	BHARATH HEAVY ELECTRICAL LIMITED RAMACHANDRAPURAM HYDRABAD-502032 ANDHRA PRADESH, INDIA		Phones: 3021902,3307353 Telex : 425-6212,6248,6777,6778, Fax : 009-040-0321910,3021954,3020195				0422-240		ENQUIRY	
									PURCHASE DEPARTMENT	
SUPPLIER CODE: C70003 Name&Address		Enquiry No. D2095000000338VV1		Enq. Date 11 -JAN- 10		No. of. Items 003		DUE DATE OF QUOTATION 02-FEB-10		
Enq. Sl.No	Indent (MPR) No.	Material Code	Drawing No. Description& Specification	Unit Code	Unit	Quantity	Delivery Schedule			
							Date	Quantity		
001	5000000338 001	HY1091092150	SS WELDED PIPES TO SPECN.,HY 10992 REV:00 AMNDT. 00 (ASTM A 312 GR TP 321) SIZE: 114.3 X 3.05 X 6000MM	72	MTR	1800.000	15-APR- 2010	1800.000		
002	5000000338 002	HY1091092168	SS WELDED PIPES TO SPECN.,HY 10992 REV:00 AMNDT. 00 (ASTM A 312 GR TP 321) SIZE: 168.3 X 3.4 X 6000MM	72	MTR	900.000	15-APR- 2010	900.000		
003	5000000338 003	HY1091092010	SS WELDED PIPES TO SPECN.,HY 10992 REV:00 AMNDT. 00 (ASTM A 312 GR TP 321) SIZE: 219 X 3.8 X 4000MM & ABOVE	72	MTR	900.000	15-APR- 2010	900.000		
Remarks: 1.THIS IS TWO PART BID. PLEASE SUBMIT PRICE & TECHNICAL BID SEPERATELY. 2.ALL PIPES SHALL BE INSPECTED AND ATTESTED BY LLOYDS/SGS/BV AND THEIR CHARGES SHALL BE INCLUSIVE..3) BHEL RESERVES THE RIGHT TO GO FOR REVERSE AUCTION INSTEAD OF OPENING THE SUBMITTED PRICE BID.			TEST CERTIFICATE REQ: YES GUARANTEE RAQ: YES SAMPLE REQ: NO		For and on-behalf of Bharat Heavy Electricals Limited VENKATESWAR V SR MANAGER / GENERAL PURCHASE(CMM)					

PIPES

ENQUIRY NO: D2095000000338VV1 DATE: 11/01/2010 No. of Items : 03
TECHNICAL BID

SL.NO	CONDITION	REQUIREMENT	SUPPLIERS REMARKS (YES / NO)
1.	Technical	Conforming in all respects to specification as per Enquiry. Mills Test Certificate shall be furnished as per BHEL Specification. Specifications are as per annexure B	
2.	Length	The length of each pipe should as per Enquiry. All pipes should confirm to one length only. (BHEL reserves the right to accept or reject alternative length at its discretion)	
3	Minimum order quantity	Minimum order quantity is not acceptable. However on case to case basis, BHEL may consider at its discretion.	
4	Inspection Charges	Inspection charges to be included in the price. Do not mention inspection charges as "Extra" or actuals. Such offers will be rejected.	
5	Name of Inspection Agency	As per BHEL Specification / Additional requirement as per Enquiry.	
6.	Mill details	Name of mill. Whether IBR approved (If Applicable). Change of mill name not acceptable at the time of supply.	
7	Mills T.C incase of ex-stock supplies	Copies to be furnished. Offers without TCs will be rejected. In case of ex-stock supplies. Original TC should be furnished along supplies. BHEL reserves the right to accept based on its experience with the mill.	
8	Ex- stock	Incase of ex-stock supplies, please confirm availability of entire enquiry quantity. In case the material is being offered from stock the tenderer should furnish complete TCs along with the offer. In the event of placement of order the tenderer should confirm submission of original TCs. The tenderer should be in a position to supply only the particular item for which TCs have been furnished and no change will be entertained. The offer from stockists will be considered only after specific acceptance of above conditions.	

COMMERCIAL BID

SL.NO	CONDITION	REQUIREMENT	SUPPLIERS REMARKS (YES / NO)
1	P & F Charges as per Specification	To be included in Price.	
2	Penalty	Penalty will be levied @ 1/2% per week for the quantity/ value of the undelivered portion of the order subject to a maximum of 10% of undelivered quantity/ value of order. In case of non acceptance of penalty 10% will be loaded on to basic price.	
3	Terms of Delivery	1) FOR - BHEL HYDERABAD (for indigenous Vendors). In case of vendors quote on Ex works basis 5% will be loaded on to the basic price. 2) CFR - Mumbai for imported vendors (the prices quoted should be inclusive of freight charges, inclusive of inspection charges. Do not give break up of prices. Offers not conforming to above will be rejected.	
4	Payment terms	a) 100% payment on receipt and acceptance of material within 90 days from the date of despatch/ invoice (for other than SSI units) only.	
4.1	For Indigenous vendors:-	b) 100% payment on receipt and acceptance of material within 45 days from the date of despatch / invoice (for SSI units) only. In case non acceptance of payment terms @ 18% per annum interest will be loaded.	
4.2	For foreign supplier:-	Letter of Credit will be established 1 month prior to dispatch and valid for 3 months. If LC require along with PO LC charges for more than 3 months will be to supplier A/c.	
5	Validity	The offer should be valid for 30 days from the date of Price Bid opening.	
6	Guarantee	The material shall be guaranteed for a period of 12 months after putting into service or 18 months after despatch, whichever is later.	
7	Delivery	Delivery is the essence of the contract. BHEL reserves the right to reject offers on basis of unsuitable deliveries.	
8	Rejection Replacement	In case of any rejections the supplier will be arranged immediate replacement.	

NOTE:

- BHEL Terms and Conditions of Contract (attached) are applicable.
- BHEL reserves the right to reject incomplete / ambiguous offers without assigning any reason thereof.
- The tenderer should only submit Technical / Commercial Bid and Price Bid only as per this format. Do not submit your offer on any other sheet.
- Offers not meeting our requirement because of long delivery period are liable to be rejected by BHEL at its discretion.
- Offers Indicating "extra" or at actuals" are not acceptable and are liable to be rejected.
- Offers shall be submitted by manufacturers or their marketing agents. In case of offers through agent an authorization letter with suitable validity should be furnished.
- Orders will be finalised on lowest technically suitable offer basis item wise.
- Price should be firm till completion of supplies.
- Tenderers who would like to register with BHEL as approved may fill up the questionnaire available in www.bhel.com and furnish separately.
- Stockists / Traders shall indicate manufacturing mill name and their details from where pipes shall be supplied and mill name should not be changed in place of order.
- BHEL reserves right to go for a Reverse Auction instead of opening the submitted Price Bid.

Signature & Seal of tenderer

PRICE BID

ENQUIRY NO. _____

DATE: _____

Enq Item No.	Material Specification	Description (Size,OD,Tk,Lg)	Qty (in Mtrs)	Rate / Mtr	Rate In words	Remarks (Plese mention extra taxes) applicable, if any

Signature & Seal of tenderer
Date.



**PLANT PURCHASING
SPECIFICATION
HYDERABAD**

HY 10992

REV. NO: 00

PAGE 1 OF 4

**SEAMLESS AND WELDED AUSTENITIC STAINLESS
STEEL PIPES (Ti STABILIZED)**
(GRADE : AISI 321)

1.0 GENERAL:

This specification governs the requirements of seamless and welded austenitic stainless steel pipes for high temperature and general corrosive service.

2.0 APPLICATION :

General Engineering purposes.

3.0 DELIVERY CONDITION:

Hot or cold finish pipes.

4.0 COMPLIANCE WITH STANDARDS:

This specification, in general complies with requirements laid down in ASTM A 312, grade TP 321 for welded and seamless pipes.

5.0 DIMENSIONS AND TOLERANCES :

5.1 Sizes: Our order shall clearly state outside diameter and wall thickness of the tube

Pipes shall be supplied in lengths of not less than 4.5 metres unless exact lengths are called for in the order.

5.2 Tolerances: Pipes shall comply with the dimensional tolerances as specified in ASTM A 530

6.0 MANUFACTURE:

The steel shall be made by electric furnace or similar process agreed upon by purchaser. Pipes shall be welded using an automatic welding machine with no addition of weld filler metal. The pipes may be hot or cold finished and shall be pickled free of scale if it has not been bright annealed.

7.0 FREEDOM FROM DEFECTS:

The finished pipes shall be straight and free from injurious defects and shall have a workman like finish.

Revisions:			Issued : STANDARDS ENGINEERING DEPARTMENT		
Rev No.	Rev. Date	Revised:	Prepared: Matls. Engg	Approved: GM (E&CC)	Date: AUG., 1991

**8.0 HEAT TREATMENT:**

All pipes shall be supplied in the following heat treated condition.

Solution Annealing: At a temperature of 1040°C to 1060°C and subsequently quenching or cooling rapidly to achieve the Mechanical properties specified.

NOTE: If the temperature of annealing exceeds 1065°C then a low temperature re-solution annealing has to be carried out at 840°C-900°C as a stabilization treatment, for upto 5 hrs, depending on the thickness of the section.

9.0 CHEMICAL COMPOSITION:

The analysis of the material shall be as follows:

Element	C	Si	Mn	Ni	Cr	S	P	Ti
%. Min	--	-	-	9.00	17.00	-	-	5x%C
% Max.	0.08	0.75	2.00	13.00	20.00	0.030	0.040	0.70
Permissible Variation	+0.01	+0.05	+0.06	-0.10 +0.15	+0.02	+0.005	+0.008	+0.05

10.0 TEST SAMPLES:

10.1 Chemical Tests: One sample per melt shall be tested.

10.2 Mechanical Tests: One tensile test shall be made on a specimen for lots of not more than 100 pipes. For lots of more than 100 pipes, two tensile tests have to be done.

10.3 Flattening Test: For material heat treated in a batch type furnace, flattening tests shall be made on 5 percent of the pipe from each heat treatment lot. For material heat treated by the continuous process, this test shall be made on a sufficient number of pipes to constitute 5 percent of the lot, but in no case less than two lengths of pipe.

NOTE: For welded pipes whose diameter exceeds 250mm, a transverse guided face bend test of the weld may be conducted instead of a flattening test in accordance with the method outlined in the steel tubular product supplement of methods and definitions of ASTM A 370. The ductility of the weld shall be considered acceptable when there is no evidence of cracks in the weld or between the weld and base metal after bending. Test specimens from 5% of the lot shall be taken from the pipe or test plates of the same material, the test plates being attached to the end of the cylinder and welded as a prolongation of the pipe on longitudinal seam.

10.4 Hydrostatic Test: Each length of finished pipe shall be subjected to the Hydrostatic test.

NOTE: The term 'Lot' applies to all pipes of the same notional size and wall thickness, which are produced from the same heat of steel and subjected to the same finishing treatment 1) in a continuous heat treatment furnace or 2) in a batch type heat treatment



**PLANT PURCHASING
SPECIFICATION
HYDERABAD**

HY 10992

REV. NO: 00

PAGE 3 OF 4

11.0 MECHANICAL PROPERTIES:

11.1 Tensile: When tested in accordance with ASTM A530, the test pieces shall show the following properties:

Tensile strength : 515 N/mm² Min.

Yield strength : 205 N/mm² Min.

Elongation on 50 mm gauge length:

a) Longitudinal : 35 Percent Min.

b) Transverse : 25 Percent Min.

11.2 Flattening Test: Shall be conducted as specified in ASTM A 530 and shall meet the requirements specified therein.

11.3 Hydrostatic Test: Shall be conducted as specified in ASTM A 530 and shall meet the requirements specified therein.

12.0 ULTRASONIC EXAMINATION:

If specified in the purchase order, ultrasonic testing shall be conducted on each pipe in accordance with Corporate Standard AA 085 01 45 and the norms of acceptance shall be as specified therein.

13.0 TEST CERTIFICATES:

Three copies of test certificates shall be supplied unless otherwise stated in the order.

Test certificate shall bear the following information:

BHEL References:

HY 10992

BHEL Order No.


Supplier's Reference:

Supplier's Name

Heat No.

Batch/Identification No.

Process of manufacture

HY 10992	PLANT PURCHASING SPECIFICATION HYDERABAD	
REV. NO: 00		
PAGE 4 OF 4		

Results of Tests:

Results of chemical analysis and all mechanical tests called for in this specification.

14.0 PACKING AND MARKING:

As per BHEL Corporate Standard AA 049 00 01.

15.0 REPAIR OF DEFECTS:

Repairs involving fusion welding are prohibited.

Wherever defects are repaired by mechanical means, the wall thickness requirements shall be satisfactorily met with and the surfaces shall be smoothly dressed up without any sharp edges.