0.2\%}$  : Min 370 MPa

% elongation (on  $L = 5.65\sqrt{A}$ ) and % reduction in area shall be reported.

iv) Definition of Lot

A lot of electrodes shall consist of electrodes of the same diameter, with a core from the same heat and a coating made from the same mix which form part of same manufacturing cycle. No lot shall exceed the following limits.

Dia. mm	No. of electrodes
2.5	100,000
3.2	83,000
4	55,000
5	40,000
6	25,000

B. PACKING AND STORAGE

The electrodes shall first be put in plastic boxes with plastic covers and sealed with leaktight adhesive tapes. Three boxes shall be kept together in one cardboard packing. The cardboard boxes shall be put in wooden crates lined internally with water proof paper.

Supplier shall indicate at the time of quotation the details as regards to preservation of the electrodes and shelf life under those conditions.

C. ACCEPTANCE REPORTS

For each lot, the supplier shall prepare an acceptance report. The following test results shall be indicated in the report.

- Dimensional checks
- Chemical composition
- Mechanical properties
- RT<sub>NDT</sub> temperature (for 3.2 mm electrode only)
- Fillet weld test (for electrode sizes as required in SFA 5.5 specification)
- Soundness test

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SPECIFICATION FOR 2½Cr-1Mo AND 9Cr-1Mo FILLER WIRES

Filler wires are for execution of root pass by TIG welding with argon as shielding and purging gas.

2½Cr-1Mo filler wire shall conform to SG Cr Mo 2 of DIN 8575 with the following modified requirements. 9Cr-1Mo filler wire shall conform to AWS classification ER 505 of SFA 5.9 or SG Cr Mo 9 of DIN 8575 with the following modified requirements.

A. MODIFIED REQUIREMENTS

i) Chemical Composition of bare wire

2½Cr-1Mo Type

Elements	C	Cr	Mo	Mn	Si	P max	S max
Composition	0.03	2.2	0.9	0.5	0.2	0.02	0.02
% by weight	to	to	to	to	to		
	0.10	3.0	1.1	1.2	0.8		

9Cr-1Mo Type

Elements	C	Cr	Mo	Mn	Si	P max	S max	Cu max	Ni max
Composition	0.03	8	0.8	0.4	0.2	0.02	0.02	0.5	0.5
% by weight	to	to	to	to	to				
	0.10	10.5	1.2	0.7	0.8				

ii) Definition of lot

Wires from the same heat and forming part of the same manufacturing cycle (same diameter at the end of run) shall constitute a lot.

B. PACKING AND STORAGE

The straight filler wires in lengths of either 900 or 1000 mm shall be packed in cardboard cartons and these cartons shall be put in suitable wooden crates. Sea worthy packing shall be ensured by the supplier.

C. ACCEPTANCE REPORTS

For each lot, the supplier shall prepare an acceptance report. The following test results shall be indicated in the report.

- Dimensional checks
- Chemical composition

SPECIFICATION FORGRADE 91 (MODIFIED 9Cr-1Mo) FILLER WIRES1.0 SCOPE

The Grade 91 (modified 9Cr-1Mo steel) filler wires are meant for execution of TIG welding (GTAW process) with argon as shielding and purging gas. These filler wires shall meet the requirements given below.

2.0 GENERAL

Each lot shall be subjected to tests indicated below in Clause 3.1 to 3.6. A lot shall consist of wires from the same heat and forming part of same manufacturing cycle with same diameter at the end of run.

3.0 REQUIREMENTS3.1 Test Weld Pads

Test weld pads using Grade 91 (modified 9Cr-1Mo steel) material shall be prepared by TIG welding process in flat position as per AWS SFA 5.4. The minimum preheat temperature shall be 250 °C and interpass temperature shall be between 200 and 250 °C.

The test weld pads shall be subjected to a heat treatment of 760±10 °C. The heating rate and cooling rate shall be 150 °C/hour maximum and the soaking time shall be 2 hours.

3.2 Radiographic Examination

After removal of support plate from the weld test pad,

100% radiographic examination of the weld shall be carried out and acceptance criteria shall be as given in specification No. PFBR/01950/SP/1001/R-1. The examination shall be carried out after heat treatment. The acceptance criteria shall be as applicable for Class-1 components.

3.3 Chemical Analysis of Weld Deposit

The chemical composition of the deposited weld metal shall meet the requirements as given below:

Elements	Composition % by weight
C	0.08-0.12
Cr	8-9.5
Mo	0.85-1.05
Mn	0.5-1.2
Si	0.2-0.4
S max	0.01
P max	0.015
Ni	0.6-1.0
Nb	0.04-0.07
V	0.15-0.22
N	0.03-0.07
Fe	Balance

3.4 All Weld-metal Tension Tests

After subjecting the weld to heat treatment all weld-metal tension tests at room temperature and at 515 C as per AWS SFA 5.4 and ASTM E21 respectively shall be carried out. The test results shall meet the following requirements.

	<u>Room</u>	<u>At 515</u>
	<u>Temp.</u>	<u>deg.C</u>
Ultimate tensile strength, MPa, min	: 585	to be noted
Yield strength (E 0.2%) MPa, min.	: 415	310
Elongation on 5d, % min	: 16	to be noted

3.5 Charpy V-Notch Impact Test at 20 deg.C

After heat treatment, 3 nos. of weld specimens (10 mm x 10 mm size) shall be subject to Charpy V-notch impact test at 20 C as per ASTM E23. The minimum impact strength shall be 100 J.

3.6 Hardness Test

The hardness of as-welded and post weld heat treated weld pads shall be measured and reported.

4.0 PACKAGING

The straight filler wires in lengths of 1000 mm shall be first put in plastic boxes and sealed with leaktight adhesive tapes. These boxes shall be kept in cardboard cartons and then these cartons shall be put in suitable wooden crates lined internally with water proof paper. Sea-worthy packing shall be ensured by the supplier. The information to be marked on each unit of package shall be as per AWS SFA 5.9.

5.0 ACCEPTANCE REPORTS

For each lot, the supplier shall prepare an acceptance report. The following test results/details shall be

indicated in the report.

- Welding parameters (voltage, current, speed, heat input, preheat temp., interpass temp., thickness of pad plate etc.) used for preparation of weld pads for each size of filler wire.
- Heat treatment details of test weld pad
- Radiographic examination
- Chemical composition of weld metal
- All weld-metal tension tests at room temperature and at 515 C
- Charpy V-Notch impact test
- Hardness test
- Dimensional checks of filler wires being supplied

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SPECIFICATION FOR  
GRADE 91 (MODIFIED 9Cr-1Mo) ELECTRODES

1.0 SCOPE

The Grade 91 (modified 9Cr-1Mo steel) electrodes shall be basic flux coated and to be used for SMAW Process. These electrodes shall meet the requirements as given below.

2.0 GENERAL

The electrodes shall be suitable for welding in all positions except that its usability in vertical down position is not mandatory.

Each lot shall be subjected to tests indicated below in Clause 3.1 to 3.8. A lot shall consist of electrodes of the same diameter, with a core from the same heat and a coating made from the same mix which form part of same manufacturing cycle.

3.0 REQUIREMENTS

3.1 Weld Test Pads

Weld test pads shall be prepared from Grade 91 (modified 9Cr-1Mo) material by using SMAW process in flat position as per AWS SFA 5.4. The minimum preheat temperature shall be 250 °C and the interpass temperature shall be between 200 and 250 °C.

The test weld pads shall be subjected to a heat treatment of 760 ± 10 °C. The heating rate and cooling rate shall be 150 °C/hour maximum and the soaking time shall

be 2 hours.

3.2 Radiographic Examination

After the removal of support plate from the weld test pad, 100% radiographic examination of the weld shall be carried out and shall conform to requirements given in specification No. PFBR/01950/SP/1001/R-1. The examination shall be carried out after heat treatment. The acceptance criteria shall be as applicable for Class-1 components.

3.3 Chemical Analysis of Weld Deposit

The chemical composition of the deposited weld metal shall be as given below:

Elements	Composition % by weight
C	0.08-0.12
Cr	8 - 9.5
Mo	0.85-1.05
Mn	0.5-.1.2
Si	0.2-0.4
S max	0.01
P max	0.015
Ni	0.6-1.0
Nb	0.04-0.07
V	0.15-0.22
N	0.03-0.07
Fe	Balance

3.4 All Weld-metal Tension Tests

After subjecting the weld to heat treatment all weld-metal tension tests shall be carried out at room temperature and at 515 C respectively as per AWS SFA 5.4 and ASTM E21. The results shall meet the following requirements.

	Room Temp.	At 515 deg.C
Ultimate tensile strength, MPa, min :	585	to be noted
Yield strength (E 0.2%) MPa, min. :	415	310
Elongation on 5 d, % min :	16	to be noted

3.5 Charpy V-Noth Impact Test at 20 deg.C

This test shall be carried out on 3 specimens (10 mm x 10 mm size) after heat treatment of the weld test pad as per ASTM E23 and the minimum impact strength at 20<sup>o</sup> C shall be 45 J.

3.6 Fillet Weld Test

The fillet weld test shall be carried out as per AWS SFA 5.4 for 3.2 mm diameter and above size electrodes.

3.7 Hardness Test

The hardness of as-welded and post-welded heat treated weld pads shall be measured and reported.

3.8 Moisture Content

The moisture content of the deposited weld metal shall be measured. The maximum hydrogen level shall be less than 5 ml/100 g in weld metal.

4.0 PACKAGING

The electrodes shall first be put in plastic boxes and sealed with leak tight adhesive tapes. These boxes shall be kept in cardboard cartons and then these cartons shall be put in suitable wooden crates lined internally with water proof paper. Sea-worthy packing shall be

ensured by the supplier. Each unit of package shall be marked as per AWS SFA 5.4.

#### 5.0 ACCEPTANCE REPORTS

For each lot, the supplier shall prepare an acceptance report. The following test results/details shall be indicated in the report.

- Welding parameters (voltage, current, speed, heat input, preheat temp., interpass temp., thickness of pad plate etc.) used for preparation of weld pads for each size of electrodes.
- Heat treatment details of test weld pads
- Radiographic examination
- Chemical composition of weld metal
- All weld-metal tension tests at room temperature and at 515 C
- Charpy V-Notch impact test
- Fillet weld test
- Hardness test
- Moisture content test
- Dimensional checks of electrodes being supplied
- Details of baking and storage conditions for the electrodes along with the shelf life.

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# Technical Annexure PFBR/33040/SP/1000/R-2

PFBR/33040/SP/1000/R-2

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## SPECIFICATION FOR 9Cr-1Mo ELECTRODES

Electrodes shall be basic coated and conform to AWS classification E 505-15 of SFA 5.4 specification with the following modified requirements.

### A. SUPPLEMENTARY REQUIREMENTS

i) Chemical composition of the deposited weld metal:

Elements	Composition % by weight	
C	0.06	- 0.10
Cr	8	- 9.5
Mo	0.85	- 1.0
Mn	0.7	- 1.0
Si	0.35	- 0.6
S max	0.015	
P max	0.02	
Cu max	0.15	
Ni max	0.3	
V max	0.05	

ii) Radiographic Examination

After the removal of support plate, 100% radiographic examination of the weld shall be carried out and shall meet the acceptance criteria specified for Class 1 components in the enclosed specification PFBR/01950/SP/1001/R-1. The examination shall be carried out after heat treatment.

iii) All Weld Metal Tension & Impact Tests

After subjecting the weld to a heat treatment of 730<sup>o</sup> ±10 C, (heating rate: max. 150 C/h, soaking time 1 h cooling rate max. 150 C/h) the all weld metal tension and impact tests shall meet the following

# Technical Annexure PFBR/33040/SP/1000/R-2

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requirements. These tests shall be done for each electrode size.

## Tensile Test at Ambient Temperature

Ultimate tensile strength	Min. 590 MPa
Yield Strength (E 0.2%)	Min. 398 MPa
% elongation on L = $5.65 \sqrt{A}$	Min. 18%

## Charpy V Impact Strength at 20 °C (As per ASTM E 23)

Min. 6.5 daj/cm<sup>2</sup> (3 specimens shall be tested).

### iv) Definition of Lot

A lot of electrodes shall consist of electrodes of the same diameter, with a core from the same heat and a coating made from the same mix which form part of same manufacturing cycle. No lot shall exceed the following limits.

<u>Dia. mm</u>	<u>No. of electrodes</u>
2.5	100,000
3.2	83,000
4	55,000

### B. PACKING AND STORAGE

The electrodes shall first be put in plastic boxes with plastic covers and sealed with leaktight adhesive tapes. Three boxes shall be kept together in one cardboard packing. The cardboard boxes shall be put in wooden crates lined internally with water proof paper.

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## C. ACCEPTANCE REPORTS

For each lot, the supplier shall prepare an acceptance report. The following test results shall be indicated in the report.

- Dimensional checks
- Chemical composition
- Mechanical properties (with heat treatment details)
- Fillet weld test
- Radiographic examination

x . x . x . x . x

C108/D20

## Annexure-II

### BHARAT HEAVY ELECTRICALS LIMITED

(A GOVT.OF INDIA UNDERTAKING)

### HIGH PRESSURE BOILER PLANT

TIRUCHIRAPPALLI-620 014

Enq No:

Date:

#### TERMS AND CONDITIONS OF THE ENQUIRY (TWO PART BIDS)

**Note:** This Annexure has to be mandatorily filled & signed by the manufacturer (or) mill and submitted along with Technical bid.

**Any deviation to the below mentioned terms shall be stated specifically in the comments column for each term and also in case of acceptance to our terms, it will be construed that the whole term is understood and agreed in totality without any deviation. (If otherwise mentioned).**

SL NO	Description	Vendor's Acceptance
1.	<p><b><u>SCOPE OF SUPPLY:</u></b></p> <p>i) Supply shall be made strictly as per the Technical specifications/WCPI mentioned in the Enquiry</p> <p>ii) All documents and certificates as per specifications shall be submitted during order execution.</p> <p>iii) Deviation, if any, shall be clearly mentioned in your offer.</p> <p>iv) Quantity variation up to <b>-5%</b> is acceptable. Supply of extra quantity is not permissible.</p>	
2.	<p><b><u>Item details, Quantity &amp; Technical Specifications:</u></b> As per <b>Annexure-VI</b> of Enquiry.</p> <p>Note: Annexure VI is to be duly filled, signed and to be submitted by the bidder.</p>	
3.	Annexure-IV (Vendor details and Commercial terms) of tender enquiry is to be duly filled, signed and to be submitted by the bidder.	
4.	<p><b><u>Pre-Qualification requirements (PQR):</u></b> As per Enquiry attachment "Annexure-V".</p> <p>Note: Enquiry attachment "Annexure-V" is to be duly filled, signed and to be submitted by the bidder in the Part 1 bid.</p>	
5.	<b><u>Delivery Period:</u></b> within 60 days from the date of Purchase order.	
6.	<p><b><u>Liquidated Damages / Penalty: -</u></b></p> <p>a) Time is the essence of the contract.</p> <p>b) The ordered items shall be delivered as per the delivery period mentioned in the Purchase Order.</p> <p>c) In case the supplier supplies the ordered items beyond the delivery period specified, Liquidated Damages -LD - as detailed below shall be levied from the supplier without prejudice to any other relief /compensation available to BHEL, Tiruchirappalli under any other condition of the contract/applicable legal provisions.</p> <p><b>d) Liquidated damages shall be 0.5% of the Total order value per week or part thereof subject to a maximum of 10 % of the total order value.</b></p> <p>NOTE:</p> <ol style="list-style-type: none"> <li>Any deviation from the above LD clause, loading will be applied to the extent to which it is not agreed by the bidder (at offered value).</li> <li>For Indigenous: FOR order - LD will be reckoned from the date of LR/RR/BL / e-way bill/ Invoice whichever is later. If the goods are delivered through trans-shipment, the delivery documents of the 1st shipment from the factory works, will be considered for calculation of LD.</li> <li>For Imports: CFR order- LD will be reckoned from B/L date</li> </ol>	
7.	<p><b><u>1. Payment Terms for Indigenous Bidders:</u></b></p> <ul style="list-style-type: none"> <li><b>For Micro &amp; Small Enterprises (MSEs):</b> 100% direct EFT payment within 45 days from the date of receipt and acceptance of materials at BHEL STORES. The supplier should be a manufacturer of the offered item and should upload Udyam Registration Certificate in proof of MSE.</li> <li><b>For Medium Enterprises:</b> 100% direct EFT payment within 60 days from the date of receipt and acceptance of materials at BHEL STORES. The supplier should be a manufacturer of the offered item and should upload Udyam Registration Certificate in proof of Medium Enterprises.</li> </ul>	

	<ul style="list-style-type: none"> <li>• <b>For Non MSME Suppliers:</b> 100% direct EFT payment within 90 days from the date of receipt and acceptance of materials at BHEL STORES.</li> </ul> <p><b>2. Payment Terms for Import Bidders:</b></p> <ul style="list-style-type: none"> <li>• <b>BHEL Payment term is 100% payment on CAD basis after 90 days from the date of receipt of documents, specified in PO, at BHEL bank. Respective bank charges to respective account</b></li> <li>• If supplier insists for LC, only Usance LC with 90 days' credit (90 days from the date of receipt of documents, specified in PO, at BHEL bank) will be opened one month prior to material readiness, further loading will be considered @ 1.5% on the offered value. Hence supplier shall intimate the material readiness accordingly for opening of LC. LC validity period will be 90 days and for any extension, applicable charges will be to supplier's account.</li> </ul> <p>If the LC payment is insisted, TWO sets of original TCs to be submitted prior to dispatch and a certificate to that effect from BHEL should form a part of the documents to be negotiated. If this condition is not complied by the vendor, the offer is liable for rejection.</p> <ul style="list-style-type: none"> <li>• Quoted currency to be indicated.</li> </ul> <p><b>3). New Suppliers:</b></p> <ul style="list-style-type: none"> <li>• For new suppliers not registered with BHEL Trichy for the product, payment shall be made <b>within 90 days</b> after receipt and acceptance of materials.</li> </ul>	
8.	<p><b><u>Risk Purchase clause</u></b></p> <ol style="list-style-type: none"> <li>1. In the event of any successful Tenderer's failure to fulfil any of the tender / Contract obligations including supply of whole or any part of the ordered items as per Contract / Agreement, BHEL has the right to terminate the contract and purchase from elsewhere ,at the risk and cost of the defaulted supplier, either the whole of the goods or any part which the supplier has failed to deliver or dispatch within the time stipulated in the contract or if the same were not available, the best and nearest available substitute thereof. The supplier shall be liable for the additional expenditure/difference in Cost, if any, including consequential losses which BHEL may sustain by reason of risk purchase in addition to the applicable LD as per the Purchase order/contract.</li> <li>2. The decision of BHEL with regard to the additional expenditure / difference in cost and consequential losses incurred by BHEL shall be final and binding on the supplier.</li> <li>3. The amount recoverable under risk purchase shall be recovered from the defaulted supplier in all or any of the following manners: <ol style="list-style-type: none"> <li>i) From dues available in the form of Bills payable to defaulted supplier, SD, BGs against the same contract.</li> <li>ii) from the dues payable to defaulted supplier against other contracts in the same Region/Unit /any other region/unit</li> <li>iii) In-case recoveries are not possible with any of the above available options, Legal action shall be initiated for recovery against defaulted supplier.</li> </ol> </li> </ol>	
9.	<p><b>Validity of quoted rates should be maintained minimum for 120 days from the date of Tender opening (Technical Bid). The quoted/Finalized rates shall be Firm till completion of the supplies.</b></p>	
10.	<p><b><u>Offer Submission (Indigenous &amp; Import suppliers)</u></b></p> <ol style="list-style-type: none"> <li>a) This Tender is hosted in EPS portal &amp; offer to be submitted through EPS portal only.</li> <li>b) You are requested to submit your 2 parts offer before due date &amp; time given in RFQ through NIC (<a href="https://eprocurebhel.co.in">https://eprocurebhel.co.in</a>) only.</li> <li>c) The tender will be operated on <b>Two part bids basis</b> i.e. <b>Part I -Techno-Commercial Bid &amp; Part II- Price Bid NIC PORTAL (<a href="https://eprocurebhel.co.in">https://eprocurebhel.co.in</a>) ONLY.</b></li> <li>d) <b>Part-I Techno-Commercial Bid</b> : It contains Technical details, specifications, commercial terms and conditions Taxes, delivery terms, delivery schedule, validity of offer, payment terms (except price details), acceptance for LD clause, RP clause etc. as per ANNEXURE-II.</li> <li>e) <b>Part-II Price Bid</b> : It contains the input form for quoting price for all the enquired items in NIC (<a href="https://eprocurebhel.co.in">https://eprocurebhel.co.in</a>).</li> <li>f) Tender should not be addressed to any individual's name / designation.</li> <li>g) Attached documents/tenders should be free from CORRECTION AND ERASURES. Any correction in any attached document should have been attested.</li> <li>h) Please submit point wise compliance to our specifications, terms and conditions. Otherwise it will be presumed that you are accepting BHEL's terms and conditions. Please ensure that all terms &amp; conditions are filled.</li> </ol>	

	<p>Commercial terms agreed in Part-1 Techno commercial Bid and in subsequent clarifications (if any) is final, anywhere else mentioned will not be considered.</p> <p>i) Offer(s) received after due date and time as mentioned in EPS portal will not be considered under any circumstances. If the due date of tender opening happens to be a holiday, those tenders will be opened on future working day for which corrigendum will be issued.</p> <p>j) <b>Documents submitted with the offer shall be signed and stamped in each page</b> by authorized representative of the bidder.</p> <p>k) The bidder shall submit his response through bid submission to the tender on EPS website at <a href="https://eprocurebhel.co.in">https://eprocurebhel.co.in</a>. The bidder would be required to register on the EPS website at <a href="https://eprocurebhel.co.in">https://eprocurebhel.co.in</a> and submit their bids online. SEALED COVER BIDS / E-MAILS / FAX / MANUAL OFFERS WILL NOT BE ACCEPTED.</p> <p>l) Normally offer to be submitted within due date only. Any tender due extension request to be given on or before 48hrs of due date &amp; time.</p>	
11.	<p><b>Offer Submission (Indigenous)</b></p> <p>1. Submit your FIRM competitive offer for <b>rate per kg</b> of material required with best possible delivery on <b>FOR BHEL Stores-Trichy</b> basis ONLY. The quoted prices shall be inclusive of all charges (like testing charges, Freight, etc.).</p> <p>2. Quoted price should be exclusive of GST. Applicable GST percentage (additional to the quoted price) to be indicated in Part 1 techno-commercial bid.</p> <p>3. All the items should be supplied at our STORES, at your own cost. Offers with any other delivery conditions is not acceptable.</p> <p><b>IMPORTANT NOTE:</b> Delivery condition like <b>Ex-works / Ex-go down / Transportation of materials through transport carriers from your works up to the transport carrier's office</b> and taking delivery of goods by BHEL from such office of transport carriers is <b>not acceptable</b> to us.</p> <p>4. Price Variation Clause (PVC) is not acceptable and offer shall be rejected.</p> <p>5. While quoting price, it shall be ensured that all terms &amp; conditions as per GST act is followed.</p> <p>6. TAXES AND DUTIES: GST IN no, HSN CODE, GST rate for each items are to be quoted</p> <p>7. Transit insurance should be in the scope of supplier only.</p> <p>8. The offers of Indigenous suppliers will be evaluated on total landed cost to BHEL, Trichy as detailed below:</p> <p>9. <b>Total Landed cost = FOR Rate in INR (A) + Applicable Taxes (B) + Loading for LD (C) – Applicable input tax credit (D)</b></p> <p>A. Indigenous vendor's quoted rate on Free on Road (FOR), Trichy in INR.</p> <p>B. GST and any other taxes as applicable.</p> <p>C. Loading for non-acceptance of Liquidated Damages (LD)</p> <p>D. Input tax credit for GST (SGST, CGST/IGST)</p>	
12.	<p><b>Offer Submission (Imports)</b></p> <p>a. Submit your FIRM competitive offer for <b>rate per kg</b> of material required with best possible delivery <b>on CFR-Chennai Sea port (LILO – Liner in Liner Out) basis only</b>. The quote should be inclusive of all charges, including testing packing, inspection etc. Ocean freight (LILO basis) for CFR, Chennai shall also be quoted separately. BHEL will finalize order on either FOB or CFR basis keeping its commercial interest. <b>Note:</b> Insurance will be arranged by BHEL. Suppliers to submit offer exclusive of Insurance.</p> <p>b. Shipment shall be through container or Break Bulk vessel, depending on the earliest vessel availability. Accordingly supplier shall quote the freight charges on LILO (LINER IN LINER OUT) basis with options for Container/ Break bulk to ensure the earliest possible shipment.</p> <p>c. The preferred shipment mode "Containerized Cargo or Break Bulk" shall be specified clearly in the offer.</p> <p>d. BREAKBULK CARGO:</p> <p>1. For CFR terms, moved through BREAK BULK BASIS (Suppliers should clearly specify this in their offer) it would be presumed by BHEL that the freight charges quoted is on LILO (LINER IN LINER OUT) basis.</p> <p>2. The materials will be Custom cleared from Port itself.</p> <p>e. For shipment through container, acceptance to the following points are required.</p> <p>i. B/L should bear the endorsement that "14 free days for Container Detention is applicable". Pls refer to note below also</p> <p>ii. For CFR terms, moved through Containers (Suppliers should clearly specify this in their offer) it would be presumed by BHEL that the freight charges quoted is on LILO (LINER IN LINER OUT) basis including extra</p>	

<p>charges, if any, like Container Imbalance Charges, Trade Imbalance charges or any other charges payable to the Liner. No other charges other than the quoted Freight rate will be paid by BHEL excepting applicable Terminal Handling Charges, Container cleaning Charges, DO charges to Shipping Liner at Discharge Port.</p> <p>iii. Note: 14 Free days for Container detention at final port of destination shall be provided and the same to be endorsed in the Bill of Lading. If there is no free day or less than 14 free days provided by the supplier, then the actual cost incurred towards detention charges due to non-availability of above said free days will be recovered from the supplier Invoice</p>	
<p>f. The Original Documents (Bill of Lading, Invoice, Packing List, Certificate of Origin &amp; Test Certificate) shall reach BHEL well in advance before the vessel arrival. The soft copies of the above shall be forwarded to BHEL immediately after shipment.</p>	
<p>g. In the event of delayed submission of documents/ non-submission of documents by the supplier as per the mutually agreed terms, an amount up to 5% of the invoice value will be retained towards detention/ demurrage &amp; other charges and the difference if any between actual charges and recovery will be settled separately through supplementary invoice.</p> <p>In such cases, the Supplier shall authorize the Steamer / Shipping agent / transporter to freely release the consignment to BHEL by providing a "Surrender Bill of Lading".</p> <p>Otherwise, No-objection Certificate shall be issued to the Liner, authorizing BHEL to get the Delivery Order without producing the Original Bill of Lading.</p> <p>This is required to ensure avoidance of detention/ demurrage at Chennai Sea-port that may arise in case of delayed presentation of documents by the Seller.</p>	
<p>h. Price Variation Clause is not acceptable and offer shall be rejected</p>	
<p>i. All invoices shall bear the HSN Code for each item separately (Harmonized System of Nomenclature)/ SAC code (Services Accounting Code).</p>	
<p>j. The Evaluation Currency for this tender shall be "INR". The offers of vendors will be evaluated on total landed cost to BHEL, Trichy. The evaluation process is as detailed below:</p> <p><b>Total Landed cost = CFR Rate in INR (A) + Applicable Duties (B) + Incidental Charges (C) + Loading for payment term &amp; LD (D)</b></p> <p>A. Import vendor's Quoted rate on CFR, Chennai port (LILO – Liner in Liner Out) basis in INR (Rate in foreign currency multiplied by the Exchange rate (SBI TT Selling rate) as on technical bid opening date)</p> <p>B. Customs duty, Safe guard duty and antidumping duty as applicable.</p> <p>C. Incidental charges @ 2.26%.</p> <p>D. Loading for payment terms &amp; Non-acceptance of Liquidated Damages (LD)</p>	
<p><b>Note:</b></p> <ol style="list-style-type: none"> <li>Exchange rate for converting such offers to INR will as SBI TT selling rate as on the date of Technical/Un-priced bid opening date in case of two part (technical + price bid) bid and price bid opening date in case of single part bid (only price bid). Multiple PO may also be placed considering the applicable duty structure of the respective requirement/Qty. In case the day of bid opening happens to be bank holiday in India, then exchange rate as on previous bank working day will be considered for evaluation.</li> <li>Multiple PO may also be placed considering the applicable duty structure of the respective requirement/Qty.</li> <li>Indian Customs has imposed a penalty on late filing of Bill of Entries (Air/Sea Shipments) by the importer. The maximum free time allowed is 24 hrs. from the time of arrival of cargo at final port of discharge. At present penalty is Rs.5000/- per day (for Initial 03 days) &amp; Rs.10000/- per day (thereafter). Hence the supplier shall submit the Non-Negotiable Documents (Bill of Lading, Commercial Invoice, Packing List, Certificate of Origin, etc.) either by email or post/courier to BHEL well before the landing of cargo at final port of discharge.</li> <li>In case of any penalty due to late filing of Bill of entry for reasons attributable to suppliers (as listed below), the same will be recovered from the bills of supplier: <ol style="list-style-type: none"> <li>Non-availability of Non-Negotiable Documents (NNDs) before the cargo arrival</li> <li>Discrepancy in documents</li> <li>Short landing of Consignments (For shipments on CFR– Chennai Port)</li> </ol> </li> <li>For all the shipments for the contracts (POs) finalized on CFR- Chennai Port basis, <ol style="list-style-type: none"> <li>Delivery Orders involving multiple agencies like liners/freight forwarders are not allowed. To avoid any delay, BHEL prefers Single agency office at the final discharge Port (Chennai) for issuing the Delivery Order to BHEL.</li> <li>The detention/demurrage charges arising due to the nomination of containers under single BL to different/ multiple CFS by the liner will be deducted from Vendor's bills only.</li> <li>The detention/demurrage charges arise due to the delay in collection of Delivery Orders from multiple agencies of liner/freight forwarder also whose offices are not at available Chennai, the same amount will be deducted from Supplier's bills.</li> <li>Apart from the Terminal Handling Charges, Container cleaning Charges &amp; Delivery Order Charges at final port of discharge, any other charges will not be borne by BHEL.</li> </ol> </li> </ol>	

	<p>e. The liner/freight forwarders shall be informed by the Vendor not to claim any additional charges (like charges listed below) for issuing Delivery Order. In case if the liner/freight forwarder claims such charges, the same amount will be deducted from the Vendor bills with/without any prior intimation in order to avoid the delay in Customs clearance. The likely additional/hidden charges are listed below.</p>	
	<p>1. CIC - Container Imbalance Charges/Surcharges 2. CAF - Container/Currency Adjustment Factor 3. RDS - Rupee Depreciation Surcharge 4. EIC - Equipment Imbalance Charge/Surcharges 5. BAF - Bunker Adjustment Factor</p>	<p>6. CDS - Currency Depreciation Surcharge 7. PCS - Port Congestion Surcharge 8. LSS - Low Sulphur Surcharge 9. Devanning Charges</p>
	<p>Service charges, commission charges and any other incidentals will NOT be paid extra.</p>	
	<p>Port of discharge shall be <b>Chennai Sea Port</b>. Pls confirm specifically</p>	
	<p>Indicate the Port of shipment</p>	
	<p>Indicate the Mill (Name, Location) &amp; Country of origin</p>	
	<p>One Indian agent can represent one foreign principal only and submit one offer for these tender items.</p>	
	<p><b>Note:</b> In order to maintain sanctity of the tender system it is mandatory that one agent cannot represent two suppliers or quote on their behalf in a particular tender enquiry. If any agent represents more than one supplier, all such offers will be rejected.</p>	
	<p><b>Agency Commission:</b></p> <p>a) Agency commission, if any should be clearly given in the offer (% on FOB / CFR Chennai inclusive). b) In respect of offers from overseas suppliers, agency commission, if any, payable to their agents in India, shall invariably be shown separately in the Performa invoice &amp; shall be declared in techno-commercial offer itself and this will be paid by us in India, in Indian rupees, on satisfactory completion of the contract. c) For calculation of rupee equivalent for agency commission, exchange rate as prevailing on the date of order will be taken.</p>	
13.	<p><b>Acceptance of materials supplied:</b></p> <p>a) The supply shall strictly as per the specifications in the tender /purchase order. b) Delivery of the ordered items as per the delivery terms in the Purchase Order does not automatically constitute acceptance of the delivered items. c) Acceptance of the materials supplied will be based on the inspection and certification documents by the supplier as stipulated in the Purchase order. However, BHEL reserves the right to test the material supplied, if required, at BHEL Lab or any other approved/accredited lab and the result will be binding on the supplier. d) The acceptance or otherwise of the delivered items will be separately communicated to the supplier by BHEL either through B2B portal or through e mail within 120 days' from the delivery of items or delivery of the required test certificates /other documents whichever is later. e) In case of rejection of the delivered items, either part or full, the vendor shall replace the rejected items as per the specification in the Purchase order/tender at their cost.</p>	
14.	<p>Note: In the course of evaluation, if more than one bidder happens to occupy L1 status, effective L1 will be decided by soliciting discounts from the respective L1 bidders. In case more than one bidder happens to occupy the L1 status even after soliciting discounts, the L1 bidder shall be decided by a toss/draw of lots, in the presence of the respective L1 bidders or their representatives. Ranking will be done accordingly. BHEL decision in such situations shall be final and binding.</p>	
15.	<p>BHEL will consider the ranking after the loading is applied as referred above wherever deviations observed in LD clause &amp; payment term.</p>	
16.	<p><b>PARTICULARS TO BE FURNISHED BY FOREIGN VENDORS FOR EVALUATION OF BIDS WITH CUSTOMS DUTY BENEFIT</b></p>	<p><b>VENDOR COMMENTS</b></p>
	<p>A. Whether PTA/ CEPA or any other agreement/treaty between respective Governments/Countries exists and the same is applicable for your supplies w.r.t this Enquired Items/tender.</p>	<p>YES / NO</p>
	<p>B. If yes, mention the Concessional Customs Duty (Such Duty Benefits)</p>	<p>%</p>
	<p>C. Documentary proof for the applicable Concessional Customs Duty (eg. PTA/ CEPA or other agreement) shall be submitted along with the Part-1 bid.</p>	<p>SUBMITTED/ NOT SUBMITTED</p>
	<p>D. Relevant documents and details to avail the above concessional duty benefits by BHEL shall be submitted by the supplier along with dispatch documents</p>	<p>CONFIRMED/ NOT CONFIRMED</p>

	E. In the event of seller failing to provide appropriate documents along with dispatch documents for purchasers to avail disclosed concessional duty benefits in India, financial loss, so incurred, will be to the seller's account.	CONFIRMED/ NOT CONFIRMED		
	<b>Note:</b> Evaluation of the Price bids will be based on the above details only and unless mentioned/furnished by the vendor, Customs Duty benefit will not be applied for evaluation purposes.			
17.	<p><b>Special Provisions for Micro and Small Enterprises (MSE) bidders registered as per MSME act:</b> (Subject to participating MSE vendors meeting the tender requirements of BHEL)</p> <ol style="list-style-type: none"> <li>a) As per Gazette Notification no. S.O. 2119(E) dated 26.06.2020 issued by Ministry of MSME applicable/existing Micro and small suppliers are requested to get registered with Udyam Registration portal and share us the Udyam registration no along with Udyam registration certificate.</li> <li>b) 25% of the tendered quantity is earmarked for MSE suppliers in this tender, subject to participating MSE Vendors should meet the tender requirements of BHEL. In case MSE vendor participating in the tender quotes within the price band of L1 + 15%, they will be allowed to supply the portion of the requirement subject to acceptance of L1 price by MSE vendor. In case of more than one such MSE vendor within the "L1+15% price band", the supply shall be shared proportionately.</li> <li>c) In the event of Non MSE supplier becoming L1 and MSE supplier quotes within the price band of L1+15% and it is not possible to split the tendered quantity on account of reasons like customer contract requirement/technical requirements, then 100% of the quantity will be offered to MSE suppliers subject to acceptance of L1 price by MSE supplier.</li> <li>d) Counter offering of L1 rate will not be made with any MSE vendor whose quoted rate is more than the price band of L1+15%.</li> <li>e) Payment to MSE vendor will be as per the applicable provisions of the MSME Act 2006.</li> <li>f) If L1 offer is from a Micro / Small enterprise, the 25% earmarking provision is not applicable.</li> <li>g) Out of the 25% tendered quantity reserved for MSE suppliers, 6.25% shall be earmarked for procurement from MSE owned by SC/ST entrepreneurs. Apart from this 3% shall be earmarked for procurement from MSE owned by Women entrepreneurs.</li> <li>h) In case of any change in the MSE status of the bidder, it shall be the responsibility of the bidder to notify the change as a part of the bid document. If at a later date it comes to the knowledge of BHEL, that the change in the status has not been intimated by the bidder and the order is obtained under the premise of an MSE then BHEL would cancel the pending order against this tender and take necessary steps for suspension of the business dealing with the bidder as per the procurement policy of BHEL.</li> <li>i) MSE suppliers can avail the intended benefits only if they submit along with the offer, Valid EM-II certificate along with CA certificate or valid NSIC certificate or UAM certificate along with attested copy of a CA certificate (Format enclosed as below) applicable for the relevant financial year (latest audited). Date to be reckoned for determining the deemed validity will be the date of bid opening (Part 1 in case of two part bid). Non-submission of such documents will lead to consideration of their bid at par with other bidders. No benefit shall be applicable for this enquiry if any deficiency in the above required documents are not submitted before price bid opening. Documents should be notarized or attested by a Gazetted officer. However, credentials of all MSE suppliers will be verified before considering the intended benefits for MSE suppliers at the time of tender evaluation. Non-submission of such documents will lead to consideration of their bids at par with other bidders and MSE status of such suppliers shall be shifted to Non MSE supplier till the supplier submits these documents.</li> </ol> <p><b>UDYAM Registration</b></p> <p>As per Gazette Notification no. S.O. 2119(E) dated 26.06.2020 issued by Ministry of MSME regarding change in definition of Micro, Small &amp; Medium Enterprises (MSMEs) applicable w.e.f. 01.07.2020, you are hereby requested to obtain 'UDYAM Registration' and submit the same. Non-submission of such documents will lead to consideration of their bid at par with other bidders.</p> <p>In case any improper / lack of documents is there, vendor on their own interest may submit all the relevant documents as stated above before tender opening.</p>			

	<p>No benefit shall be applicable for this enquiry if any deficiency in the above required documents are not submitted before tender opening. Documents should be notarized or attested by a Gazetted officer for consideration of MSE certificate. "</p> <p>Such Micro/Small Enterprises registered vendors must state the sub-category to which they belong and submit documentary proof for the same. The sub-categories:</p> <p>(a) Enterprises owned by Scheduled Castes.  (b) Enterprises owned by Scheduled Tribes.  (c) Enterprises owned by Women  (d) Enterprises owned by other than above two categories</p> <p>The enterprises under (a), (b) &amp; (c) means the proprietor in case of single owned firm and all partners in case of partnership firm and all directors in case of private/public limited must belong to SC/ST category or women (Such enterprise will have to submit relevant document for proof of SC/ST or women ownership category) (Note: vendor need to go through General Note of tender condition also for any special instruction &amp; deviation from above.)</p> <p>If more than one valid MSE supplier stands with in rage of L1+15% range, 25% of quantity will be shared till quantity split is feasible &amp; rest of 25% will be awarded to lowest quote of valid MSE supplier.  Note: Wherever for splitting of order, if splitted quantity comes out &lt;1, the splitting of order will not be feasible. (For MSE vendors). Further updates or any changes will be taken decision according to MSE procurement policy.</p> <p>Traders will be excluded from the above MSE benefit as per MSE public procurement policy. In order to get MSE benefit, MSE supplier will have to submit the UDAYAM REGISTRATION CERTIFICATE and will be considered after updating in BHEL.</p> <p>Payment for MSE Indigenous eligible vendors will be as per MSMED Act 2006 subject to fulfilment of above procedure.</p>	
18.	<p><b>Preference to Make in India:</b>  For this procurement, the local content to categorize a supplier as a class I local supplier/class II local supplier /Non-local supplier and purchase preference to class I local supplier, is as defined in Public Procurement (Preference to Make in India), Order 2017 dated 04.06.2020 issued by DPIIT. In case of subsequent Orders issued by the respective Nodal Ministry, changing the definition of local content for the items of the NIT, the same shall be applicable even if issued after issue of this NIT, but before opening of part II bids against this NIT.</p>	
19.	BHEL reserves its right to reject a tender due to unsatisfactory past performance in the execution of a contract at any of BHEL projects / Units	
20.	If <b>Guarantee / Warranty</b> period is applicable as per tender specification, No deviation is permitted and deviated offers are liable for rejection	
21.	Supplier has to ensure quoting of price very carefully in EPS PORTAL to avoid any discrepancies	
22.	On the due date of tender opening, the <b>technical bids will be opened</b> . Bids will be evaluated by us and clarifications required, if any, will be called for from the bidders on technical and commercial points	
23.	After tender opening Technical scrutinisation of the offers will be done.	
24.	Bidders has to meet our technical specification and PQC is essential for consideration of their offer.	
25.	Tender evaluation will be carried out on the basis of Technical Specifications and Commercial Terms and Conditions specified in the tender documents and changes thereof (if any) will be communicated to all bidders	
26.	For verification of data submitted towards evaluation of bidder's capability, BHEL may decide to visit the bidder(s) works. Any fact found deviating from submitted data shall make the bidder liable to be disqualified.	
27.	The correspondence between the bidder and BHEL through email is considered as valid document Legally though not signed. It is treated as valid confirmations made on behalf of the respective company and comes under the legal ambit of the business transaction and hence binding on both the parties. If any discrepancies found in the Techno-commercial bid and price bid, the final terms will be finalised after clarification sought through mail/EPS portal by BHEL will be considered.	
28.	BHEL reserves the right to negotiate or re-float the tender opened, if L1 price is not the lowest acceptable price to BHEL due to inter-alia other reasons. (Wherever if applicable).	
29.	Any other conditions which might have been quoted by the seller and are in contravention to the terms prescribed in the order and which have not been specifically accepted by purchaser in written will not be applicable to the contract	
30.	<p><b>PACKING AND MARKING:</b></p>	

	The supplier shall arrange for securely protecting and packing the stores to avoid loss or damages during transit. (Wherever if applicable).Also, Supplier to comply for packing & marking as per Technical specification.	
31.	Erection / commissioning charges , if applicable as per tender condition will be clearly mentioned in the offer or else confirmation that Erection / commissioning shall be done at free of cost is available in the offer	
32.	Any warranty replacement during warranty period shall be supplied free of charge on <b>FOR BHEL, TRICHY</b> basis	
33.	The vendor shall provide necessary drawings, Test Certificates and Operating Maintenance Manuals etc., as called for in the Technical Specification, in the required number of copies at no extra cost	
34.	In case of any short shipment in the main equipment / spares, where separate rates are not available in the contract, the customs duty levied on such supplies, shall be borne by the supplier / Indian agent.( <b>For import supplies</b> )	
35.	<b><u>FRAUD PREVENTION POLICY:</u></b> The bidder along with its associate/ collaborators/ sub-contractors/ sub-vendors/ consultants/ service providers shall strictly adhere to BHEL fraud prevention policy displayed on BHEL website <a href="http://www.bhel.com">http://www.bhel.com</a> and shall immediately bring to the notice of BHEL management about any fraud or suspected fraud as soon as it comes to their notice.	
36.	<b><u>Suspension of Business Dealings with Suppliers/Contractors:</u></b> The offers of the bidders who are under suspension as also the offers of the bidders, who engage the services of the banned firms /principal/agents, shall be rejected. The list of banned firms is available on BHEL web site <a href="http://www.bhel.com">www.bhel.com</a> .	
37.	<b><u>Integrity commitment, performance of the contract and punitive action thereof:</u></b>  <b>Commitment by BHEL:</b> BHEL commits to take all measures necessary to prevent corruption in connection with the tender process and execution of the contract. BHEL will during the tender process treat all Bidder(s) in a transparent and fair manner, and with equity. <b>Commitment by Bidder/ Supplier/ Contractor</b> <ul style="list-style-type: none"> <li>• The bidder/ supplier/ contractor commit to take all measures to prevent corruption and will not directly or indirectly influence any decision or benefit which he is not legally entitled to nor will act or omit in any manner which tantamount to an offence punishable under any provision of the Indian Penal Code, 1860 or any other law in force in India.</li> <li>• The bidder/ supplier/ contractor will, when presenting his bid, disclose any and all payments he has made, and is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract and shall adhere to relevant guidelines issued from time to time by Govt. of India/ BHEL.</li> <li>• The bidder/ supplier/ contractor will perform/ execute the contract as per the contract terms &amp; conditions and will not default without any reasonable cause, which causes loss of business/ money/ reputation, to BHEL.</li> </ul> <p>If any bidder/ supplier/ contractor during pre-tendering/ tendering/ post tendering/ award/ execution/ post-execution stage indulges in any act, including but not limited to, mal-practices, cheating, bribery, fraud or and other misconduct or formation of cartel so as to influence the bidding process or influence the price or tampers the tendering process or acts or omits in any manner which tantamount to an offence punishable under any provision of the Indian Penal Code, 1860 or any other law in force in India or does anything which is actionable under the Guidelines for suspension of business dealing, then, action may be taken against such bidder/ supplier/ contractor as per extant guidelines of the company available on <a href="http://www.bhel.com">www. bhel.com</a> and/or under applicable legal provisions. Guidelines for suspension of business dealings is available in the webpage: <a href="http://www.bhel.com/vender_registration/vender.php">http://www.bhel.com/vender_registration/vender.php</a>.</p>	
38.	<b><u>Cartel Formation:</u></b> All the firms should desist from forming cartel as the practice is prohibited under Section 3(3) (a) & (d) of the competition Act 2002. If any such instance is observed during this tender will attract disciplinary action as per BHEL policies.	
39.	<b><u>Documents required for Indigenous suppliers on dispatch of material.</u></b>  The following documents are to be sent along with consignment to store: One Duplicate for Transporter copy of tax invoice + one extra copy of tax invoice + Delivery challan + LR COPY+E-Way bill + MTC/ TC/ Compliance certificate (as applicable) + Guarantee/ Warrantee certificate (if applicable) + any other document indicated in PO.  he following documents are to be sent to MM/Purchase, BHEL, Trichy for bill processing : Seller Tax invoices (Original for Recipient + Duplicate for Transporter) either in Original hard copies or Digitally Signed Soft copies along with copy of LR/ courier Receipt/ Speed Post Receipt/ E-Way bill.	
40.	<b><u>Documents required for Import suppliers on dispatch of material.</u></b> <ol style="list-style-type: none"> <li>a. Bill of Lading.</li> <li>b. Invoice, should show the description of the goods and the unit rate of each item as in the purchase contract. Against each item in the invoice and packing list, the serial number of the corresponding item in the purchase contract or as per order acknowledgement should be indicated. HSN code to be indicated for each item.</li> <li>c. Packing list must indicate case identification, case dimension, and case contents, no of bundles, gross and net weight.</li> <li>d. Country of origin Certificate. HSN code to be indicated for each item.</li> </ol>	

	e. Mill test certificate	
	All the above documents should be submitted in triplicate & in all documents Contract No., L.C. No. and Import License No. are to be indicated.	
41.	<b>Intellectual Property Rights:</b> The supplier shall, at all times, indemnify and keep indemnified the purchaser, free of cost, against all claims which may arise in respect of goods & services to be provided by the supplier under the contract for infringement of any intellectual property rights or any other right protected by patent, registration of designs or trademarks. In the event of any such claim in respect of alleged breach of patent, registered designs, trademarks etc. being made against the purchaser, the purchaser shall notify the supplier of the same and the supplier shall, at his own expenses take care of the same for settlement without any liability to the purchaser.	
42.	<b>Role of Agents</b> a. BHEL strongly discourages the engagement of Agents by foreign principals, to deal with BHEL, in BHEL's tenders. b. In case of foreign suppliers representing through their Indian/foreign agents, agency agreement should be submitted, else offer is liable for rejection. Agency agreement requirements attached as separate file and full compliance to it shall be ensured while submitting the same. c. BHEL, due to business reasons would ban, would have banned Indian agents from dealing with BHEL. Any foreign principal who engages such a banned agent, or an employee of the banned agency, or any other person connected with the banned agency, at any time during the tender proceedings, would be disqualified from the tender proceedings. The decision of BHEL in this regard shall be final and be binding on the OEM. Hence in their own interests, prospective tenderers may check with BHEL. The list of banned firms is available on BHEL website <a href="http://www.bhel.com">www.bhel.com</a> . d. In view of the requirement of BHEL, it is strongly suggested that in their own interest, foreign principals may desist from engaging any Indian agent and deal with BHEL directly and it is stressed that any Main producer proposing to deal with BHEL by engaging and through an Indian Agent does so at their own risk. BHEL shall in no way be responsible for any consequences that may arise to the foreign principal on account of the antecedents / actions of their Indian Agent.	
43.	<b>Resolution of Disputes:</b> The Parties agree that if at any time (whether before, during or after the arbitral or judicial proceedings), any Disputes (which term shall mean and include any dispute, difference, question or disagreement arising in connection with construction, meaning, operation, effect, interpretation or breach of the contract/tender which the Parties are unable to settle mutually), arise inter-se the Parties, the same may, be referred by either party to Conciliation to be conducted through Independent Experts Committee to be appointed by competent authority of BHEL from the BHEL Panel of Conciliators. The proceedings of Conciliation shall broadly be governed by Part-III of the Arbitration and Conciliation Act 1996 or any statutory modification thereof. <b>Notes:</b> 1. No serving or a retired employee of BHEL/Administrative Ministry of BHEL shall be included in the BHEL Panel of Conciliators. 2. Any other person(s) can be appointed as Conciliator(s) who is/are mutually agreeable to both the parties from outside the BHEL Panel of Conciliators. The proceedings of Conciliation shall broadly be governed by Part-III of the Arbitration and Conciliation Act 1996 or any statutory modification thereof and as provided in Annexure X to this Enquiry Conditions. The Annexure together with its appendices will be treated as if the same is part and parcel hereof and shall be as effectual as if set out herein in these Enquiry Conditions. Except as provided elsewhere in this Contract, in case amicable settlement is not reached between the parties, in respect of any dispute or difference; arising out of the formation, breach, termination, validity or execution of the Contract; or, the respective rights and liabilities of the Parties; or, in relation to interpretation of any provision of the Contract ; or , in any manner touching upon the Contract, then, either Party may , by a notice in writing to other Party refer such dispute or difference to sole arbitration of an arbitrator appointed as per the Arbitration and Conciliation Act, 1996 (India) or statutory modification or re-enactment thereof and the rules made thereunder and for the time being in force . The Arbitrator shall pass a reasoned award and the award of the Arbitrator shall be final and binding upon the parties. Subject as aforesaid, the provision of Arbitration & Conciliation Act 1996 (India) or statutory modification or re-enactment thereof and the rules made thereunder and for the time being in force shall apply to the arbitration proceeding under this clause. The seat of arbitration shall be Trichy, Tamil Nadu, India. The cost of arbitration shall be borne as per the award of the Arbitrator. Subject to arbitration in terms of clause above, the Courts at Trichy, Tamil Nadu, India shall have exclusive jurisdiction over any matter arising out of or in connection with this Contract.	

	<p>Notwithstanding the existence or any dispute or difference and/or reference for the arbitration, the vendor shall proceed with and continue without hindrance the performance of its obligation under this Contract with due diligence and expedition in a professional manner except where the Contract has been terminated by either Party in terms of this Contract.</p> <p><b><u>In Case of Contract with Public Sector Enterprise (PSE) or a Government Department, the following shall be applicable:</u></b>  In the event of any dispute or difference relating to the interpretation and application of the provisions of commercial contract(s) between Central Public Sector Enterprises (CPSEs)/Port Trusts <i>inter se</i> and also between CPSEs and Government Departments/Organizations (Excluding disputes concerning Railways, Income Tax, Customs &amp; Excise Departments, such dispute or difference shall be taken up by either party for resolution through AMRCD as mentioned in DPE OM No. 4(1)/2013 –DPE (GM)/FTS-1835 dated 22-05-2018.</p>	
44.	<p><b><u>IN THE EVENT OF FORCE MAJEURE</u></b></p> <p>a. Notwithstanding the provisions contained in other clauses, the supplier shall not be liable for imposition of any such sanction so long the delay and/or failure of the supplier in fulfilling its obligations under the contract is the result of an event of Force Majeure. For purposes of this clause, Force Majeure means an event beyond the control of the supplier and not involving the supplier's fault or negligence and which is not foreseeable and not brought about at the instance of the party claiming to be affected by such event and which has caused the non – performance or delay in performance. Such events may include, but are not restricted to, wars or revolutions, hostility, acts of public enemy, civil commotion, sabotage, fires, floods, explosions, epidemics, quarantine restrictions, strikes excluding by its employees, lockouts excluding by its management, freight embargoes and Acts of GOD.</p> <p>b. If a Force Majeure situation arises, the supplier shall promptly notify the Purchaser/Consignee in writing of such conditions and the cause thereof within twenty-one days of occurrence of such event. Unless otherwise directed by the Purchaser/Consignee in writing, the supplier shall continue to perform its obligations under the contract as far as reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.</p> <p>c. If the performance in whole or in part or any obligation under this contract is prevented or delayed by any reason of Force Majeure for a period exceeding sixty days, either party may at its option terminate the contract without any financial repercussion on either side.</p> <p>d. In case due to a Force Majeure event the Purchaser/Consignee is unable to fulfil its contractual commitment and responsibility, the Purchaser/Consignee will notify the supplier accordingly and subsequent actions taken on similar lines described in above sub-paragraphs</p>	
45.	<p><b><u>Set-off Clause:</u></b>  BHEL shall have the right to recover any money which in the sole opinion of BHEL is due from the Contractor from any money due to the Contractor under this Contract or any other contract or from the Security Deposit furnished by the Contractor under this Contract or any other contract.</p>	
46.	<p><b><u>Caution:</u></b></p> <p>a) The suppliers are severely cautioned to note that the price bid document accepts the price in figures only. It does not allow the supplier to write the value by words. Therefore, all care shall be exercised by the supplier while filling in the figures. Once the price bid is opened no option is available for the supplier to retract the offer under any grounds. If a supplier, for any reason whatsoever approaches BHEL with a request for change in the price, it would be treated as going back on the offer submitted. In such cases, action would be initiated by BHEL for suspending further business dealings with such suppliers as per policy of BHEL which prevails at that point of time.</p> <p>b) The language in the tender documents downloaded by the Bidders shall at no point of time be changed, altered or modified in any manner by the Tenderer. If such changes are made by any tenderer, it shall be considered as tampering with BHEL's terms and the offer shall be summarily rejected, whenever it is noticed by BHEL. Such Bidders would be disqualified from the Bidding Process and their offers would be forfeited / Bank Guarantees invoked. They would also not be allowed to participate in future tenders of BHEL.</p>	
47.	<p><b><u>General condition:</u></b></p> <p>a) Bids including all enclosures and supporting documents like catalogues, pamphlets, etc., shall be submitted / uploaded in ENGLISH language only. If the documents submitted have other than English language, translation of the same shall be provided for evaluation.</p> <p>b) In addition to TCs in relevant IBR forms ( if applicable) corresponding mill TCs should also be provided. Two sets of original and one copy of all TCs are to be provided to BHEL, Trichy. Acceptance of Test Certificates by BHEL before dispatch is must.</p> <p>c) No revision of prices will be entertained after the tenders are opened.</p> <p>d) In the event of our customer order covering this tender being cancelled / placed on hold / otherwise modified, BHEL would be constrained to accordingly cancel / hold / modify the tender / purchase order at any stage of execution.</p> <p>e) L1 will be arrived based on Landed cost to BHEL- Trichy.</p> <p>f) No payment will be made for the excess quantity</p> <p>g) Offers for part quantities on item level basis are not acceptable to BHEL. While tenderers can quote for some or all the tendered items, no supplier shall quote for partial quantity of any given enquiry item. Such partial offer would not be considered in the enquiry for that item</p>	

	<p>h) All documents submitted with the offer shall be signed and stamped in each page by Bidder/authorized representative of the bidder.</p> <p>i) Offer should be submitted only as per Unit of Measurement (UOM) specified in enquiry.</p> <p>j) BHEL has the right to test the materials at BHEL works, if required. If supplied materials are found not acceptable, then BHEL will inform to re-supply the materials as per tender specification mentioned in Purchase Order. If any subsequent failure of not meeting the tender specification, RISK PURCHASE is applicable for the full P.O quantity. Further action will be followed as per SBD (Suspension of business dealings) with Suppliers/Contractors which is available in www.bhel.com Main Menu.</p>	
48.	The quality of the supplies should strictly conform to Technical specifications applicable for the item. The offer should specifically confirm this.	
49.	If any quality problem is pointed out by BHEL w.r.t. supplied material, the same shall be settled and corrected immediately with the BHEL, by the supplier. If the material cannot be accepted by BHEL, supplier has to replace the material with no extra cost. Collection of rejected material will be sole responsibility of the supplier. If there is any failure by the supplier to settle such quality problems, the matter will be considered very seriously and appropriate penal action may be initiated against the respective supplier	
50.	Bidders have to confirm that, whether they have been black-listed / kept on hold / given Business holiday for a specified period by any Public Sector Undertaking or Government Departments/any other units of BHEL. The reasons for such action with details and the current status of such hold shall be clearly furnished to BHEL. If no such details are mentioned in the offer, it will be construed that the bidder is not under any such hold. However, at a later date if it comes to the notice of BHEL about any such hold under enforcement, BHEL reserves the right to reject the offer at any point of time and also under any stage of the finalization of the tender. Such bidders will not be permitted to participate in the further tender proceedings and will be communicated suitably.	
51.	For indigenous suppliers: Unloading at BHEL Unit / Site has to be done by the <b>SUPPLIERS</b> only. BHEL will not be in a position to provide any handling / unloading facilities	
52.	Minimum Ordering quantity (MOQ) is not applicable for this enquiry. Supplier shall quote for the quantity as per the enquiry.	
53.	<p>For indigenous supplier: In case of receipt of order vendor will need to send consignment/material as indicated in PO. In case of dispatch by courier/ Lorry kindly put/paste the Delivery challan (extra copy) on the top of packed consignment box &amp; another copy of DC inside the box.</p> <p>Consignment should be forwarded to the PO <b>consignee address only</b> along with extra/Xerox copy of invoice (wherever applicable). It should be supported with Delivery challan copy.</p> <p><b>(Kindly do not forward any consignment to purchase dept. or do not address the consignment to the name of any official)</b></p>	
54.	Vendor's confirmation for any terms & conditions should be uniform throughout the offer. In case any discrepancies is found in the quoted terms & conditions & Vendor's own format of quotation BHEL reserves the right to consider terms mentioned in Annexure-II.	
55.	Vendor may View Bill Status in www.bheltry.co.in -> materials management systems -> login id - Vendor Code and Password .	
56.	<p><u>For the New vendors-</u> In case of ordering bills against the PO shall be processed only on receipt of the following:</p> <p>a) Send the hard copy of EFT Format (will be informed at the time of PO) duly filled-in in a Single Page with all the certification formalities by you &amp; your bankers</p> <p>b) One Cancelled cheque of your account (from the concerned bank) must be sent.</p> <p>c) The Vendor's code as per PO &amp; address must be as per billing address mentioned in PO.</p>	
57.	<p><b><u>Authorization for participation in EPS portal through DSC: E-Tender.</u></b></p> <p><b><u>Participation requirements:</u></b></p> <p>Either Principal or authorized agent shall register their Digital Signature Certificate (DSC) (Class 3- SHA2- 2048 BIT-SIGNING &amp; ENCRYPTION). Suppliers are advised to go through the FAQ available in the web portal (<a href="https://eprocurebhel.co.in">https://eprocurebhel.co.in</a>). DSC shall be registered for the authorized person and all transaction done using that DSC against our tenders shall be taken as valid communication and shall be binding on principal/agent and is valid legally.</p> <p><b><u>For foreign Principal</u></b></p> <p>In case of Principal (being foreigner), they may apply for DSC through Indian embassy at their country and can register with us for participating in E-tenders. Details of the applicable procedure is available in the webpage <a href="http://www.cca.gov.in/cca/">http://www.cca.gov.in/cca/</a>.</p> <p><b><u>For Indian agent</u></b></p>	

In case of agents participating/registering their DSC (of authorized person), it will be at the sole authorization of principal to their agents to participate on their behalf and all transactions done using that DSC against our tenders shall be known as valid communication and shall binding on principal and is legally valid.

58.

**GST compliance for Indigenous suppliers:**

**Indigenous suppliers:**

a) Response to Tenders for Indigenous supplier will be entertained only if the vendor has a valid GST registration Number (GSTIN) which should be clearly mentioned in the offer. If the dealer is exempted from GST registration, a declaration with due supporting documents need to be furnished for considering the offer. Dealers under composition scheme should declare that he is a composition dealer supported by the screen shot taken from GSTN portal. The unregistered dealer as well as the composition dealer has to submit an undertaking stating that they will not claim GST during the execution of the contract even if their status under GST changes to regular tax payer. The dealer has to submit necessary documents if there is any change in status under GST.

b) Supplier shall mention their GSTIN in all their invoices (incl. credit Notes, Debit Notes) and invoices shall be in the format as specified/prescribed under GST laws. Invoices shall necessarily contain Invoice number (in case of multiple numbering system is being followed for billing like SAP invoice no, commercial invoice no etc., then the Invoice No. which is linked/uploaded in GSTN network shall be clearly indicated), Billed to party (with GSTIN) & Shipped to party details, item description as per PO, Quantity, Rate, Value, applicable taxes with nomenclature (like IGST, SGST, CGST & UTGST) separately, HSN/ SAC Code, Place of Supply etc. **Wherever E-Invoice is applicable, the tax invoice/ CN / DN submitted by the vendor must contain the QR code generated in E-Invoice Portal & IRN.**

c) All invoices shall bear the HSN Code for each item separately (Harmonized System of Nomenclature)/ SAC code (Services Accounting Code)

d) Invoices will be processed only upon completion of statutory requirement and further subject to following:

i. Vendor declaring such invoice in **their GSTR-1 Return/ IFF**

ii. Receipt of Goods or Services and Tax invoice by BHEL

e) As the continuous uploading of tax invoices in GSTN portal (**in GSTR-1/ IFF**) is available for all (i.e. both Small & Large) tax payers, all invoices raised on BHEL may be uploaded immediately in GST portal on dispatch of material /rendering of services. The supplier shall ensure availability of Invoice in GSTN portal before submission of invoice to BHEL. Invoices will be admitted by BHEL only if the invoices are available in GSTN portal (in BHEL's **GSTR-2A/ GSTR-2B**).

f) In case of discrepancy in the data uploaded by the supplier in the GSTN portal or in case of any shortages or rejection in the supply, then BHEL will not be able to avail the tax credit and will notify the supplier of the same. Supplier has to rectify the data discrepancy in the GSTN portal or issue credit note or debit note (details also to be uploaded in GSTN portal) for the shortages or rejections in the supplies or additional claims, within the calendar month informed by BHEL.

g) In cases where invoice details have been uploaded by the vendor but failed to remit the GST amount to GST Department (Form PMT-08 or Form GST RET-01 to be submitted) within stipulated time, then GST paid on the invoices pertaining to the month for which GST return not filed by the vendor will be recovered from the vendor along with the applicable interest (currently 24% p.a) and all subsequent bills of the vendor will not be processed till filing of the GST return by the vendor.

h) In case GST credit is denied to BHEL due to non-receipt or delayed receipt of goods and/ or tax invoice or expiry of timeline prescribed in GST law for availing such ITC, or any other reasons not attributable to BHEL, GST amount claimed in the invoice shall be disallowed to the vendor.

i) Where any GST liability arising on BHEL under Reverse Charge (RCM), the vendor has to submit the invoices to BHEL well within the timeline prescribed in GST Law, to enable BHEL to discharge the GST liability. If there is a delay in submission of invoice by the vendor resulting in delayed payment of GST by BHEL along with Interest, then such Interest payable or paid shall be recovered from the vendor.

j) Under GST regime, BHEL has to discharge GST liability on LD recovered from suppliers/contracts. Hence applicable GST shall also be recoverable from suppliers/contractors on LD amount. For this Tax Invoice will be issued by BHEL indicating the respective supply invoice number.

	<p>k) GST TDS will be deducted as per Section 51 of CGST Act 2017 and in line with Notification 50/2018 – Central Tax dated 13.09.2018. GST TDS certificate will be generated in GSTN portal subsequent to vendor accepting the TDS deduction in the GSTN portal &amp; the vendor can directly download the Certificate from the GSTN Portal.</p>	
59.	<p><b><u>Compliance of Direct Tax Provisions w.r.t. transactions with Non-Residents:</u></b></p> <p>Non Residents Does not have Permanent Establishment in India and Services have been rendered outside India, Income may still accrue/arise in India in case Non Resident has Significant Economic Presence in India.</p> <p>However, in case Non- resident is a resident of the Country/jurisdiction with whom India has comprehensive DTAA, then Provisions of Significant Economic Presence may not apply, due to the Overriding provisions of DTAA read with Sec. 90(2) of the I.T. Act. It may be also noted that non-resident shall be eligible for DTAA benefits subject to submission of all the relevant documents viz. <b>Tax Residency Certificate, Form 10F, No PE certificate etc.</b></p> <p>In this regard, vendor shall submit Tax residency certificate (TRC) issued by supplier's country, Form 10F and No PE in India certificate/declaration from foreign suppliers immediately wherever DTAA is applicable.</p>	
60.	<p><b><u>Imports and Input Tax Credit (ITC):</u></b></p> <p>In GST regime, input tax credit of the integrated tax (IGST) and GST Compensation Cess shall be available to the importer and later to the recipients in the supply chain, however the credit of basic customs duty (BCD) would not be available. In order to avail ITC of IGST and GST Compensation Cess, an importer has to mandatorily declare GST Registration number (GSTIN) in the Bill of Entry. Provisional IDs issued by GSTN can be declared during the transition period. However, importers are advised to complete their registration process for GSTIN as ITC of IGST would be available based on GSTIN declared in the Bill of Entry. Input tax credit shall be availed by a registered person only if all the applicable particulars as prescribed in the Invoice Rules are contained in the said document, and the relevant information, as contained in the said document, is furnished in FORM GSTR-2 by such person. Customs EDI system would be interconnected with GSTN for validation of ITC. Further, Bill of Entry data in non-EDI locations would be digitized and used for validation of input tax credit provided by GSTN.</p> <p>Customs EDI system would be interconnected with GSTN for validation of ITC. Further, Bill of Entry data in non-EDI locations would be digitized and used for validation of input tax credit provided by GSTN.</p> <p><b>Note: In cases where imported goods are liable to Anti-Dumping Duty or Safeguard Duty, calculation of Anti-Dumping Duty or Safeguard duty would be as per the respective notification issued for levy of such duty. It is also clarified that value for calculation of IGST as well as Compensation Cess shall also include Anti-Dumping Duty amount and Safeguard duty amount.</b></p>	
61.	<p>Wherever Service is associated in the tender scope (For cases Service PO is released – Supplier has to pay GST for all charges including transportation, boarding etc.)</p>	
62.	<p>BHEL reserve the right for asking sample / drawing approval / Pre-Dispatch Inspection before bulk supply of the materials (If required)</p>	
63.	<p><b>For Indigenous suppliers:</b> Pay procedure will be initiated after acceptance of full lot of material &amp; final submission of Bill in line with PO instructions &amp; conditions, GST regulations. Also Pay procedure will be initiated only if the GST return is filed against submitted invoice to BHEL.</p> <p><b><u>BILL PROCESSING METHOD"</u></b></p> <p>Supplier has to ensure the full quantity of material delivery within given PO delivery date to process the bill for payment. In case supplier fails to deliver full quantity within delivery date, bills received after PO delivery date will be processed after final despatch of the total pending supply. Further, bills will be clubbed and forwarded for payment processing as a single bunch.</p>	
64.	<p>For more details, please refer to Ref. NIT of BHEL's website <a href="http://www.bhel.com">http://www.bhel.com</a> (tender notification page) or NIC portal (<a href="https://eprocurebhel.co.in">https://eprocurebhel.co.in</a>).</p> <p>Important: All updates, amendments, corrigendum etc., if any will be posted only on the above website as and when required. There will be no publication of the same through any other media.</p>	
65.	<p>For any clarification you can contact to <a href="mailto:psdevi@bhel.in">psdevi@bhel.in</a>, <a href="mailto:mpuja@bhel.in">mpuja@bhel.in</a> and Contact nos. 0431257-5870 / 0431257-4750</p>	

**Bidder's Seal & Signature**

**ANNEXURE – IV - COMMERCIAL DETAILS**

**VENDOR DETAILS**

<b>SL NO</b>	<b>DESCRIPTION</b>	<b>To be filled by bidder</b>
<b>1</b>	VENDOR NAME	
<b>2</b>	QUOTATION REFERENCE	
<b>3</b>	QUOTATION DATE	
<b>4</b>	MILL ADDRESS	
<b>5</b>	BANK DETAILS (NAME, ADDRESS, SWIFT CODE, A/ C NO.)	
<b>6</b>	TELE, MOBILE NO	
<b>7</b>	CONTACT PERSON	
<b>8</b>	EMAIL ID	
<b>9</b>	ORDER TO BE PLACED ON	
<b>10</b>	ORIGIN OF DISPATCH	
<b>11</b>	GSTIN NO	

Vendor Seal / Sign

**COM M ERCIAL TERM S**

SL NO	DESCRIPTION	Option	To be filled by bidder
1	QUOTATION VALIDITY (120 DAYS) AS PER ANNEX-II	ACCEPTED / NOT ACCEPTED	
2	DELIVERY TERM S AS PER ANNEXURE-II	ACCEPTED / NOT ACCEPTED	
3	COUNTRY OF ORIGIN	ACCEPTED / NOT ACCEPTED	
4	M ODE OF DISPATCH	ROAD / SEA / AIR	
5	PAYM ENT TERM S AS PER ANNEXURE-II	ACCEPTED / NOT ACCEPTED	
6	DELIVERY SCHEDULE IN NO. OF DAYS / WEEKS FROM THE DATE OF PO	DAYS / WEEKS	
7	CGST SUPPLY IN %	ACCEPTED / NOT ACCEPTED	
8	SGST SUPPLY IN %	ACCEPTED / NOT ACCEPTED	
9	IGST SUPPLY IN %	ACCEPTED / NOT ACCEPTED	
10	HSN CODE for all the items (quote - mandatory)	QUOTED / NOT QUOTED	
11	M SE CATEGORY	M SE / Non M SE	
12	M SE SUB-CATEGORY	M ICRO / SM ALL / NOT APPLICABLE	
13	LIQUIDATED DAM AGE CLAUSE AS PER ANNEXURE-II	ACCEPTED / NOT ACCEPTED	
14	RISK PURCHASE CLAUSE AS PER CLAUSE NO:20 OF ANNEXURE-II	ACCEPTED / NOT ACCEPTED	
15	I HAVE THOROUGHLY GONE THROUGH ALL THE TENDER CONDITIONS AND ALL THE DOCUM ENTS AND UNDERSTOOD THE ABOVE TECHNO-COM M ERCIAL REQUIREM ENTS AND QUOTED ACCORDINGLY	ACCEPTED UNCONDITIONALLY / ACCEPTED WITH DEVIATION	

Vendor Seal / Sgn

## **ANNEXURE – V - PRE QUALIFICATION CRITERIA**

- 1. ALL THE POINTS GIVEN BELOW SHALL BE CONFIRMED OTHERWISE OFFER WILL NOT BE CONSIDERED.**
- 2. BHEL RESEVES ITS RIGHT TO REJECT THE BIDDER ON ACCOUNT OF UNSATISFACTORY PAST PERFORMANCE BY THE BIDDER IN AWARDED PURCHASE ORDER.**

Sl. No.	Pre –Qualification Criteria – PR 0131888810	Bidder remark
1	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.	
3	Mill address (manufacturing address).	
4	Manufacturer shall submit manufacturing process flow chart (Raw material to finished product) along with offer.	
5	Manufacturer (Principle Supplier) shall submit a valid ISO 9001 certificate or Quality management system certificate or Written down procedure Quality or ISO 45001 or Written down procedure for inspection.	
6	Technical Specification for diameter 2.4 mm and 2.5 mm shall be taken as same. Technical Specification for diameter 3.15 mm and 3.2 mm shall be taken as same. 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".	

**TECHNICAL TERMS**

<b>ITEM NO</b>	<b>DESCRIPTION</b>	<b>QUOTED/ NOT QUOTED (To be filled by bidder)</b>	<b>QUOTED BRAND MAKE (To be filled by bidder)</b>
10	TIG , ERNiCr3(Dia. 1.6 mm) as per ASME Sec.II.C (Latest)		
20	Dia. 2.4 mm/ 2.5mm TIG Rod 2.25Cr-1Mo as per Technical Annexure 33040/ SP/ 1002		
30	Dia. 2.5 mm/ 2.4 mm (SMAW) E9015-B3 or E9016-B3 or E9018-B3 as per Technical Annexure 33040/ SP/ 1001		
40	TIG Modified 9Cr-1Mo(Dia. 1.6 mm) as per Technical Annexure FBTR/ 33410/ 0002		
50	Dia. 2.4 mm/ 2.5mm TIG Modified 9Cr-1Mo as per Technical Annexure FBTR/ 33410/ 0002		
60	Dia. 1.6 mm TIG 9Cr-1Mo as per Technical Annexure 33040/ SP/ 1002		
70	TIG 9Cr-1Mo (Dia. 2.4 mm/ 2.5mm ) as per Technical Annexure 33040/ SP/ 1002.		
80	SMAW Modified 9Cr-1Mo(Dia.2.4mm/ 2.5 mm) as per Technical Annexure FBTR/ 33410/ 0001		
90	SMAW Modified 9Cr-1Mo (Dia. 3.2mm/ 3.15mm) as per Technical Annexure FBTR/ 33410/ 0001		
100	SMAW 9Cr-1Mo (Dia.2.5 mm/ 2.4mm) as per Technical Annexure PFBR/ 33040/ SP/ 1000/ R-2		

110	<b>SMAW 9Cr-1Mo (Dia. 3.2 mm/3.15mm) as per Technical Annexure PFBR/ 33040/ SP/ 1000/ R-2</b>		
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Vendor Seal / Sign

## **ITEM DETAILS & TECHNICAL SPECIFICATION**

Item Sl. No.	Description	Unit	Quantity	Vendor confirmation
10	TIG , ERNiCr3(Dia. 1.6 mm) as per ASME Sec.II.C (Latest)	Kg	55	
20	Dia. 2.4 mm/ 2.5mm TIG Rod 2.25Cr-1Mo as per Technical Annexure 33040/ SP/ 1002	Kg	5	
30	Dia. 2.5 mm/ 2.4 mm (SMAW) E9015-B3 or E9016-B3 or E9018-B3 as per Technical Annexure 33040/ SP/ 1001	Kg	30	
40	TIG Modified 9Cr-1Mo(Dia. 1.6 mm) as per Technical Annexure FBTR/ 33410/ 0002	Kg	35	
50	Dia. 2.4 mm/ 2.5mm TIG Modified 9Cr-1Mo as per Technical Annexure FBTR/ 33410/ 0002	Kg	105	
60	Dia. 1.6 mm TIG 9Cr-1Mo as per Technical Annexure 33040/ SP/ 1002	Kg	30	
70	TIG 9Cr-1Mo (Dia. 2.4 mm/ 2.5mm ) as per Technical Annexure 33040/ SP/ 1002.	Kg	30	
80	SMAW Modified 9Cr-1Mo(Dia.2.4mm/ 2.5 mm) as per Technical Annexure FBTR/ 33410/ 0001.	Kg	55	
90	SMAW Modified 9Cr-1Mo (Dia. 3.2mm/ 3.15mm) as per Technical Annexure FBTR/ 33410/ 0001.	Kg	55	
100	SMAW 9Cr-1Mo (Dia.2.5 mm/ 2.4mm) as per Technical Annexure PFBR/ 33040/ SP/ 1000/ R-2.	Kg	20	
110	SMAW 9Cr-1Mo (Dia. 3.2 mm/ 3.15mm) as per Technical Annexure PFBR/ 33040/ SP/ 1000/ R-2.	Kg	20	

Vendor sign & seal

## / On Bidder's office letter pad /

Self-Declaration

Enquiry No.	
Enquiry Date	

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

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

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

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

We also understand that the false declarations will be considered as breach of Integrity and liable for action.

For Company Name:

Seal:

Signature:

Date:

Place:

(Please fill all the yellow color field)