



Bharat Heavy Electricals Limited
(A Govt. of India Undertaking)

Piping Centre, 80, G. N. Chetty Road, CHENNAI – 600 017
Phone : 91 (044) 28161381, e-mail: meerthika@bhel.in

REF: ENQ NO:4011700016

DT: 03.07.2017

Sub: Request For Quotation (RFQ) for supply of large diameter welded pipes - reg.

Ref: Enquiry No: 4011700016 dt 03.07.2017

BHEL/Piping Centre invites RFQ's for supply of welded pipes to spec IS3589 with special coating for **seawater application**. The offers should be submitted in the E-procurement portal. The offer will be opened at **14.30 hrs** on the **due date 24.07.2017**. Late tenders are liable to be rejected. Please find the following documents enclosed for you to submit offer in two parts

1. Tender documents – Scope of supply,
Techno Commercial Terms and Conditions (T&C)
2. Tech. delivery condition for pipes TDG: 07: 06 Dt. 04.05.2012.
3. Edge Preparation Drawing 4-80-999-93079 Rev. 00
4. Spider Arrangement Drawing 4-80-999-93078 rev :00
5. Painting scheme QP NO: 7270: QPC: 12 Rev. 02 dt. 26.05.2017
6. Internal coating spec PC: E:GF:001 Rev 00 or latest revision
7. Pre-Qualification Requirement (PQR) with all supporting documents
8. Unpriced bid Format
9. Integrity Pact
10. Price bid Format.
11. Bank Guarantee format.
12. Checklist (To be filled and submitted with Technical bid without fail).
13. Guidance for submission of offer in E-procurement.
14. Special conditions for foreign Bidders
15. Information on Reverse Auction.

Please indicate enquiry no and date and due date in all correspondences. This is only a request for quotation and not an order.

All supporting documents called for in PQR and T&C should be enclosed in Part-I of the tender.

Ms. Meerthika S
Deputy Manager / Purchase
BHEL, Piping Centre
80, G.N.Road, T.Nagar, Chennai –600 017
Phone – 044-28161381. Email: meerthika@bhel.in

For any clarifications on the Enquiry you may also contact

Mr. Varadarajan S/ Sr.Manager / Purchase Phone –044-28161243 Email: varada@bhel.in

TENDER DOCUMENTS TERMS & CONDITIONS - PROCUREMENT OF 'CW PIPES'
INDIGENOUS / FOREIGN

SL. NOS.	BHEL REQUIREMENT	AGREE/ DISAGREE																
1	SCOPE OF SUPPLY Manufacture and supply of below mentioned quantity of IS 3589 Pipes with external and special internal coating schemes for Ennore Project and to be delivered at Ennore SEZ STPP 2X660 MW project site.																	
2	LIST OF ITEMS <table><tr><th>SI No.</th><th>Item Description</th><th>Qty in metres</th><th>Work Order Details</th></tr><tr><td>10</td><td>Pipe Dia 3820X18 MM</td><td>1550</td><td>P7273180468001</td></tr><tr><td>20</td><td>Pipe Dia 2132X18 MM</td><td>90</td><td>P7273180468003</td></tr><tr><td>30</td><td>Pipe Dia 2540X18 MM</td><td>50</td><td>P7273180468002</td></tr></table> <u>TECHNICAL REQUIREMENTS</u> <u>A) PIPE REQUIREMENT</u> Pipe shall confirm to IS 3589 specification meeting the requirements as per our Technical Delivery Condition TDC: TDG:07 Rev. 06. Deviation if any shall be clearly indicated in a separate sheet. UNDISCLOSED DEVIATIONS ARE NOT ACCEPTABLE. Edge preparation (beveling) shall be done as per Drawing No.4-80-999-93079 Rev. 00. sent along with the enquiry. Spider Arrangement shall be provided at both ends of the pipe as per Drawing No. 4-80-999-93078 Rev. 00 The Length of each Pipe shall be 7 to 12.5 Meters. Total Quantity Tolerance shall be +2/- 2 Meters per Size of the PO Quantity <u>B) COATING REQUIREMENT</u> Painting Scheme Reference for ENNORE QP NO:7270: QPC:12 Rev. 02 dt. 26.05.2017 <u>External</u> Red Oxide Zinc Phosphate (Alkyd Base to IS 12744) - 1 x 30 Microns <u>Internal</u> Isophthalic Polyester/acrylic co-polymer filled with glass flakes coating - 1000 microns (min). Acceptance to coat inside surface of pipes with Isophthalic Polyester /Acrylic co-polymer filled with glass flakes meeting engineering specification ref PC: E:GF:001 Rev 00 or latest revision.	SI No.	Item Description	Qty in metres	Work Order Details	10	Pipe Dia 3820X18 MM	1550	P7273180468001	20	Pipe Dia 2132X18 MM	90	P7273180468003	30	Pipe Dia 2540X18 MM	50	P7273180468002	
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30	Pipe Dia 2540X18 MM	50	P7273180468002															

Criteria that will be considered for approving isophthalic polyester/acrylic co-polymer filled with Glass Flake Coating vendor cum applicator.

Supporting documents enclosed
YES/NO.

1. Coating Vendor shall be a manufacturer of Isophthalic polyester/acrylic co-polymer filled with glass flakes coating material. They are also responsible for the application of the coating on the internal surface of the Pipes covered in this tender used for transporting sea water. Factory license and or any other relevant documents to substantiate proof of manufacturing glass flake coating shall be enclosed.
2. Coating Vendor shall have proven track record for having coated Isophthalic polyester/acrylic co-polymer filled with glass flakes coating for similar pipe sizes mentioned in this tender used for sea water application and shall be in operation for a minimum period of 5 years.
3. Coating Inspection shall be performed by NACE level 2 inspectors. Details to be furnished.
4. Coating vendor shall possess an ISO 9001 or its equivalent Certificate. Copy shall be furnished.
5. Coating vendor shall submit the test certificates from independent reputed laboratory (IIT/ICT preferably) towards the below indicated type tests meeting values as indicated in Engg specification **PC: E: GF: 001 Rev 00** or latest revision.
 - a) Water Vapour Permeability - ASTM-D-1653
 - b) Adhesive Strength - ASTM-D-4541
 - c) Tensile Strength - ASTM-D-638
 - d) Abrasion Resistance - ASTM-D-4060
 - e) Cathodic Disbondment - ASTM G8
6. Coating Vendor shall furnish typical Quality Plan, Procedure for coating & testing of any recently executed contract for our review.
7. Coating Vendor shall also accept to carry out coating of (i) Pipes covered in this tender at Pipe manufacturer's works (ii) mitre bends, fittings (approx. 5% of Pipes quantum) at BHEL's Sub contractors works and (iii) site joints (approx. 2% of Pipes quantum) at Project site. Coating Vendor shall also carry out walk through inspection and repair work if any for the entire coated pipe line in-situ at site after erection.

BHEL shall evaluate the credentials of coating vendor and reserves the right to accept or reject the coating vendor. In case of rejection, BHEL will provide the acceptable list of coating vendors to the Bidder who are otherwise acceptable. In such case the Bidder will be allowed to submit the price implication if any before price bid opening.

3

QUALITY PLAN

Along with the Part-1 bid, bidder shall furnish typical quality plan being used by them earlier for 1) Welded pipe and 2) Glass flake coating prepared by the coating vendor (QP used / approved by any other well-known customer preferred)

QP to be enclosed

After placement of Purchase order vendor shall submit quality plan,

(a) Manufacturing of IS 3589 pipes meeting the requirements of TDC- **TDG:07 Rev. 06**

(b) Internal Coating of pipe by Coating Manufacturer.

for review/approval immediately within 1) 4 days for Pipe and 2) 20 days for glass flake Coating. Manufacturing shall commence subjected to approval of above QPs by BHEL.

4

INSPECTION**Indigenous suppliers**

BHEL/ BHEL approved third Party inspection agency.

Inspection call shall be raised by the Bidder as per the inspection stages indicated in approved Quality Plan. Inspection call shall be given at least 14 days in advance to the required inspection for planning. Inspection call letter should contain all details pertaining to type of inspection, manufacturing schedule, inspection dates etc.

Bidder to ensure the readiness of material on the date of visit by inspector.

Foreign suppliers

Inspection shall be through renowned agencies such as TUV, Lloyds, SGS, BV etc. If any different agency is proposed by the bidder; the name of the inspection agency shall be indicated in the offer. BHEL shall consider for acceptance or otherwise.

Inspection charges shall be included in the quoted unit prices.

5

TESTING AND TEST CERTIFICATES

NDE TESTING AS PER CLAUSE 5.2 OF TDC: TDG:07:06 DT. 04.05.12 SHALL BE DONE BY ANY ONE OF THE FOLLOWING OPTIONS. BIDDERS TO TICK AND INDICATE THEIR CHOICE BELOW –

i) 100% Hydro test along with Radiography Test for 100 mm Weld Length on both the ends of each pipe.

☐

ii) 100% Ultrasonic Test + 10% Radiography Test on weld length (including all T-joints and 100 mm Weld length at both the ends) for each pipe.

☐

iii) 100% Radiography Test on weld length of each pipe.

☐

Test certificates as called for in the TDC shall be sent to Purchase / Piping Centre BHEL Chennai immediately after the shipment / dispatch of items and not through Bank.

Inspection documents shall be furnished for each batch of dispatch / consignment.
Soft copy of the all the test certificates shall also be submitted through email.

Year of Code for the standards shall be latest and the specific year is to be mentioned in the Manufacturer's test certificates.

6

Two-part bid :

Part-I TECHNICAL - CUM – COMMERCIAL PART (Un priced) :-

This part of the bid shall contain following technical and commercial points only (**except price portion**)

1. Bidder to submit duly filled and signed '**Pre-Qualification Criteria**' along with all supporting documents.
2. Duly filled, signed and stamped our '**Terms and Conditions**' format which contains Commercial & Technical requirements along with BHEL TDC: TDG: 07 : 06, Painting scheme, Edge preparation and Spider arrangement Drawings.
3. Copy of Unpriced bid (**without price**) clearly **indicating quoted/not quoted** against each line item.
4. Integrity Pact - To be filled and submitted with Part-1 without fail.

The above documents form part of this tender document and bidder shall ensure that they have received all these along with tender and confirm.

7

PART II PRICE PART :

Bidders should accept ordering based on competitive price for all three items put together as a package.

Ordering will be made on **cumulative L1 basis ONLY**. (ie package of all three items)

Bidders are requested not to quote for part of the tender. Otherwise, their bid will be liable for rejection.

Quantity mentioned against each item may vary. In such case, bidder shall be asked to submit price impact in % before opening of price bid.

INDIGENOUS BIDDERS

The unit price shall be quoted on **FOR Ennore project site basis**
(BASE PRICE and other components strictly as per price template attached)

The price shall include all testing, inspection, packing & Forwarding charges.
PLEASE DO NOT QUOTE ON EX-WORKS BASIS.

Price quoted by the Supplier item wise with **break up as per the price bid template** shall be furnished.

a. **Base Price** shall include Cost of Raw Material plus conversion **cost per Meter of bare pipe** including Edge Preparation and providing Spider Arrangement and Testing and Packing and Forwarding.

b. **Painting charges** shall be quoted extra as per the respective painting scheme attached, as indicated in the price format.

c. Percentage of applicable GST shall be clearly indicated.

d. **Freight, GST on freight and transit insurance charges** to be quoted extra. Ordering shall be on Free on Road, FOR – ENNORE Project Site.

FOREIGN BIDDERS

The unit price shall be quoted on **CFR Chennai port basis**. Tender shall be evaluated for price competitiveness on FOR Ennore project site (total cost to BHEL) basis, considering quotation on CFR Chennai.

Currency to be mentioned.

Country of origin to be indicated.

In case, Bidders wish to quote on FOB basis, they are required to provide **loading port name**. In such cases BHEL shipping charges shall be loaded on quoted prices to evaluate the tender on CFR basis.

The price shall include all testing, inspection, packing & Forwarding charges.

PLEASE DO NOT QUOTE ON EX-WORKS BASIS.

Price quoted by the Supplier item wise with **break up as per the price bid template shall be furnished.**

a. **Base Price** shall include Cost of Raw Material plus conversion **cost per Meter of bare pipe** including Edge Preparation and providing Spider Arrangement and Testing and Packing and Forwarding.

b. **Painting charges** shall be quoted extra as per the respective painting scheme attached, as indicated in the price format.

c. **Freight charges** should be quoted extra. Ordering shall be on be CFR – Chennai Port basis.

e. **Customs Duty** - Pls note that the comparison of offers would be done as per the applicable Duty structure on the date of opening of Price Bid.

f. **Exchange Rate** – For import bidders, the exchange rate on the date of technical bid opening, as per TT selling rate of SBI will be taken for evaluation.

Additional loading for foreign Bidders

i) Freight and Insurance from Chennai port upto Ennore project site

ii) Customs incidental charges

8

Tender shall be processed by **E-Procurement Mode**. (Pl refer Guidance to bidders enclosed). Please click this link to take you to the procurement site - <https://bheleps.buyjunction.in>, you will be required to log in with user code and password allotted to you. (contact mjunction)

You may please contact m/s. Mjunction services ltd in case if you have not been activated on eps (enterprise procurement system) or if you have not received login user code/ password. Email at eps.customer@mjunction.in, else call at 033-66106426/66106454/9163348104/9231027017 (10 am to 06 pm).

9	EVALUATION OF BIDS L-1 shall be arrived on cumulative L-1 basis, i.e, based on the total net cash outflow to BHEL (inclusive of all cost elements for the entire scope, taxes and duties) as one single complete package. Price Comparison shall be made by considering the Exchange rates (SBI TT Selling rate) as on Technical bid opening date. BHEL reserves the right to finalize the prices through Reverse Auction or sealed envelope bid opening and the same shall be intimated to Bidders after technical scrutiny of the offers. Information on Reverse Auction enclosed.	
10	VALIDITY OF THE OFFER: - The quotation shall be valid at least for a period of 90 days from the date of technical bid opening / 60 days from the date of final reverse auction. Offer with lesser validity may not be considered	
11	DELIVERY SCHEDULE: - 3-4 months from LOI / PO date Delivery shall commence progressively from the first week of 3rd month. As delivery will affect our project requirements, kindly quote for the above delivery period only. Bidder has to strictly confirm to the delivery terms. Bids not complying with the delivery period are liable for rejection.	
12	TERMS OF DELIVERY: - 1) Indigenous Bidders FOR ENNORE PROJECT Site basis: - Dispatch of items shall be made to Ennore project Site based on Delivery instructions by BHEL-PC.	
	2) Foreign Bidders CFR Chennai port basis: - Bidders quoting on CFR basis shall arrange for free container retention period of 21 days for clearance of cargo.	
13	GUARANTEE: Bidders shall guarantee the supplies for a period of 36 months from the date of dispatch of materials or 18 months from the date of their commissioning whichever is earlier. To this effect a Guarantee certificate should be sent along with the dispatch documents in the event an order is placed on you. Material shall be guaranteed against manufacturing defects or faulty workmanship for a period of 36 months from the date of receipt of pipes with coating at project site. Any defect noticed during this period shall be repaired/replaced free of cost, to the satisfaction of BHEL and the End User. No deviation in this regard shall be accepted. Pipe Bidder shall cover the guarantee for both pipe and coating. Pipe Bidder shall take necessary guarantee certificate of the coating from the coating manufacturer. PERFORMANCE BANK GUARANTEE Bank Guarantee for 5% of the PO value shall be submitted valid upto the end of guarantee period.	

14	LD CLAUSE: - If the supplier fails to deliver the item within the period specified in the contract the purchaser shall deduct Liquidated Damages, a sum equivalent to 0.5% of the price for each week of delay up to a maximum of 10% of the price of delayed/undelivered portion. However, it may be noted that loading on quoted prices for LD shall be done to the extent to which the bidder is not agreed (for e.g. if Bidder agrees for LD max. of 6% then the remaining portion i.e. 4% shall be loaded on his quoted rates for evaluating the offer). For the purpose of LD, the delivery date will be reckoned as follows: 1. For foreign/Imported Bidders: CFR basis: Date of Bill of Lading will be taken as delivery date. 2. For foreign/Imported Bidders: FOB basis: Final inspection agency's signed date in the test certificate. 3. For Indigenous sources: LR date will be taken as the delivery date.	
15	RISK PURCHASE Your confirmation to our standard risk purchase clause that alternatively the Purchaser at his option will be entitled to terminate the contract and to purchase elsewhere at the risk and cost of the seller either the whole of the goods or any part which the supplier has failed to deliver or dispatch within the time stipulated as aforesaid or if the same were not available, the best and the nearest available substitute there for. The supplier shall be liable for any loss which the purchaser may sustain by reason of such risk purchases in addition to penalty at the rate mentioned in LD above.	
16	TERMS OF PAYMENT: No advance payment shall be made by BHEL. For indigenous Bidders: 100% payment after 45 days after receipt of materials & Performance bank guarantee @ 5% of PO value valid until guarantee period: Payment shall be made against presentation of following documents to our Finance Department. However, a copy of Invoice and LR shall be sent to Purchase department immediately after the dispatch is affected. a) Commercial Invoice in triplicate b) Delivery Challan in triplicate whichever is applicable c) Guarantee certificate. d) Lorry Way Bill (Original + Two copies) e) Site Ack. Lorry Way Bill (Original + Two Copies) f) Quality documents (as indicated below) g) ED gate pass with a confirmation that the duplicate for transporter is sent with the goods. h) Performance bank guarantee for 5% of PO value. Soft copy of Invoice and LR should be sent immediately after dispatch by e-mail. Hard copy should be sent subsequently at the earliest possible time.	

	One original + two copies of Quality Documents, as listed below shall be sent to Purchase / Piping centre BHEL Chennai immediately after the shipment / despatch of Items. 1) BHEL / BHEL authorised Third Party Inspection Agency Report 2) Works TC 3) Hydro Test Report (as applicable) 4) NDE reports (as applicable) 5) Dimensional report 6) Mechanical, Chemical Analysis and other Lab test reports 7) Confirmation report to BHEL Specification. 8) Basic raw material (Mill) TC 9) Other documents as per TDC / approved QP/IS 3589/other Specifications. All the above documents are to be submitted in soft copy apart from the hard copy, as above	
	For Foreign Bidders: 1) 100% through CAD (or) 2) 100 % LC at sight. It may be noted that loading for LC charges will be made @ 1.5% of quoted rates. Kindly choose one of the above given two options	
17	INTEGRITY PACT – Format being sent. Your bid will be considered only after signing and submitting the Integrity pact THIS TENDER WILL BE MONITORED BY INDEPENDENT EXTERNAL MONITOR (IEM). DETAILS OF IEM ARE AS GIVEN BELOW – Shri V.V.R. Sastry, Ex-CMD/ BEL Address - 957, 9th Main, 3 Stage, 3 Block, Basaveswaranagar, Bangalore- 560079 Ph: +91 80 23225150 sastryvvr@gmail.com	
18	This is to bring in your attention that information regarding ‘Guidelines for Suspension of Business Dealings with Suppliers/ Contractors’ is now available on www.bhel.com on “supplier registration page”. Bidders are requested to go through these guidelines.	
19	The Bidder along with its associate/ collaborators/ sub-contractors/ sub-Bidders/ 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.	
20	Bidders who are not registered with BHEL PC Chennai, will have to submit the Supplier Registration Form (SRF) after successful completion of techno-commercial evaluation and after getting intimation from BHEL for the same. The Supplier Registration Form (SRF) duly filled will be assessed for manufacturing capability, quality systems being followed, organizational soundness and financial worthiness. The Online Application may be submitted through following link http://suppliers.bheltry.co.in/	

21	One agent cannot represent two or more suppliers or quote on their behalf in a particular tender. If so found at any stage, BHEL PC Chennai is likely to cancel Enquiries / POs to such suppliers. Further, such Indian Agent is likely to be de-listed (Black listed for business from BHEL)	
22	GENERAL: - 1. The PO copy with all details will be given to successful bidders in soft mode also. 2. Order will be placed as a total package ONLY 3. Acknowledgement for receipt of PO shall be sent within one week from the date of receipt. 4. BHEL reserves the right to cancel this tender without assigning any reasons what so ever. 5. Deviation taken after placement of order will not be accepted (Both technical & on delivery) 6. Suppliers to analyze in detail, at the time of submission of offer with reference to our "delivery" requirement of item and confirm compliance. 7. Lowest prices received against BHEL tenders does not mean order will be placed on that Supplier. BHEL reserves the right not to consider the same. 8. BHEL reserves the right to negotiate or re-float the tender opened if L1 price /or other details are not acceptable to them 9. BHEL reserves the right to order on more than one Bidder at the lowest acceptable price to BHEL. 10. Any other terms or conditions mentioned in your offer other than the above mentioned formats will not be evaluated and will be considered null & void. Hence your offer shall contain ONLY the above mentioned formats. 11. 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. 12. In the event of newly approved vendor becoming the successful bidder, first lot of Pipes (Quantity as mentioned in the PO) shall be manufactured and coated. Inspection shall be done by BHEL. Balance PO quantity can be taken up for manufacture only after inspection and clearance of the first lot by BHEL. BHEL reserves the right to cancel the order if the trial quantity is not meeting our requirement.	

Note: Please confirm your acceptance/other wise to all the points indicated above positively and submit this format duly filled, signed & stamped along with the technical bid.

BIDDERS SIGNATURE & SEAL



1.0 SCOPE

- 1.1 This Technical Delivery Conditions specify the requirements in addition to IS:3589 for electrically welded (ERW \ SAW) steel pipes.
- 1.2 The pipes are intended for water services (under Non-IBR Piping system only).
- 1.3 The pipes shall conform to the size, grade and quantity as specified in the purchase order.

2.0 MATERIAL

- 2.1 The plates / coils used for pipe shall meet the requirements as per IS: 3589 Grade Fe 410 MPa including mechanical test requirements.

3.0 DIMENSIONAL TOLERANCES

- 3.1 The tolerances limits are:
 - a) OD:- Upto NB 1600 mm: ± 4 mm; Above NB 1600 mm: ± 6 mm
 - b) Thickness:- Upto 14mm : $+1.3$ mm / -0.8 mm; Above 14 mm : $+1.4$ mm / -0.8 mm.
 - c) Ovality (Difference between major and minor inside diameter): 0.5% maximum
 - d) Squareness of ends: The ends of pipe section shall not vary by more than 3mm at any point from a true plane perpendicular to the axis of the pipe and passing through the center of the pipe at the end.
 - e) Length and quantity tolerance as per P.O.
- 3.2 Other tolerances shall be as per IS: 3589

4.0 MANUFACTURING

- 4.1 The pipe shall be of longitudinally welded or spirally welded as indicated in the P.O.
- 4.2 The ends shall be edge prepared as indicated in the purchase order.
- 4.3 Circumferential seams shall be minimum 1500 mm apart from each other and from ends.
- 4.4 All pipes shall be completely finished and free from surface, sub surface defects such as pits, cracks, weld spatters & laminations etc..

5.0 NDE

- 5.1 For Pipe dia less than 1000mm:- 100 % Hydro test on each pipe + Radiography test for 100mm weld length at both the ends for 10% of the pipes.
- 5.2 For Pipe dia 1000 mm & above :-The NDT for each pipe shall be done by any one of the following options. The vendor shall indicate their choice in the offer.
 - a) 100 % Hydro test along with Radiography test for 100mm weld length on both the ends of each pipe.
 - b) 100 % Ultrasonic test + 10 % Radiography test on weld length (including all T- joints and 100mm weld length at both the ends) for each pipe.
 - c) 100 % Radiography test on weld length of each pipe.
- 5.3 The Ultrasonic test / Radiography test shall be carried out as per ASME Sec-V and shall be accepted as per ASME B31.1 Cl:136.4.6 / Cl:136.4.5.

6.0 INSPECTION

- 6.1 All pipes shall be inspected by the vendor prior to BHEL / Customers' Inspection. BHEL or BHEL authorized inspector / Customer will select the pipes at random and carryout the inspection. The necessary Material Despatch Clearance Certificate is to be obtained by the vendor prior to the despatch of material.

G.Venkataramani, Engg&Quality

Approved by

G.Panneer Selvam, QA

K. Ganeshan, QDC&MPL



7.0 PAINTING AND PACKING

- 7.1 The pipes if dispatched to BHEL Stores shall be coated with resin type translucent rust preventive on the outside unless otherwise specified in the P.O. Pipes of diameter above NB 450 mm, shall be coated inside also.
- 7.2 The pipes if dispatched to project site directly shall be coated outside & inside as indicated in P.O.
- 7.3 In case of any special coating like PU, Glass Flake etc.. the vendor shall get BHEL approval for their QP and Procedure for application of coating.
- 7.4 Internal coating shall not be applied for 100mm length from each end to facilitate site joints.
- 7.5 Spiders are to be provided on both ends of the pipes as per the drawing indicated in the enquiry / Purchase Order.

8.0 MARKING

- 8.1 The pipes dispatched to BHEL Stores shall be paint stencilled & hard punched with the following details.
- 1) PO Number 2) Supplier's emblem/code 3) Size & Specification 4) Heat number
5) Pipe number 6) Inspector's seal
- 8.2 The pipes despatched directly to project site as DTS, the following details (furnished in the P.O. or separately) shall be paint stencilled & hard punched on both ends of the pipes in addition to the above.
- Work order No ➤ DU No ➤ Project name
➤ Quantity ➤ Weight
- 8.3 For the pipe dia 1000mm and above marking shall be done on internal surface in the uncoated area (i.e) within 100mm from pipe ends. The hard punching shall be done at one end and paint stencilling at other end. In case of pipes of dia less than 1000mm the marking shall be done on outside surface.

9.0 CERTIFICATES

- 9.1 Three original test certificates typed in English shall be submitted along with the inspection report.
- 9.2 The test certificate shall furnish the following details.
- BHEL P.O Number & Amendment Number(if any)
 - BHEL P.O. Serial Number
 - Test Certificate number.
 - Specification, grade, size, quantity
 - Heat number of plate (or pipe number with traceability to heat number)
 - Chemical composition and Mechanical properties
 - Hydrostatic test, UT, RT reports as applicable.
 - Dimensional report
 - Painting details

Records of Revn:06 :- i) Para 3.1, 5.1, 7.1, 8.1, 8.2 & 9.2 are revised
ii) Para 5.2, 5.3, 7.2, 7.3, 7.4 & 8.3 are added.

G.Venkataramani, Engg&Quality

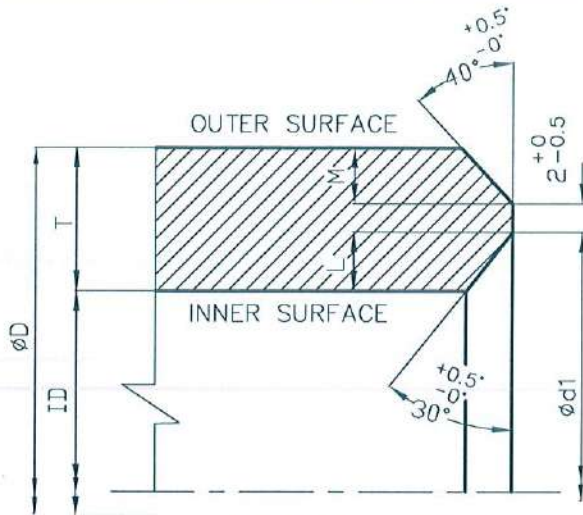
Approved by

G.Panneer Selvam, QA

K.Ganesan, OPC&MPL

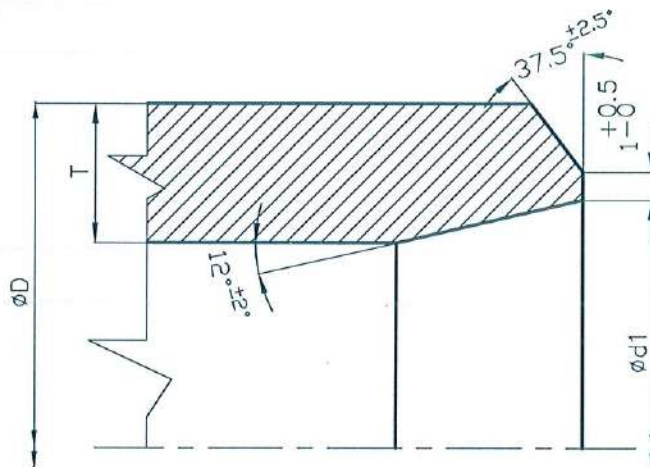
CAUTION: The information on this document is the property of BHARAT HEAVY ELECTRICALS LTD. It must not be used directly or indirectly in any way detrimental to the interest of the company.

REV	DATE	ALTERED	ALL DIMENSIONS ARE IN MILLIMETRES	
		APPROVED		



PIPE SIZE	M	L	ID	Ød1
ØD X T	5	T-7	D-2T	D-14

FIG-A E.P.DETAIL FOR PIPES OF THICKNESS
ABOVE 14mm



PIPE SIZE	Ød1
ØD X T	D-2T

STYLE-D E.P.DETAIL FOR PIPES OF THICKNESS
14mm AND BELOW

STANDARD



BHARAT HEAVY ELECTRICALS LIMITED
PIPING CENTRE
CHENNAI 600 017

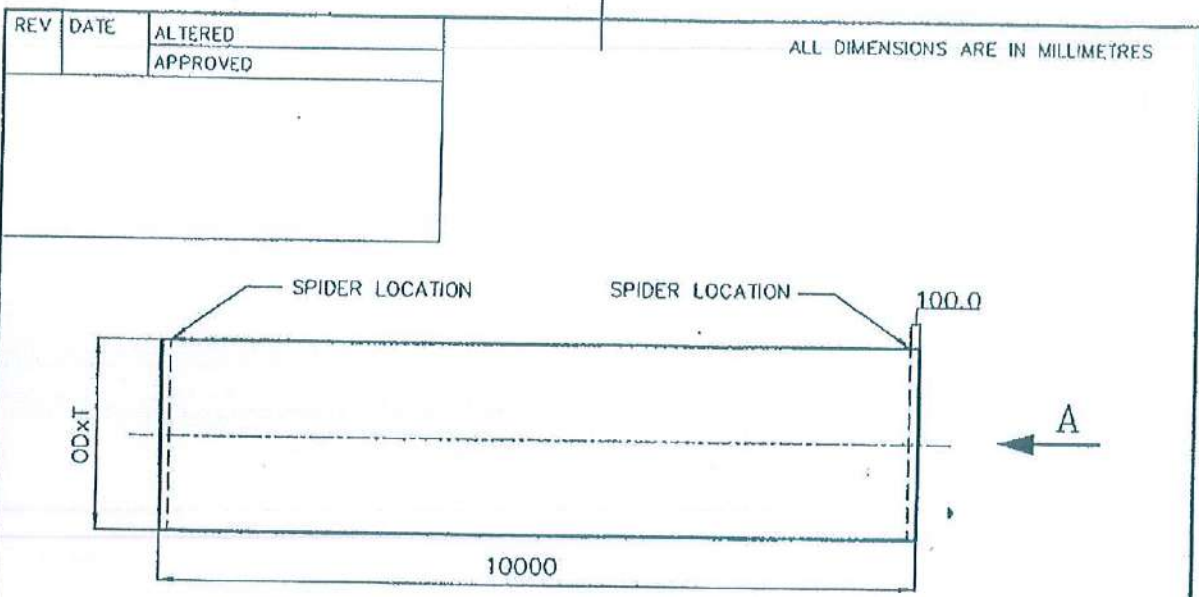
DRN	NAME	SIGN	DATE	NO. OF VAR
CHD	C.K.KARAN		11.04.08	
APPD	C.K.KARAN		11.04.08	

DEPT	GRADE OF UNTOL DIM	SCALE	WEIGHT (KG)	REF. TO ASSY./OLD DRG.	ITEM NO	NO. OF ITEMS
CODE	C / M / F	N.T.S				
TITLE				CARD CODE	DRAWING NO.	REV
EDGE PREPARATION DETAIL FOR PIPE DIA > 1000				U 01	4-80-999-93079	00

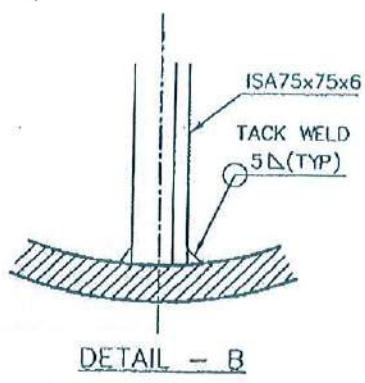
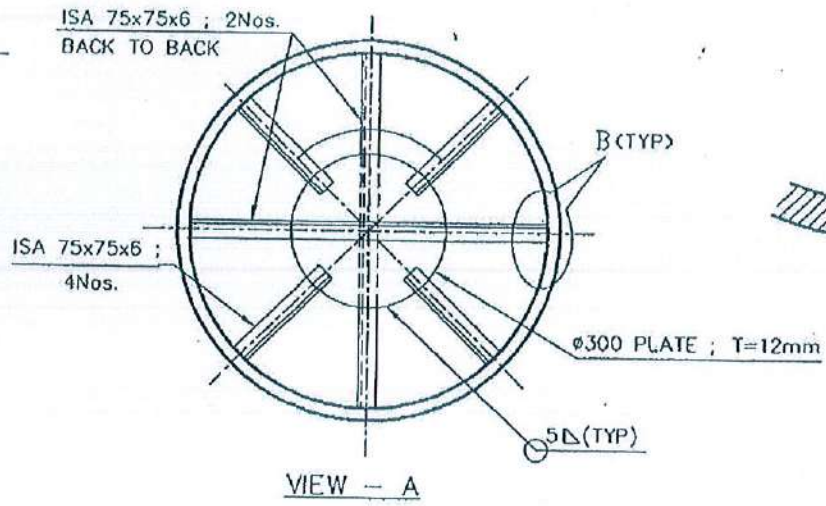
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UNLESS OTHERWISE SPECIFIED, THE DIMENSIONS OF THE PROPERTY OF BHARAT HEAVY ELECTRICALS LTD. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO THE INTEREST OF THE COMPANY.



SPIRAL/LONGITUDINAL WELDED PIPE
(2 LOCATIONS IN 10 MTR. PIPE)



BHARAT HEAVY ELECTRICALS LIMITED PIPING CENTRE CHENNAI 600 017				DRN	NAME	SIGN DATE	NO. OF VAR	
				CHD	C.K.KARAN			11.04.08
				APPD	C.K.KARAN			11.04.08
DEPT	GRADE OF UNTOLO DIM		SCALE	WEIGHT (KG).	REF. TO ASSY./OLD DRC.	ITEM NO.	NO. OF ITEMS	
CODE	C / M / F		N.T.S					
TITLE SPIDER ARRANGEMENT FOR FOR PIPE DIA > 1000				CARD CODE U 01	DRAWING NO. 4-80-999-93078		REV 00	

PAINING SCHEME FOR LP PIPING

(CW / ACW / ECW / Plant water, Air Piping, etc...,)

PROJECT NAME :- ENNORE SEZ STPP - (2X660MW)

BHEL CUSTOMER Nos : 7270, 7271, 7272(Aux.Boiler) & 7273(Outside TG Hall).

QPNo: 7270:QPC:12

REV.NO: 02

Dt: 16.05.2017

Sl. NO	PGMA / Description	Surface Preparation & Surface Profile	Primer coat		Intermediate coat			Finish coat			Total DFT Microns (Min.)	REMARKS
			Primer	No of coats	Paint	No of coats	Shade	Paint	No of coats	Shade		
1	2	3	4	5	6	7	8	9	10	11	12	13
1	(a) Internal Surface - Steel Pipe - Seawater handling	Blast Cleaning SSPC SP-10 / SA 2½ (Refer Note 1)									1000 Microns (min)	(Refer Note 2)
	(b) Holiday test (Refer Note 3)											
2	External Surface --Buried Piping / Encased in concrete (Temporary Protection for transportation from works to site). **Further protection to be done by BHEL Erection Group as per Contract requirement.	SSPC-SP3 / Power Tool Cleaning	Red Oxide Zinc Phosphate (Alkyd base to IS 12744)	1 (30 Microns per coat)							30 Microns	
2A	External Surface --Buried Piping - Not Encased in concrete	Blast cleaning to SSPC SP-10 / SA 2½										Shall be done by BHEL's Erection Group.
3	Internal Surface --Other than Sea water handling - (For 800Nb and above diameters)	Blast cleaning to SSPC SP-10 / SA 2½	Epoxy Polyamide resin based Zinc Phosphate Primer	2 (35 microns per coat)	Epoxy resin with MIO	1 (75 microns per coat.)		Epoxy Polyamide finish Paint	1 \$ (40 microns per coat)	Smoke Grey Shade No 692 of IS 5 (Refer Note-4)	145 at shop + 40 at site	\$: 1 coat of DFT- 40 microns finish coat at site
4	External Surface - Over ground piping (For all diameters)	Blast cleaning to SSPC SP-10 / SA 2½	Epoxy Polyamide resin based Zinc Phosphate Primer	2 (35 microns per coat)	Epoxy resin with MIO	1 (75 microns per coat.)		Epoxy Polyamide finish Paint	1 \$ (40 microns per coat)	Smoke Grey Shade No 692 of IS 5 (Refer Note-4)	145 at shop + 40 at site	\$: 1 coat of DFT- 40 microns finish coat at site
5	Galvanised and Stainless steel Piping											
Notes:												
1. Blast cleaning to near white metal to obtain roughness as per paint manufacturer's recommendations.												
2. Application and inspection (including DFT) of Isophthalic polyester / acrylic co-polymer filled with glass flakes shall be as per Paint manufacturer's QP and Painting procedure approved by BHEL.												
3. Witness by BHEL / BHEL nominated inspection agency.												
4. Shade for finish coat to be done at site shall be as per project specification/contract requirement.												
10. 						For Customer use :			Page 1/1			
PREPARED BY : VIVEKANANDA YELLU, Dy. Mar/QA			APPROVED BY : A.P. MADHAVANKUTTY, AGM/Q									

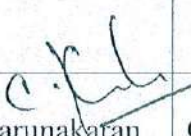
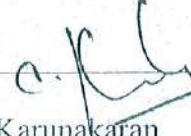


Bharat Heavy Electricals Limited
Piping Centre Chennai-17
ENGINEERING AND R&D

Specification Number	Revision Number	Sheet Number
PC:E:GF:001	00	1 of 7

**Standard Technical Specification for Glass Flake Reinforced Ambient
cure Polyester Acrylic Polymer Coating for Internal surface of steel
pipes handling sea-water**

APPLICABLE TO UTILITY AND INDUSTRIAL UNITS

00	16.12.09	Fresh Issue	 C.Karunakaran	 C.Karunakaran	 S.Jayakumar
Rev	Date	Alteration	Prepared	Checked	Approved



Bharat Heavy Electricals Limited
Piping Centre Chennai-17
ENGINEERING AND R&D

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CONTENTS

1	SCOPE
2	PRODUCT SPECIFICATION
3	SURFACE PREPARATION
4	PRIMING
5	COATING
6	FIELD JOINTING
7	INSPECTION AND TESTING



Specification Number	Revision Number	Sheet Number
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**Technical Specification for Glass Flake Reinforced Ambient cure
Polyester Acrylic Polymer Coating for Internal surface of steel pipes
handling sea-water**

1 SCOPE

This specification covers the technical details of the two-component glass flake reinforced ambient cured polyester coating, its method of application, surface preparation requirements, testing requirement and QA/inspection criteria.

The glass-flake reinforced polyester coating material lining process shall be carried out at lining applicator's works before the internally lined pipes and components are dispatched to site, where only field joints are to be carried out at the previously planned cut-back portion of the pipes and components. In exceptional cases large diameter fittings and specialities may be allowed to be internally lined at site-fabrication yard/in-situ through automatic/semi-automatic or manufacturer recommend means to achieve same level of finish and quality as done in shop.

2 PRODUCT SPECIFICATION

The product (coating material shall be high build, fast cure anti-corrosive coating meant for application in aggressive corrosion environment like sea-water application in the internal surfaces of pipes. The recommended working "Volume Solids" is 85% or it should be as recommended by manufacturer. Method of application of this coating material by Airless spray technique and in exceptional cases of unforeseen encounter with "pits" in metal, through brush to ensure proper treatment.

The following recommended test data may be adhered to for the coating material. The same will be reviewed and approved by BHEL.

Coating thickness shall be 1000 micron (DFT) minimum.



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Piping Centre Chennai-17
ENGINEERING AND R&D

Specification Number	Revision Number	Sheet Number
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Test type	Test Method	Specification Details	Typical Results
Cathodic Disbondment	ASTM G8 "Cathodic Disbonding of Pipeline Coatings" Method A	2x600 micron DFT applied directly to SA 2.5 blasted steel.	Typically less than 1 mm disbondment following 30 days exposure
Immersion	IS 2812 Part 2 (Modified)- "Resistance to sea water immersion @ 40 Deg C.	1x500 micron DFT applied directly to SA 2.5 blasted steel.	No film defects following 8000 hours exposure.
Salt Spray	ISO 7523- Resistance to neutral salt spray (fog) @ 35 Deg C.	2x600 micron DFT applied directly to SA 2.5 blasted steel.	No film defects, and no rust creep at the scribe following 6000 hours exposure.
Abrasion	ASTM D 4060- "Abrasion Resistance of coatings via the Taber Abraser"	1x500 micron DFT applied directly to SA 2.5 blasted steel.	Average of 224 mg weight loss per 1000 cycles using H18 wheels and a 1 Kg loading.
Adhesion	ISO 4624-"Pull off test for adhesion" using portable adhesion testers.	2x500 micron DFT applied directly to SA 2.5 blasted steel.	Not less than 7 MPa (1015 psi) when using a PAT Model GM 01 hydraulic adhesion tester on 5mm thick steel.
Elongation Break @	BS 6319 Part 7	1 x 500 micron DFT "free film"	Elongation 0.61%
Impact	BS 3900 Part E3	1x500 micron DFT applied directly to SA 2.5 blasted steel.	Direct impact Resistane-6.5 Joules
Tensile Strength	BS 6319 Part 7	1x500 micron DFT "free film"	An average of 210 Kg/cm2 is required to



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Piping Centre Chennai-17
ENGINEERING AND R&D

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			achieve fracture of the coating.
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3 SURFACE PREPARATION

All surfaces to be coated should be clean, dry and free from contamination. Prior to paint application all surfaces should be assessed and treated in accordance with ISO 8504:1992. Wherever necessary, the weld spatters are to be removed and wherever required weld seams and sharp edges are to be smoothened. Oil and grease shall be removed in accordance with SSPC SP1 Solvent cleaning.

The lining shall only be applied on surfaces prepared by abrasive blast cleaning to SA 2½ (ISO 8501-1:1988) or SSPC-SP-10. A sharp, angular surface profile of 75-100 microns (3-4 mils) shall be achieved.

The lining shall be applied before oxidation of the steel occurs. If oxidation does occur the entire oxidized areas should be reblasted to the standard specified above. Surface defects revealed by blast cleaning process, should be ground, filled or treated in the appropriate manner. Surfaces must be primed with suitable primer before oxidation occurs. Chlorides are also to be removed before blast cleaning,

4 PRIMING

Priming shall be done with a priming material suitable for the coating/lining material being applied and usually should be between 15-50 micron DFT (0.6-2 mils) or as recommended by manufacturer. Priming shall be done before oxidation of blasted surface starts to set in. Coating/lining material shall be applied on primed surface within the time frame recommended strictly by the coating/lining material manufacturer.

5 COATING



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Piping Centre Chennai-17
ENGINEERING AND R&D

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The coating material shall be applied in requisite thickness in accordance with recommended working procedure for application by manufacturer and shall be done by Airless spray technique within the recommended temperature and humidity range.

6 FIELD JOINTING

Field jointing shall be undertaken by the applicator agency strictly as per the recommended instruction of the manufacturer with stipulated "cut-back/"hold-back" dimensions earmarked for such jointing and abrasion/cleaning procedure.

7 INSPECTION AND TESTING

- 7.1 All work under this specification shall be subject to inspection by BHEL or its representatives. All parts of work shall be accessible. The bidder shall correct such work as is found defective under the specifications.
- 7.2 The following tests shall be made by the applicator prior to during and after priming and coating application.
 - 7.2.1 Blast surface profile using elcometer 123 or equivalent surface profile gauge. The average of readings from five randomly selected areas shall constitute the average surface profile. Test area to be flat (without culvature).
 - 7.2.2 The dry film thickness shall be checked with a magnetic mil gauge (positest by Defeisko or equivalent). The average of readings from five randomly selected areas shall constitute the film thickness. Individual readings shall not vary by more than 25% from the mean.
 - 7.2.3 Holidays testing using high voltage holiday detector (Tinker Razor or equivalent) as per NACE International RP 0188-90 "Holiday Testing". Coating to have cured at least 24 hours prior to holiday test. Due care should be taken not to use voltage exceeding the dielectric strength of the coating. The location of the holidays shall be noted on the coated surface for repair.
- 7.3 Pull of Adhesion to stell shall be measured using Elcomeer/ Postitest / Equivalent adhesion tester as per ASTM D 4541. Average reading from



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three (3) randomly selected spots shall constitute one test and shall be at least 10 (ten) N/mm². Adhesion test shall be carried out on fully cured coating (7 days at 25 Deg C) & on flat (without curvature) test area.

Minimum 5 nos. tests shall be carried out in one (1) Km at locations desired by Engineer in charge/site engineer/Project Manager on behalf of Employer. If the adhesion is not satisfactory, a systematic inspection (adhesion test) of all pipe shall be carried out and all pipes not meeting this adhesion requirement shall be rejected. Damaged test areas of acceptable pipe shall be repaired as indicated in clause above. The rejected pipes shall be cleaned by blasting and re-coated.

- 7.4 All previously carried out test-certificates on material shall be furnished for Employer's scrutiny that have done already by manufacturer.

PRE – QUALIFICATION REQUIREMENT (PQR) FOR IS 3589 PIPES

Sl No.	PQR Description	Documents to be submitted	Bidder Compliance with supporting documents (YES / NO)
1	Bidder shall be manufacturer OR authorized agent of the manufacturer. Such agent shall not represent two manufacturers quoting for this tender.	Authorization letter by Manufacturer for agent.	
2*	Bidder shall have BIS license for IS 3589 Pipes.	Copy of valid BIS certificate	
3*	Bidder shall have necessary manufacturing & storage facilities for IS 3589 (Spiral / LS) Pipes and adequate personnel to manufacture the tendered items Capacity to manufacture the tendered items in terms of Volume (MT)	List of manufacturing, testing & handling facilities and list of personnel. Bidder to mention the manufacturing process – Spiral or LS Bidder shall furnish the monthly/annual capacity details	<u>Spiral or LS</u>
4*	Bidder shall have prior experience for 2 years in supply of IS 3589 Pipes. The experience shall be counted 2 years prior to the date of Enquiry.	PO copies / Supply completion certificate copies containing Customer Name, Size & Quantity, Month and year of their supplies shall be furnished. End customer details shall be provided to verify the performance, if required.	
5*	Bidder must have valid ISO: 9001 or equivalent certification.	Copy of certificate	
6*	Financial details of the Bidder	Audited Balance Sheet and Audited Profit & Loss Account for the past three financial years. In case of foreign Bidders, credit rating report issued by D&B/Creditre form will be accepted in place of the above.	
7	Acceptance to manufacturing of pipes as per TDC: TDG:07 Rev 06 dt 04.05.2012		

8*	Bidder's acceptance to coat inside surface of pipes with Isophthalic Polyester /Acrylic co-polymer filled with glass flakes meeting engineering specification ref PC: E:GF:001 Rev 00 or latest revision Coating vendor shall have proven track record for having coated Isophthalic polyester/acrylic co-polymer filled with glass flakes coating for similar pipe sizes mentioned in this tender used for sea water application and shall be in operation for a minimum period 5 years period.	Coating vendor details to be furnished.	
9	Acceptance to provide guarantee for the supply of Pipe with coating for 36 months.		

***Supporting documents to be enclosed without fail.**

Note –

- i. Bids fulfilling the above criteria will be considered for further techno-commercial evaluation.
- ii. If the bidder is already a registered vendor with BHEL Piping Centre for the tendered items, then, point 1 to 5 is not applicable for that bidder.
- iii. Only techno-commercially accepted will be considered for price bid opening.
- iv. For foreign Bidders, it will be mandatory to furnish D&B/Creditre form Report during submission of SRF

VENDOR SIGNATURE

Name of contact person:

Name of the firm:

Contact number:

Email Id:

BHEL : PIPING CENTRE : CHENNAI - 17

Open Tender No. 4011700016/03.07.2017

INDIGENOUS VENDOR UNPRICED FORMAT - TO BE SUBMITTED ALONG WITH PART 1 BID

ITEM DESCRIPTION :

SI No. 10 - CW (IS 3589) Pipe Dia Dia 3820X18 MM UG -1550 Metres - Despatch to Ennore Project Site

	Tender Serial No ----->		10
	Item Description --Pipe Dia Dia 3820X18 MM UG - 1550 Metres - (LS/SPIRAL) IS3589 TDC:TDG:07:06		
	Work Order Details		P7273180468001
Sl No.	Elements of Cost		QUOTED/NOT QUOTED
1	BASE PRICE including all basic cost elements in the scope such as Basic Pipe, P&F, Edge Preparation, Spiders, NDE etc	Rate per Meter	
	Painting Charges -Underground Piping		
2	a)External - Red Oxide Zinc Phosphate (Alkyd Base to IS 12744) - 1 x 30 Microns - Primer Coat	Rate per Meter	
	b)Internal - Isophthalic Polyester/acrylic co-polymer filled with glass flakes coating - 1000 microns (min)	Rate per Meter	
3	GST (in %age _____) (applicable on (1), &(2)) at _____ %)	Rate per Meter	
4	Freight Charges excluding service tax (up to Ennore Project site)	Rate per Meter	
5	Service Tax, if and as applicable, on Freight (in %age _____)	Rate per Meter	
6	Other Statutory Levies, if and as applicable (in %age _____) (applicable on _____)	Rate per Meter	
7	Transit Insurance Charges by Vendor in INR to be quoted per meter	Rate per Meter	
8	Unit All-inclusive price (Rate per Meter) (1+2a+2b+3+4+5+6+7)		
9	Total Rate (Rate per Meter * Total Quantity) (8) * 1550 metres		

ITEM DESCRIPTION:**SI No. 30 - CW (IS 3589) Pipe Dia 2540X18 MM UG -50 Metres - Despatch to Ennore Project Site**

	Tender Serial No ----->		30
	Item Description - Pipe Dia 2540X18 MM UG -50 Metres - (LS/SPIRAL) IS3589-410 MPA TDC:TDG:07:06		
	Work Order Details		P7273180468002
SI No.	Elements of Cost		QUOTED/NOT QUOTED
1	BASE PRICE including all basic cost elements in the scope such as Basic Pipe, P&F, Edge Preparation, Spiders, NDE etc	Rate per Meter	
	Painting Charges -Underground Piping		
2	a)External - Red Oxide Zinc Phosphate (Alkyd Base to IS 12744) - 1 x 30 Microns - Primer Coat	Rate per Meter	
	b)Internal - Isophthalic Polyester/acrylic co-polymer filled with glass flakes coating - 1000 microns (min)	Rate per Meter	
3	GST (in %age _____) (applicable on (1), &(2)) at _____ %)	Rate per Meter	
4	Freight Charges excluding service tax (up to Ennore Project site)	Rate per Meter	
5	Service Tax, if and as applicable, on Freight (in %age _____)	Rate per Meter	
6	Other Statutory Levies, if and as applicable (in %age _____) (applicable on _____)	Rate per Meter	
7	Transit Insurance Charges by Vendor in INR to be quoted per meter	Rate per Meter	
8	Unit All-inclusive price (Rate per Meter) (1+2a+2b+3+4+5+6+7)		
9	Total Rate (Rate per Meter * Total Quantity) (8) * 50 metres		

1	TOTAL RATE FOR ENQ SL NO. 10 - CW (IS 3589) Pipe Dia Dia 3820X18 MM	
	TOTAL RATE FOR ENQ SL NO. 20 - CW (IS 3589) Pipe Dia 2132X18 MM UG -	
	TOTAL RATE FOR ENQ SL NO. 30 - CW (IS 3589) Pipe Dia 2540X18 MM UG -	
	TOTAL RATE FOR ALL ITEMS	

Rate entered as total rate for all items will be used at arriving at L-1 bidder. Any other loading factors will be taken into account, as applicable.

(Bidder seal and signature)

BHEL : PIPING CENTRE : CHENNAI - 17
Open Tender No.4011700016/03.07.2017

IMPORT VENDOR UNPRICED FORMAT - TO BE SUBMITTED WITH PART 1 BID

CURRENCY QUOTED : USD / EURO / -----

ITEM DESCRIPTION :

SI No. 10 - CW (IS 3589) Pipe Dia Dia 3820X18 MM UG -1550 Metres - Despatch to Chennai Port

	Tender Serial No ----->		10
	Item Description- Pipe Dia Dia 3820X18 MM UG - 1550 Metres - Despatch to Chennai Port (LS/SPIRAL) IS3589 TDC:TDG:07:06		
	Work Order Details		P7273180468001
SI No.	Elements of Cost		QUOTED/NOT QUOTED
1	BASE PRICE including all basic cost elements in the scope such as Basic Pipe, P&F, Edge Preparation, Spiders, NDE etc	Rate per Meter	
2	Painting Charges -Underground Piping		
	a)External - Red Oxide Zinc Phosphate (Alkyd Base to IS 12744) - 1 x 30 Microns - Primer Coat	Rate per Meter	
	b)Internal - Isophthalic Polyester/acrylic co-polymer filled with glass flakes coating - 1000 microns (min)	Rate per Meter	
3	Freight Charges upto Chennai Port	Rate per Meter	
4	Unit All-inclusive price (Rate per Meter) (1+2a+2b+3)		
5	Total Rate (Rate per Meter * Total Quantity) (4) * 1550 metres		

ITEM DESCRIPTION:**SI No. 20 - CW (IS 3589) Pipe Dia 2132X18 MM UG - 90 Metres - Despatch to Chennai Port**

SI No	Tender Serial No ----->		20
	Item Description - Pipe Dia 2132X18 MM UG -90 Metres - Despatch to Chennai Port - (LS/SPIRAL) IS3589-410 MPA TDC:TDG:07:06		
	Work Order Details		P7273180468003
	Elements of Cost		QUOTED/NOT QUOTED
1	BASE PRICE including all basic cost elements in the scope such as Basic Pipe, P&F, Edge Preparation, Spiders, NDE etc	Rate per Meter	
2	Painting Charges -Underground Piping		
	a)External - Red Oxide Zinc Phosphate (Alkyd Base to IS 12744) - 1 x 30 Microns - Primer Coat	Rate per Meter	
	b)Internal - Isophthalic Polyester/acrylic co-polymer filled with glass flakes coating - 1000 microns (min)	Rate per Meter	
3	Freight Charges upto Chennai Port	Rate per Meter	
4	Unit All-inclusive price (Rate per Meter) (1+2a+2b+3)		
5	Total Rate (Rate per Meter * Total Quantity) (4) * 90 metres		

ITEM DESCRIPTION:**SI No. 30 - CW (IS 3589) Pipe Dia 2540X18 MM UG -50 Metres - Despatch to Chennai Port**

	Tender Serial No ----->		30
	Item Description - Pipe Dia 2540X18 MM UG -50 Metres -Despatch to Chennai Port - (LS/SPIRAL) IS3589-410 MPA TDC:TDG:07:06		
	Work Order Details		P7273180468002
Sl No.	Elements of Cost		QUOTED/NOT QUOTED
1	BASE PRICE including all basic cost elements in the scope such as Basic Pipe, P&F, Edge Preparation, Spiders, NDE etc	Rate per Meter	
2	Painting Charges -Underground Piping		
	a)External - Red Oxide Zinc Phosphate (Alkyd Base to IS 12744) - 1 x 30 Microns - Primer Coat	Rate per Meter	
	b)Internal - Isophthalic Polyester/acrylic co-polymer filled with glass flakes coating - 1000 microns (min)	Rate per Meter	
3	Freight Charges upto Chennai Port	Rate per Meter	
4	Unit All-inclusive price (Rate per Meter) (1+2a+2b+3)		
5	Total Rate (Rate per Meter * Total Quantity) (4) * 50 metres		

1	TOTAL RATE FOR ENQ SL NO. 10 - CW (IS 3589) Pipe Dia Dia	
	TOTAL RATE FOR ENQ SL NO. 20 - CW (IS 3589) Pipe Dia 2132X18	
	TOTAL RATE FOR ENQ SL NO. 30 - CW (IS 3589) Pipe Dia 2540X18	
TOTAL RATE FOR ALL ITEMS		

Rate entered as total rate for all items will be used at arriving at L-1 bidder. Any other loading factors will be taken into account, as applicable.

(Bidder seal and signature)

INTEGRITY PACT

Between

Bharat Heavy Electricals Ltd. (BHEL), a company registered under the Companies Act 1956 and having its registered office at "BHEL House", Siri Fort, New Delhi - 110049 (India) hereinafter referred to as "The Principal", which expression unless repugnant to the context or meaning hereof shall include its successors or assigns of the ONE PART

and

_____, (description of the party along with address), hereinafter referred to as "The Bidder/ Contractor" which expression unless repugnant to the context or meaning hereof shall include its successors or assigns of the OTHER PART

Preamble

The Principal intends to award, under laid-down organizational procedures, contract/s for

SUPPLY OF LARGE DIAMETER WELDED PIPES

AGAINST ENG 4011700016 / 03.07.17

_____. The Principal values full compliance with all relevant laws of the land, rules and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder(s)/ Contractor(s).

In order to achieve these goals, the Principal will appoint Independent External Monitor(s), who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

AA:MM:IP:RO1 dtd 1.4.2010

Section 1 – Commitments of the Principal

1.1 The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:-

1.1.1 No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.

1.1.2 The Principal will, during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.

1.1.3 The Principal will exclude from the process all known prejudiced persons.

1.2 If the Principal obtains information on the conduct of any of its employees which is a penal offence under the Indian Penal Code 1860 and Prevention of Corruption Act 1988 or any other statutory penal enactment, or if there be a substantive suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions.

Section 2 – Commitments of the Bidder(s)/ Contractor(s)

2.1 The Bidder(s)/ Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.

2.1.1 The Bidder(s)/ Contractor(s) will not, directly or through any other person or firm, offer, promise or give to the Principal or to any of the Principal's employees involved

in the tender process or the execution of the contract or to any third person any material, immaterial or any other benefit which he / she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.

- 2.1.2 The Bidder(s)/ Contractor(s) will not enter with other Bidder(s) into any illegal or undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
- 2.1.3 The Bidder(s)/ Contractor(s) will not commit any penal offence under the relevant IPC/ PC Act; further the Bidder(s)/ Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- 2.1.4 The Bidder(s)/ Contractor(s) 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.
- 2.2 The Bidder(s)/ Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3 – Disqualification from tender process and exclusion from future contracts

If the Bidder(s)/ Contractor(s), before award or during execution has committed a transgression through a violation of Section 2 above, or acts in any other manner such as to put his reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s)/ Contractor(s) from the tender process or take action as per the separate "Guidelines on Banning of Business dealings with Suppliers/ Contractors". framed by the Principal.

Section 4 – Compensation for Damages

- 4.1 If the Principal has disqualified the Bidder from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent Earnest Money Deposit/Bid Security.
- 4.2 If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages equivalent to 5% of the contract value or the amount equivalent to Security Deposit/Performance Bank Guarantee, whichever is higher.

Section 5 – Previous Transgression

- 5.1 The Bidder declares that no previous transgressions occurred in the last 3 years with any other company in any country conforming to the anti-corruption approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.
- 5.2 If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

Section 6 – Equal treatment of all Bidders/ Contractors/ Sub-contractors

- 6.1 The Bidder(s)/ Contractor(s) undertake(s) to obtain from all subcontractors a commitment consistent with this Integrity Pact and report Compliance to the Principal. This commitment shall be taken only from those sub-contractors whose contract value is more than 20 % of Bidder's/ Contractor's contract value with the Principal. The Bidder(s)/ Contractor(s) shall continue to remain responsible for any default by his Sub-contractor(s).
- 6.2 The Principal will enter into agreements with identical conditions as this one with all Bidders and Contractors.
- 6.3 The Principal will disqualify from the tender process all bidders who do not sign this pact or violate its provisions.

Section 7 – Criminal Charges against violating Bidders/ Contractors /Sub-contractors

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the Vigilance Office.

Section 8 –Independent External Monitor(s)

- 8.1 The Principal appoints competent and credible Independent External Monitor for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.

- 8.2 The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the CMD, BHEL.
- 8.3 The Bidder(s)/ Contractor(s) accepts that the Monitor has the right to access without restriction to all contract documentation of the Principal including that provided by the Bidder(s)/ Contractor(s). The Bidder(s)/ Contractor(s) will grant the monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his contract documentation. The same is applicable to Sub-contractor(s). The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/ Contractor(s) / Sub-contractor(s) with confidentiality.
- 8.4 The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the contract provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.
- 8.5 As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or take corrective action, or heal the situation, or to take other relevant action. The Monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.
- 8.6 The Monitor will submit a written report to the CMD, BHEL within 8 to 10 weeks from the date of reference or intimation to him by the Principal and, should the occasion arise, submit proposals for correcting problematic situations.
- 8.7 The CMD, BHEL shall decide the compensation to be paid to the Monitor and its terms and conditions.
- 8.8 If the Monitor has reported to the CMD, BHEL, a substantiated suspicion of an offence under relevant IPC / PC Act, and the CMD, BHEL has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Office, the

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Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.

8.9 The number of Independent External Monitor(s) shall be decided by the CMD, BHEL.

8.10 The word 'Monitor' would include both singular and plural.

Section 9 – Pact Duration

9.1 This Pact begins and shall be binding on and from the submission of bid(s) by bidder(s). It expires for the Contractor 12 months after the last payment under the respective contract and for all other Bidders 6 months after the contract has been awarded.

9.2 If any claim is made / lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified as above, unless it is discharged/ determined by the CMD, BHEL.

Section 10 – Other Provisions

10.1 This agreement is subject to Indian Laws and jurisdiction shall be registered office of the Principal, i.e. New Delhi.

10.2 Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.

10.3 If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.

10.4 Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

10.5 Only those bidders/ contractors who have entered into this agreement with the Principal would be competent to participate in the bidding. In other words, entering into this agreement would be a preliminary qualification.



For & On behalf of the Principal
S. VARADARAJAN
Sr. Manager - Purchase
BHEL - Piping Centre
80, (Office Seal) C.N. Road, T. Nagar
Chennai - 600 017.

For & On behalf of the Bidder/ Contractor

(Office Seal)

Place Chennai-17

Date 03-07-2017

Witness: _____

(Name & Address) _____

Witness: _____

(Name & Address) _____

BHEL : PIPING CENTRE : CHENNAI - 17

Open Tender No. 4011700016/03.07.2017

INDIGENOUS VENDOR PRICE FORMAT - TO BE SUBMITTED ALONG WITH PRICE BID

ITEM DESCRIPTION :

SI No. 10 - CW (IS 3589) Pipe Dia Dia 3820X18 MM UG -1550 Metres - Despatch to Ennore Project Site

	Tender Serial No ----->	10
	Item Description --Pipe Dia Dia 3820X18 MM UG - 1550 Metres - (LS/SPIRAL) IS3589 TDC:TDG:07:06	
	Work Order Details	P7273180468001
SI No.	Elements of Cost	
1	BASE PRICE including all basic cost elements in the scope such as Basic Pipe, P&F, Edge Preparation, Spiders, NDE etc	Rate per Meter
	Painting Charges -Underground Piping	
2	a)External - Red Oxide Zinc Phosphate (Alkyd Base to IS 12744) - 1 x 30 Microns - Primer Coat	Rate per Meter
	b)Internal - Isophthalic Polyester/acrylic co-polymer filled with glass flakes coating - 1000 microns (min)	Rate per Meter
3	GST (in %age _____) (applicable on (1), &(2)) at _____%)	Rate per Meter
4	Freight Charges excluding service tax (up to Ennore Project site)	Rate per Meter
5	Service Tax, if and as applicable, on Freight (in %age _____)	Rate per Meter
6	Other Statutory Levies, if and as applicable (in %age _____) (applicable on _____)	Rate per Meter
7	Transit Insurance Charges by Vendor in INR to be quoted per meter	Rate per Meter
8	Unit All-inclusive price (Rate per Meter) (1+2a+2b+3+4+5+6+7)	
9	Total Rate (Rate per Meter * Total Quantity) (8) * 1550 metres	

ITEM DESCRIPTION:**SI No. 20 - CW (IS 3589) Pipe Dia 2132X18 MM UG - 90 Metres - Despatch to Ennore Project Site**

SI No	Tender Serial No ----->		20
	Item Description -Pipe Dia 2132X18 MM UG -90 Metres -(LS/SPIRAL) IS3589-410 MPA TDC:TDG:07:06		
	Work Order Details		P7273180468003
	Elements of Cost		
1	BASE PRICE including all basic cost elements in the scope such as Basic Pipe, P&F, Edge Preparation, Spiders, NDE etc	Rate per Meter	
	Painting Charges -Underground Piping		
2	a)External - Red Oxide Zinc Phosphate (Alkyd Base to IS 12744) - 1 x 30 Microns - Primer Coat	Rate per Meter	
	b)Internal - Isophthalic Polyester/acrylic co-polymer filled with glass flakes coating - 1000 microns (min)	Rate per Meter	
3	GST (in %age _____) (applicable on (1), &(2)) at _____ %)	Rate per Meter	
4	Freight Charges excluding service tax (up to Ennore Project site)	Rate per Meter	
5	Service Tax, if and as applicable, on Freight (in %age _____)	Rate per Meter	
6	Other Statutory Levies, if and as applicable (in %age _____) (applicable on _____)	Rate per Meter	
7	Transit Insurance Charges by Vendor in INR to be quoted per meter	Rate per Meter	
8	Unit All-inclusive price (Rate per Meter) (1+2a+2b+3+4+5+6+7)		
9	Total Rate (Rate per Meter * Total Quantity) (8) * 90 metres		

ITEM DESCRIPTION:**SI No. 30 - CW (IS 3589) Pipe Dia 2540X18 MM UG -50 Metres - Despatch to Ennore Project Site**

	Tender Serial No ----->	30
	Item Description - Pipe Dia 2540X18 MM UG -50 Metres - (LS/SPIRAL) IS3589-410 MPA TDC:TDG:07:06	
	Work Order Details	P7273180468002
Sl No.	Elements of Cost	
1	BASE PRICE including all basic cost elements in the scope such as Basic Pipe, P&F, Edge Preparation, Spiders, NDE etc	Rate per Meter
2	Painting Charges -Underground Piping	
	a)External - Red Oxide Zinc Phosphate (Alkyd Base to IS 12744) - 1 x 30 Microns - Primer Coat	Rate per Meter
	b)Internal - Isophthalic Polyester/acrylic co-polymer filled with glass flakes coating - 1000 microns (min)	Rate per Meter
3	GST (in %age _____) (applicable on (1), &(2)) at _____ %)	Rate per Meter
4	Freight Charges excluding service tax (up to Ennore Project site)	Rate per Meter
5	Service Tax, if and as applicable, on Freight (in %age _____)	Rate per Meter
6	Other Statutory Levies, if and as applicable (in %age _____) (applicable on _____)	Rate per Meter
7	Transit Insurance Charges by Vendor in INR to be quoted per meter	Rate per Meter
8	Unit All-inclusive price (Rate per Meter) (1+2a+2b+3+4+5+6+7)	
9	Total Rate (Rate per Meter * Total Quantity) (8) * 50 metres	

1	TOTAL RATE FOR ENQ SL NO. 10 - CW (IS 3589) Pipe Dia Dia 3820X18 MM	
	TOTAL RATE FOR ENQ SL NO. 20 - CW (IS 3589) Pipe Dia 2132X18 MM UG -	
	TOTAL RATE FOR ENQ SL NO. 30 - CW (IS 3589) Pipe Dia 2540X18 MM UG -	
TOTAL RATE FOR ALL ITEMS		

Rate entered as total rate for all items will be used at arriving at L-1 bidder. Any other loading factors will be taken into account, as applicable.

(Bidder seal and signature)

BHEL : PIPING CENTRE : CHENNAI - 17

Open Tender No. 4011700016/03.07.2017

IMPORT VENDOR PRICE FORMAT - TO BE SUBMITTED ALONG WITH PRICE BID

ITEM DESCRIPTION :

SI No. 10 - CW (IS 3589) Pipe Dia Dia 3820X18 MM UG -1550 Metres - Despatch to Chennai Port

	Tender Serial No ----->	10
	Item Description --Pipe Dia Dia 3820X18 MM UG - 1550 Metres - Despatch to Chennai Port (LS/SPIRAL) IS3589 TDC:TDG:07:06 Chennai Port	
	Work Order Details	P7273180468001
SI No.	Elements of Cost	
1	BASE PRICE including all basic cost elements in the scope such as Basic Pipe, P&F, Edge Preparation, Spiders, NDE etc	Rate per Meter
2	Painting Charges -Underground Piping	
	a)External - Red Oxide Zinc Phosphate (Alkyd Base to IS 12744) - 1 x 30 Microns - Primer Coat	Rate per Meter
	b)Internal - Isophthalic Polyester/acrylic co-polymer filled with glass flakes coating - 1000 microns (min)	Rate per Meter
3	Freight Charges upto Chennai Port	Rate per Meter
4	Unit All-inclusive price (Rate per Meter) (1+2a+2b+3)	
5	Total Rate (Rate per Meter * Total Quantity) (4) * 1550 metres	

ITEM DESCRIPTION:**SI No. 20 - CW (IS 3589) Pipe Dia 2132X18 MM UG - 90 Metres - Despatch to Chennai Port**

SI No	Tender Serial No ----->		20
	Item Description --Pipe Dia 2132X18 MM UG -90 Metres - Despatch to Chennai Port (LS/SPIRAL) IS3589-410 MPA TDC:TDG:07:06		
	Work Order Details		P7273180468003
	Elements of Cost		
1	BASE PRICE including all basic cost elements in the scope such as Basic Pipe, P&F, Edge Preparation, Spiders, NDE etc	Rate per Meter	
2	Painting Charges -Underground Piping		
	a)External - Red Oxide Zinc Phosphate (Alkyd Base to IS 12744) - 1 x 30 Microns - Primer Coat	Rate per Meter	
	b)Internal - Isophthalic Polyester/acrylic co-polymer filled with glass flakes coating - 1000 microns (min)	Rate per Meter	
3	Freight Charges upto Chennai Port	Rate per Meter	
4	Unit All-inclusive price (Rate per Meter) (1+2a+2b+3)		
5	Total Rate (Rate per Meter * Total Quantity) (4) * 90 metres		

ITEM DESCRIPTION:

SI No. 30 - CW (IS 3589) Pipe Dia 2540X18 MM UG -50 Metres - Despatch to Chennai Port

	Tender Serial No ----->		30
	Item Description --Pipe Dia 2540X18 MM UG -50 Metres Despatch to Chennai Port (LS/SPIRAL) IS3589-410 MPA TDC:TDG:07:06		
	Work Order Details		P7273180468002
SI No.	Elements of Cost		
1	BASE PRICE including all basic cost elements in the scope such as Basic Pipe, P&F, Edge Preparation, Spiders, NDE etc	Rate per Meter	
2	Painting Charges -Underground Piping		
	a)External - Red Oxide Zinc Phosphate (Alkyd Base to IS 12744) - 1 x 30 Microns - Primer Coat	Rate per Meter	
	b)Internal - Isophthalic Polyester/acrylic co-polymer filled with glass flakes coating - 1000 microns (min)	Rate per Meter	
3	Freight Charges upto Chennai Port	Rate per Meter	
4	Unit All-inclusive price (Rate per Meter) (1+2a+2b+3)		
5	Total Rate (Rate per Meter * Total Quantity) (4) * 50 metres		

1	TOTAL RATE FOR ENQ SL NO. 10 - CW (IS 3589) Pipe Dia Dia 3820X18 MM UG - 1550 Metres	₹ 0.00
	TOTAL RATE FOR ENQ SL NO. 20 - CW (IS 3589) Pipe Dia 2132X18 MM UG - 90 Metres	
	TOTAL RATE FOR ENQ SL NO. 30 - CW (IS 3589) Pipe Dia 2540X18 MM UG -50 Metres	
TOTAL RATE FOR ALL ITEMS		

Rate entered as total rate for all items will be used at arriving at L-I bidder. Any other loading factors will be taken into account, as applicable.

(Bidder seal and signature)

BANK GUARANTEE FOR PERFORMANCE SECURITY

Bank Guarantee No:

Date:

To

NAME

& ADDRESSES OF THE BENEFICIARY

Dear Sirs,

In consideration of the Bharat Heavy Electricals Limited ¹ (hereinafter referred to as the 'Employer' which expression shall unless repugnant to the context or meaning thereof, include its successors and permitted assigns) incorporated under the Companies Act, 1956 and having its registered office at _____ through its Unit at _____ (name of the Unit) having awarded to (Name of the Vendor / Contractor / Supplier) having its registered office at _____ ² hereinafter referred to as the 'Contractor/Supplier', which expression shall unless repugnant to the context or meaning thereof, include its successors and permitted assigns), a contract Ref No. _____ dated _____ ³ valued at Rs. _____ ⁴ (Rupees _____)/FC. _____ (in words _____) for _____ ⁵ (hereinafter called the 'Contract') and the Contractor having agreed to provide a Contract Performance Guarantee, equivalent to _____% (.... Percent) of the said value of the Contract to the Employer for the faithful performance of the Contract,

we, _____, (hereinafter referred to as the Bank), having registered/Head office at _____ and inter alia a branch at _____ being the Guarantor under this Guarantee, hereby, irrevocably and unconditionally undertake to forthwith and immediately pay to the Employer a maximum amount Rs. _____ (Rupees _____) without any demur, immediately on a demand from the Employer, . Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. _____.

We undertake to pay to the Employer any money so demanded notwithstanding any dispute or disputes raised by the Contractor/ Supplier in any suit or proceeding pending before any Court or Tribunal relating thereto our liability under this present being absolute and unequivocal.

The payment so made by us under this Guarantee shall be a valid discharge of our liability for payment thereunder and the contractors/supplier shall have no claim against us for making such payment.

We thebank further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Contract and that it shall continue to be enforceable till all the dues of the Employer under or by virtue of the said Contract have been fully paid and its claims satisfied or discharged.

We BANK further agree with the Employer that the Employer shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Contract or to extend time of performance by the said Contractor/Supplier from time to time or to postpone for any time or from time to time any of the powers exercisable by the Employer against the said Contractor/Supplier and to forbear or enforce any of the terms and conditions relating to the said Agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Contractor/Supplier or for any forbearance, act or omission on the part of the Employer or any indulgence by the Employer to the said Contractor/Supplier or by any such matter or thing whatsoever which under the law relating to sureties would but for this provision have effect of so relieving us.

The Bank also agrees that the Employer at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance without proceeding against the Contractor and notwithstanding any security or other guarantee that the Employer may have in relation to the Contractor's liabilities.

This Guarantee shall remain in force upto and including.....⁶ and shall be extended from time to time for such period as may be desired by Employer.

This Guarantee shall not be determined or affected by liquidation or winding up, dissolution or change of constitution or insolvency of the Contractor/Supplier but shall in all respects and for all purposes be binding and operative until payment of all money payable to the Employer in terms thereof.

Unless a demand or claim under this guarantee is made on us in writing on or before the⁷we shall be discharged from all liabilities under this guarantee thereafter.

We, BANK lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Employer in writing.

Notwithstanding anything to the contrary contained hereinabove:

- a) The liability of the Bank under this Guarantee shall not exceed.....⁸
- b) This Guarantee shall be valid up to⁹
- c) Unless the Bank is served a written claim or demand on or before¹⁰ all rights under this guarantee shall be forfeited and the Bank shall be relieved and discharged from all liabilities under this guarantee irrespective of whether or not the original bank guarantee is returned to the Bank.

We, _____ Bank, have power to issue this Guarantee under law and the undersigned as a duly authorized person has full powers to sign this Guarantee on behalf of the Bank.

For and on behalf of
(Name of the Bank)

Dated.....

Place of Issue.....

¹ NAME AND ADDRESS OF EMPLOYER i.e Bharat Heavy Electricals Limited

² NAME AND ADDRESS OF THE VENDOR /CONTRACTOR / SUPPLIER.

³ DETAILS ABOUT THE NOTICE OF AWARD/CONTRACT REFERENCE

⁴ PROJECT/SUPPLY DETAILS

⁵ BG AMOUNT IN FIGURES AND WORDS

⁶ VALIDITY DATE

⁷ DATE OF EXPIRY OF CLAIM PERIOD

⁸ BG AMOUNT IN FIGURES AND WORDS.

⁹ VALIDITY DATE

¹⁰ DATE OF EXPIRY OF CLAIM PERIOD

Note:

1. Units are advised that expiry of claim period may be kept 2/3 months after validity date.

2. In Case of Bank Guarantees submitted by Foreign Vendors-

- a. **From Nationalized/Public Sector / Private Sector/ Foreign Banks** (BG issued by Branches in India) can be accepted subject to the condition that the Bank Guarantee should be enforceable in the town/city or at nearest branch where the Unit is located i.e. Demand can be presented at the Branch located in the town/city or at nearest branch where the Unit is located.
- b. **From Foreign Banks** (wherein Foreign Vendors intend to provide BG from local branch of the Vendor country's Bank)
 - b.1 In such cases, in the Tender Enquiry/ Contract itself, it may be clearly specified that Bank Guarantee issued by **any of the Consortium Banks only** will be accepted by BHEL. As such, Foreign Vendor needs to make necessary arrangements for issuance of Counter- Guarantee by Foreign Bank in favour of the Indian Bank (BHEL's Consortium Bank). It is advisable that all charges for issuance of Bank Guarantee/ counter- Guarantee should be borne by the Foreign Vendor. The tender stipulation should clearly specify these requirements.
 - b.2 In case, Foreign Vendors intend to provide BG from Overseas Branch of our Consortium Bank (e.g. if a BG is to be issued by SBI Frankfurt), the same is acceptable. However, the procedure at sl.no. b.1 will required to be followed.
 - b.3 The BG issued may preferably be subject to Uniform Rules for Demand Guarantees (URDG) 758 (as amended from time to time). In case, of Foreign Vendors, the BG Format provided to them should clearly specify the same.
 - b.4 The BG should clearly specify that the demand or other document can be presented in electronic form.

CHECKLIST FOR DOCUMENT SUBMISSION		
S.No	Description of document - To be duly signed and filled wherever necessary	Document enclosed(Yes/No)
PART 1		
1	Techno Commercial Terms and Conditions (T&C)	
2	Pre-Qualification Requirement (PQR)	
	List of supporting documents for PQR	
	a) Copy of BIS certificate	
	b) Authorisation letter by manufacturer specific to this tender	
	c) List of manufacturing , testing and handling facilities	
	d) List of qualified personnel	
	e) Experience - PO copy / Supply completion certificate	
	f) Copy of ISO 9001 certificate	
	g) Audited balance sheet for past three years	
3	Tech. delivery condition for pipes TDG: 07: 06 Dt. 04.05.2012.	
4	Edge Preparation Drawing 4-80-999-93079 Rev. 00	
5	Spider Arrangement Drawing 4-80-999-93078 rev :00	
6	Painting scheme QP NO:7270: QPC:12 Rev. 02 dt. 26.05.2017	
7	Internal coating spec PC: E:GF:001 Rev 00 or latest revision	
	Supporting documents of Coating manufacturer (Clause (2B) of T & C)	
	a) Manufacturing details / Factory license	
	b) Copy of ISO certificate	
	c) Proof of experience	
	d) Typical quality plan for coating approved by reputed customer	
	e) NACE level 2 inspectors certification	
8	UnPriced bid Format.	
9	Integrity Pact	
10	Checklist (To be filled and submitted with Technical bid without fail).	
PART 2		
1	Price bid Format.	

Note Under Point 2) - a to g are applicable for new vendors only

VENDOR'S SIGNATURE

Guidance to bidders for Submission of Offer in Eprocurement

a) Invitation for bid

Tenders are invited through electronic mode from eligible suppliers in case of open tenders and from suppliers to whom the enquiry is addressed in case of Limited / Single Tender.

The offers shall be posted into the system before the date and time specified in the tender.

The offer shall be sent on single part / two part / three part basis as specified in the main tender document.

Bids shall be submitted through e-Procurement portal, <https://bheleps.buyjunction.in>, of M/s MJunctionServices Limited who are our solution provider.

b) Hardware and Software requirements for participating in e-tender

Requirement for participating in e-Procurement is as under:

- i) A Computer with internet connectivity (Internet Explorer Version 7 and above.
- ii) Digital Signature Certificate (Class 3- SHA2-2048 BIT- with both Signing and Encryption component separately).
- iii) JAVA (Version 1.8 Update 45).

c) Instructions for Registered Suppliers

For all types of tenders (Single / Limited / Open) an automated email alert regarding issue of the Tender will be sent by the e-procurement portal to all Suppliers registered with BHEL, PC for the item/s for which the tender is issued.

In case of open tenders, Registered suppliers with registered DSC will have to login with their user id/password & DSC and search for the Open Tender. On clicking the "Interest" button, they will get attached to that particular Open Tender.

Registered suppliers without DSC will have to first register themselves in <https://bheleps.buyjunction.in> as new supplier by clicking the "New Supplier" button.

To know the procedure for obtaining Digital Signature Certificate (DSC), suppliers who are not having the DSC are advised to visit our website www.bhel.com → Tender Notifications → Sample Checklist.

d) Instructions for new suppliers wishing to bid against open tenders

New, unregistered suppliers wanting to bid against open tender/s will have to first register themselves in <https://bheleps.buyjunction.in> as new supplier by clicking the "New Supplier" button.

After entering the Income Tax Permanent Account Number (PAN) details and pressing "Enter", they have to click the "Interested" button against the respective BHEL Unit for which they want to participate in the Open Tender and also fill up other relevant Company information as a one-time activity.

Then, a box for filling in a "preferred login id" will appear at the top of the page. After giving the "preferred login id" and then clicking the "Next" button, Supplier would have to map their DSC (which will be activated by M/s MJunction Services Limited), if available. Or else, by pressing "skip" button and selecting relevant procurement category from the list available in the next page and "agreeing" to the BHEL's terms & conditions, user id and password will be generated/activated once in 2 hours and mailed to their registered email id. Using this user id and password, Supplier has to login and map the Digital Signature Certificate they have purchased to their code.

The DSC will then be activated by M/s MJunction Services Limited. As required by the tender, the necessary documents have to be filled-in online, in the provided template.

Additional documents required are to be scanned and uploaded as .pdf file. Suppliers are advised to take note that the maximum space that is provided for uploading the documents that are to be attached is 300 MB.

However the size of an individual document cannot exceed 10 MB. For any clarification on submission of offer on line, attention of the Supplier/s is invited to our document "Supplier Manual" hosted in the homepage of the e-procurement portal. During normal business hours, helpline maintained by the service provider M/s MJunction is available for clarifying any doubts of supplier/s. The helpline numbers are 09840704941 or 09500199108.

SPECIAL CONDITIONS FOR IMPORT BIDDERS

- *Bidders should submit their offer for CFR / Chennai Port basis with freight break up details and Place of delivery INTVT6 CONCOR ICD.*
- *PORT OF LOADING SHOULD BE INDICATED WITHOUT FAIL.*
- *PORT OF DISCHARGE should be CHENNAI and PLACE OF DELIVERY - INTVT6 CONCOR ICD*

CONTAINERIZED CARGO

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 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. 14 FREE DAYS FOR Container detention shall be provided. If any deviation is taken by Tenderer, a loading of 22% on the freight rate per MT shall be considered by BHEL for arriving at the Total landed Cost.

In case of shipment through Containers on CFR basis, the BL should bear the endorsement that "14 free days for Container Detention is applicable".

Place of delivery – INTVT6 – CONCOR ICD should be clearly specified in the Bill of Lading.

BREKBUK CARGO

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.

Place of delivery – INTVT6 – CONCOR ICD should be clearly specified in the Bill of Lading.

AIR CARGO

With respect to air consignments, offers would be obtained only on FOB/(name of Loading) airport basis only. In case of any deviation from this term, the same would be clarified with vendors before opening of price bids.

INFORMATION ON REVERSE AUCTION

REVERSE AUCTION (AA: SSP: RA: 03) Issued on 26.09.2016

BHEL reserves the right to go for reverse auction (RA) (guidelines as Available on www.BHEL.com) instead of opening the sealed envelope price Bid, submitted by the bidder. This will be decided after Techno-commercial evaluation. Bidders to give their acceptance with the Offer for participation in RA. Non-acceptance to participate in RA may Result in non-consideration of their bids, in case BHEL decides to go For RA.

Those bidders who have given their acceptance to participate in Reverse Auction will have to necessarily submit 'process compliance form' (to The designated service provider) as well as 'online sealed bid' in the Reverse auction. Non-submission of 'process compliance form' or 'online Sealed bid' by the agreed bidder(s) will be considered as tampering of The tender process and will invite action by BHEL as per extant Guidelines for suspension of business dealings with suppliers/ Contractors (as available on www.BHEL.com).

The bidders have to necessarily submit online sealed bid less than or equal to their envelope sealed price bid already submitted to BHEL along With the offer. The envelope sealed price bid of successful L1 bidder in RA, if conducted, shall also be opened after RA and the order will be Placed on lower of the two bids (RA closing price & envelope sealed Price) thus obtained. The bidder having submitted this offer specifically agrees to this condition and undertakes to execute the Contract on thus awarded rates.

If it is found that L1 bidder has quoted higher in online sealed bid in Comparison to envelope sealed bid for any item(s), the bidder will be issued a warning letter to this effect. However, if the same bidder again defaults on this count in any subsequent tender in the unit, it Will be considered as fraud and will invite action by BHEL as per extant Guidelines for suspension of business dealings with suppliers/ Contractors (as available on www.BHEL.com)