



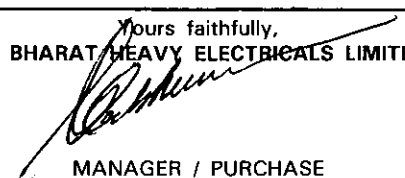
ENQUIRY
(INDIGENOUS)

BHARAT HEAVY ELECTRICALS LIMITED

(A Government of India Undertaking)
80, G.N.ROAD, T.NAGAR
Purchase Department - Piping Centre
CHENNAI - 600 017.
TAMILNADU (INDIA)

PHONE :
GRAMS : BHARATELEC
FAX NO :
E-mail :
Web :

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OFFICE COPY		Collective No.	Enquiry Date	Due Date for Quotation	
		4010900001	23.01.2009	30.01.2009 Due Date for	
RFQ No: 4010900001		Please quote Enquiry No, Date and due date in all correspondences. This is only a request for quotation and not an order			
Item	Description	Unit	Quantity	Delivery Quantity	Schedule Date
10	159386020001 PIPEDIA1829X14(SPI/LS)IS3589-410MPA-OG TDC: TDG:07:05 Length: 10000.00	M	20.000	180.00	31.03.09
20	1593859700UG PIPE DIA 2235X18 (SPI/LONGI)IS3589-410MP TDC: TDG:07:05 Length: 10000.00	M	10.000	20.00	31.03.09
30	159385970001 PIPEDIA2235X18(SPIRAL/LS)IS3589-410MPA TDC: TDC:TDG:07/05 Length: 10000.00	M	10.000	20.00	31.03.09
40	1593860100UG PIPEDIA3240X20UG(SPIRAL/LS)IS3589-410MPA TDC: TDG:07:05 Length: 10000.00	M	220.000	290.00	31.03.09
50	1593860100UG PIPEDIA3240X20UG(SPIRAL/LS)IS3589-410MPA TDC: TDG:07:05 Length: 10000.00	M	70.000	290.00	31.03.09
60	1593859700UG PIPE DIA 2235X18 (SPI/LONGI)IS3589-410MP TDC: TDG:07:05 Length: 10000.00	M	10.000	20.00	31.03.09
70	159385970001 PIPEDIA2235X18(SPIRAL/LS)IS3589-410MPA TDC: TDC:TDG:07/05 Length: 10000.00	M	10.000	20.00	31.03.09
80	159386020001 PIPEDIA1829X14(SPI/LS)IS3589-410MPA-OG TDC: TDG:07:05	M	160.000	180.00	31.03.09
The offers should reach us before the time of opening of tenders. The offers will be opened at 14:30 hours on the due date in the presence of the tenderers who may like to be present. Late tenders are liable to be rejected.			Yours faithfully, For BHARAT HEAVY ELECTRICALS LIMITED  MANAGER / PURCHASE (Piping Centre)		



BHARAT HEAVY ELECTRICALS LIMITED

(A Government of India Undertaking)
80, G.N.ROAD, T.NAGAR
Purchase Department - Piping Centre
CHENNAI - 600 017.
TAMILNADU (INDIA)

4010900001 / 23.01.2009

16013

Length: 10000.00

90	1593860200UG	M	35.000	35.00	31.03.09
	PIPEDIA1829X14(SPIL/LS)IS3589- 410MPA-UG				
	TDC: TDG:07:05				
	Length: 10000.00				

The offers should reach us before the time of opening of tenders.
The offers will be opened at 14:30 hours on the due date in the presence of the
tenderers who may like to be present.
Late tenders are liable to be rejected.

Yours faithfully,
For BHARAT HEAVY ELECTRICALS LIMITED

MANAGER / PURCHASE
(Piping Centre)



BHEL : PIPING CENTRE : CHENNAI – 600 017

ENQUIRY NO: 4010900001

DATE: 23.01.09

IMPORTANT INFORMATION TO BIDDERS.

1. This Tender is a **SINGLE PART BID for Prices.**
Type and quantum of work is detailed in "SCOPE OF WORK"
2. The quoted price shall be " FIRM " till the complete execution of the scope.
3. Mode of Operation – Reverse Auction
4. Last date for submission of offer **30.01.09 - Time - 11.00 Hours.**
5. Bid Opening Date **30.01.09 - Time - 11.30 Hours.**
6. The above bid shall be sent in a sealed cover duly indicating

Enquiry No. & date, Tender Opening date and " CW PIPING - IS 3589 – KODERMA AND DURGAPUR "

To

ADDL.GM / PROCUREMENT

BHEL - Piping Centre

Old No 93, (New No:80) G N Chetty Road

T Nagar / Chennai 600 017 . PHONE : 28158819 / 28161299

SCOPE OF WORK :

BHEL requires the below mentioned quantities of various sizes of Welded Pipes – Pipes either **Spiral or Longitudinal Seam Weld** conforming to IS 3589 FE 410 Pipes with Internal and External Painting and as per TDC-TDG:07:05 and to be delivered to BHEL Project Sites. The raw material plate is to be arranged by suppliers themselves.

LIST OF ITEMS

Enq. Sl.no	Pipe Size in MM OD x Thickness	Hydro Test (Bars)	Qty. Mtrs	Destination Project Site	Delivery	Work Order Details
01	1829 x 14 OG	21	20.00	DURGAPUR	MAR '09	P 6956-1-80-468-003
02	2235 x 18 UG	26	10.0	DURGAPUR		P 6956-1-80-468-002
03	2235 x 18 OG	26	10.0	DURGAPUR		P 6956-1-80-468-005
04	3240 x 20 UG	18	220.0	DURGAPUR		P 6956-1-80-468-001
05	3240 x 20 UG	18	70.0	KODERMA		P 6949-1-80-468-013
06	2235 x 18 UG	26	10.0	KODERMA		P 6949-1-80-468-014
07	2235 x 18 OG	26	10.0	KODERMA		P 6949-1-80-468-015
08	1829 x 14 OG	21	160.0	KODERMA		P 6949-1-80-468-016
09	1829 x 14 UG	21	35.0	KODERMA		P 6949-1-80-468-017

Total Weight ~ 635 MT

TECHNICAL CUM COMMERCIAL

Technical :

1. The bidder shall supply the Welded Pipes, as per IS 3589 Specification and BHEL TDC. The Bidder shall also comply with the following BHEL documents.
 - a. Technical requirements viz. Length, Edge Preparation, Spider Arrangement, Quality Plan etc, as finalized and agreed in our Enquiry No. BHEL:PC:PUR:CW:IS 3589 : 001 Dt. 24.04.08
 - b. Painting requirements for CW Piping as per the enclosed Painting QP for Koderma and Durgapur projects.

o/c



BHEL : PIPING CENTRE : CHENNAI – 600 017

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Commercial :

1. The prices quoted by the Bidder shall be on F.O.R. Ex-works basis with Freight extra for transportation of Finished pipes to various project sites. Price quoted shall be " FIRM " till the execution of the complete scope with raw material plate in their scope.
2. Payment for freight will be based on per meter.
3. The bidder shall furnish all the breakups as requested in the price bid format as enclosed.
4. The bidder shall clearly indicate all the applicable Taxes / Duties / CESS.
5. Delivery - March'09.
6. Bidder shall give a minimum validity of 60 days for the price offer.
7. All other commercial terms as finalized and agreed in our Enquiry No. BHEL:PC:PUR:CW:IS 3589 : 001 Dt. 24.04.08

PRICE :

The bidder shall provide the price strictly as per the price format annexed herewith. In this addition to the hard copy, the bidder has to submit in soft copy also in excel format (Preferably in CD).

- a. Base Price shall include Cost of Raw Material plus conversion cost per Mtr of bare pipe including Edge Preparation and providing Spider Arrangement and Testing as per BHEL TDC : TDG : 07 : 05.
- b. Ordering shall be on FOR - Site basis.
- c. Percentage of applicable Taxes, Duties, CESS, Service Tax on Transportation etc shall be clearly indicated .
- d. Service Tax, if included in Freight or extra, shall be clearly indicated.
- e. A soft copy of the price format with price details are also to be sent along with price bid.

Prices quoted shall be " FIRM " till complete execution of the scope and bidder shall give **validity** of this price offer for a period of **minimum 60 days** from the date of opening of Price Bids.



BHEL : PIPING CENTRE : CHENNAI – 600 017

- 3 -

LIST OF DOCUMENTS :

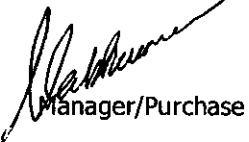
1. Painting Quality Plans for Koderma and Durgapur

DVC Durgapur Steel TPS - Painting QP Reference No. 6956 : QPC : 01. Rev 00 Dt. 07.09.07

2. Business Rule Document for Reverse Auction
 3. Price Calculation Sheets
- } shall be sent through Service Provider
}

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

- **Pre Qualified** is the criteria for consideration for other than the BHEL Approved Vendors. After qualifying for registration, the new Vendors, may be considered for future inline with their system and policy. Such Vendors will not be considered in this Enquiry.
- The new Vendors may download Vendor registration forms from BHEL Web Site www.bhel.com and submit all relevant data for formal registration.


Manager/Purchase

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:

OD:- Upto NB 1600 mm: ± 4 mm; Above NB 1600 mm: ± 6 mm

Thickness:- Upto 14mm : $+1.3$ mm / -0.8 mm; Above 14 mm : $+1.4$ mm / -0.8 mm.

Length:- for OD upto 1300 mm : $+10$ mm/ -0 mm;

for OD above 1300 mm : ± 50 mm

Ovality (Difference between major and minor inside diameter) : 0.5% maximum

Squareness of ends: The ends of pipe section shall not vary by more than 3 mm 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.

- 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 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 The spiral welds/butt welds of length 100 mm from both the ends of the pipe shall be radiographically tested.

6.0 HYDROSTATIC PRESSURE TEST

- 6.1 Each pipe shall be subjected to a hydraulic test pressure as per IS: 3589 .
(i.e., using the formula $P = 2ST / D$)

7.0 INSPECTION

- 7.1 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.

P.Elangovan, QA
K.Ganeshan, MM

Approved by

C. Karunakaran, Engg
K. Vedaprasad, QC

(Handwritten mark)

8.0 PAINTING AND PACKING

- 8.1 Unless otherwise specified in the Purchase Order, all the pipes shall be coated with resin type translucent dry type rust preventive on the outside; pipes of diameter above NB 450 mm, shall be coated inside also.
- 8.2 Spiders are to be provided on both ends of the pipes as per the drawing - if indicated in the enquiry / Purchase Order.

9.0 MARKING

- 9.1 All pipes shall be paint stencilled, hard punched with the following details.

Paint Stencil

- > Specification
- > Heat number
- > Pipe number
- > Manufacturer's identification
- > Material Code
- > Size

Hard punch

- > Specification
- > Heat number
- > Pipe number
- > Manufacturer's identification

- 9.2 In addition to the above, for the pipes directly despatched to project site, the following details (furnished in the P.O. or separately) shall be paint stencilled & hard punched on both ends of the pipes

- | | | |
|-----------------|----------|----------------|
| > Work order No | > DU No | > Project name |
| > Quantity | > Weight | |

10.0 CERTIFICATES

- 10.1 Three original test certificates typed in English shall be submitted along with the Inspection report.

- 10.2 The test certificate shall furnish the following details.

- a. Purchase Order references.
- b. Test Certificate number.
- c. Specification, grade, size, quantity
- d. Heat number of plate (or pipe number with traceability to heat number)
- e. Chemical composition and mechanical properties
- f. Hydrostatic pressure test report
- g. RT Report.

P.Elangovan, QA K.Ganeshan, MM	Approved by C. Karunakaran, Engg K. Vedaprasad, QC
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1	Approved	Approved except as noted (no submission required).
2	Approved except as noted (submission not required).	No! Approved

E. V. C. Letter ref. :
DANOMAR VALLEY CORPORATION
 Electricity Department

This approval is for general arrangement only and does not relieve the contractor of responsibility for conformity to specification and correct details and fittings of parts when assembled.

Engineer *[Signature]* Date: 5-16-67

NAME & SIGNATURE

BHARAT HEAVY ELECTRICALS LIMITED.		QUALITY PLAN FOR CW PIPING (STRAIGHT PIPES SIZE NB ≥ 1000 MM)		QP NO : 6958 : QPC : 01
PIPING CENTRE CHENNAI - 17		PROJECT: DVC - DURGAPUR STEEL TPS (2 X 500 MW)		REV. NO : 00
QUALITY DEPARTMENT.		BHEL CUSTOMER Nos : 0652 , 0653 , 6956 , 6957		DATE : 07.09.2007
				PAGE : 2 of 2

QA 03	COMPONENT & OPERATION	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	AGENCY	REMARKS
1	2	3	4	5	6	7	8	9	M B	11
3.0	Coating (External) - Over ground piping.									
3.1	Surface preparation of out side surface	Power tool cleaning / Rotary wire brush	Major	Visual	100%	Free from all dirt, oil, grease, rust, scale, weldslag, fluxdeposit, foreign matters etc	Minimum DFT: 50 microns ✓	HC	P	V
	Primer	Red oxide Zinc Phosphate primer to IS:127/44	Major	Visual & Elcometer	100%	Minimum DFT: 75 microns* ✓		HC	P	W
	Finish paint	Synthetic enamel IS2932 smoke grey shade No.692 As per IS: 5	Major	Visual & Elcometer Measurement	100%					
3.2	Coating (External) - Burried Piping No painting required for Pipes burried (under ground) - as Coal Tar Tape wrapping shall be carried out at site. Surface shall be cleaned with wire brush / power tool									
4.0	Marking & Identification	Work order NO, Du No, Length, Makers Identification	Major	Visual	100%	Each pipe punched & stenciled As per P.O		HC	P	W

APPROVED PAINT SUPPLIERS

- (1) BERGER PAINTS
- (2) SHALIMAR PAINTS
- (3) ASIAN PAINTS
- (4) JENSION & NICHOLSON
- (5) CDC CARBONITE.

1	Approved	3	Approved except as noted resubmission required.
2	Approved except as noted resubmission not required.	4	Not Approved

D. V. C. Letter ref. :
DAMODAR VALLEY CORPORATION
 Electricity Department
 This approval is for general arrangement only and does not relieve the contractor of responsibility for conformity to specifications and correct details and fittings of parts when assembled.
 Engineer: *[Signature]* DATE: 10.10.07

* Total DFT =
 Primer + Finish
 125 microns min.