

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

Piping Centre , 80, G. N. Chetty Road, CHENNAI – 600 017
Phone: 91 (044) 28161245, Fax 044 28161 341 e-mail: prs@bhelmpc.co.in

REF: ENQ NO:PC9020

DT: 29.04.2010

Sub: Procurement of alloy steel plates- SA387Gr91.

Ref: Enquiry No:PC:9020 dt 29.04.2010

Please find the following tender documents for reference.

- 1. List of items.
- 2. Tech. delivery condition TDG: 110 rev 00.
- 3. General Terms and conditions.
- 4. Checklist separate lists are attached for indigenous/foreign vendors (To be filled and submitted with Technical bid without fail).
- 5. Bank Guarantee format.

Due date for submission of offers: 17.05.2010 before 14.30 hrs IST.

Only manufacturers or their authorized representatives can submit offers. Offers from traders /stockist will be rejected.

DGM/Purchase BHEL / Piping Centre 80,GN Road, T.Nagar

Ph: 044-28161245

Chennai-600017

ENQ PC 9020 DT 29.04.10

LIST OF ITEMS

				-
Total wt IN KGS	19625	18840	19625	19625
aty nos	∞	9	5	4
Width in Meters	2.5	2.5	2.5	2.5
PL THK in mm Length in Meters Width in Meters qty nos Total wt IN KGS	5	5	5	5
PL THK in mm	25	32	40	50
Description in MM	Plate 25 X 2500 X 5000	Plate 32 X 2500 X 5000	Plate 40 X 2500 X 5000	Plate 50 X2500 X 5000
SI no	1	2	8	4

MATERIAL SPECIFICATION SA 387 Gr 91 cl II

PAYMENT WILL BE MADE ONLY ON THEORETICAL WEIGHT

TECHNICAL DELIVERY CONDITIONS: TDG 110:00

DELIVERY REQD WITHIN 4 MONTHS FROM LOI/PO DATE



Bharat Heavy Electricals Limited, Piping Centre, Chennai Technical Delivery Conditions for SA 387 Grade 91 Alloy Steel plates for pressure part, structural attachment.

TDG: 110

Dt: 23.04.2010 Page 1 of 2

1.0 SCOPE

- 1.1 This specifies the requirements of Materials, in the form of hot rolled plates of sizes specified in the purchase order, over and above the requirements of ASME Material specification, SA-387 Gr 91 Class 2.
- 1.2 Dimensional tolerance shall be as per SA20.

2.0 MANUFACTURING PROCESS & CHEMISTRY

- 2.1 Fully killed steel, Final rolling in lengthwise, Vacuum treatment for thick.>=50mm.
- 2.2 Maximum Copper content 0.15% & Maximum Aluminium content 0.015%.
- 2.3 Ladle analysis: min.1 sample per cast; Product analysis: min.1 sample per plate as rolled.

3.0 HEAT TREATMENT (HT)

- 3.1 (i) Normalised at 1040°C to 1070°C , soaking time 1/2 hour per inch of thickness (one hour minimum), followed by air cooling to a minimum of 100°C, preferably cooled to ambient, and (ii) Tempered at 760°C +/- 10°C for one hour per inch of thickness (two hours minimum)
- 3.2 The actual heat treatment details shall be furnished in Mill Test certificate.

4.0 MECHANICAL TESTS

Mechanical tests shall be carried out on heat treated Plates.

Extent of test: for each rolled plate

Orientation of Specimen: Transverse to rolling direction.

5.0 HARDNESS TEST

Hardness test shall be carried out on each plate. The values shall be 180 - 250 BHN and shall be indicated in the Test certificate.

6.0 NON DESTRUCTIVE TEST AFTER HEAT TREATMENT

All plates shall be subjected to Ultrasonic test in accordance to SA 578 and accepted according to SA578 Level B. Monitoring by BHEL approved third party inspecting agency.

7.0 FINISH AND REPAIRS

Plates to be free from loose mill scales, edge cracks & cther injurious defects. Repairs by fusion welding is prohibited. Mechanical removal of defect permitted subject to minimum thickness and as allowed by code.

S. Jayakumar, Engg

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P. Elangovan, QA

Approved by

K. Vedaprasad, Qe

K. Ganeshan, MPL



Bharat Heavy Electricals Limited, Piping Centre, Chennai Technical Delivery Conditions for SA 387 Grade 91 Alloy Steel plates for pressure part, structural attachment.

TDG: 110 Dt: 23.04.2010

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POSITIVE MATERIAL IDENTIFICATION (PMI) 8.0

Each plate shall be checked for the correctness of the material during manufacturing and final inspection using X-ray fluorescence principle or spark emission spectrography.

9.0 **MARKING**

Specification, grade, Melt number, Plate number, Maker's emblem/code, Inspecting Authority's seal to be stamped with low stress stamp on each plate along rolling direction & bordered by white paint.

PO No., material code, "BHEL - Piping Centre" & weight to be paint stencilled on each plate.

INSPECTION AND CERTIFICATION 10.0

- 10.1 All plates shall be inspected at works & test certificates countersigned by Inspecting Authority approved by IBR for country of origin (to be concurred by BHEL)
- 10.2 In case of Vendors approved by IBR as well known Steel maker, the self certified Test Certificate prepared in IBR approved format is accepted.
- 10.3 Three original Test certificates (in the format approved by Indian Boiler Inspectorate) typed in English for each product with following details shall accompany the product.
 - a. PO no.(BHEL), TDC no., Test certificate no., Plate size & Quantity.
 - b. Specification and Grade with applicable year of code, Heat number.
 - c. Heat number wise quantity and Plate number details
 - d. Steel making process, Chemistry including incidental elements Ladle and Product analysis.
 - e. Mechanical, NDE & other test results with reference & acceptance standards.
 - Heat Treatment details of material and test coupons like temperature. soaking time, cooling medium etc.
 - g. Print of the stamp of Inspecting Officer, which is used on the plate.
- 10.4 NDT. PMI reports shall be furnished separately along with the Test certificate.

11.0 **END USE**

These plates are used for the hot or cold forming of boiler pressure retaining component at stress levels and temperatures permitted by ASME Boiler and Pressure Vessel codes Section -I and Indian Boiler Regulations.

Approved by

K. Vedaprasad, QC

S. Jayakumar, Engg All P. Elangovan, QA

K. Ganeshan MPL

GENERAL TERMS AND CONDITIONS.

TWO PART BID, THE FOLLOWING PROCEDURE SHALL BE FOLLOWED.

PART-I TECHNICAL - CUM -- COMMERCIAL PART :-

This part of the Bid shall contain following Technical and Commercial Points only (Except Price Portion)

- ACCEPTANCE TO OUR TDC (TECHNICAL DELIVERY CONDITION) AS GIVEN IN THE TENDER. DEVIATION IF ANY
 SHALL BE CLEARLY INDICATED. IF THERE IS NO SPECIFIC INDICATION ABOUT DEVIATION IT WILL BE TAKEN AS
 TOTALLY ACCEPTED AND PROCESSED.
- Copy of price bid without price part to know the items for which you are quoting against this tender.

(MONEY VALUES SHALL NOT BE INDICATED I.E.UN PRICED BID).

Part II PRICE PART:

The unit price on weight basis -

FOB Sea port (or) C&F Chennai seaport India (foreign vendors)

FOR Trichy basis (indigenous vendors) and shall include all testing, inspection , packing & Forwarding charges. PAYMENT WILL BE MADE ON THEORETICAL WEIGHT (DENSITY 7.85)

THIS PART OF THE BID SHALL CONTAIN ITEM-WISE PRICE DETAILS AGAINST EACH ENQUIRY SL.NO. AND THE SAME SHALL BE PUT IN A SEALED COVER DULY INDICATING TENDER NO, TENDER OPENING DATE, AND "PRICE BID" ON THE SEALED COVER. PRICE QUOTED BY THE SUPPLIER, ELEMENT WISE INCLUDING TAXES & DUTIES SHALL BE AS PER THE FORMAT ENCLOSED. SOFT COPY OF THE SAME ALSO TO BE PROVIDED IMMEDIATELY AFTER THE PRICE BID OPENING. INCASE OF DIFFERENCE BETWEEN THE TWO, HARD COPY WILL PREVAIL AND BINDING ON THE SUPPLIER. PRECONDITIONS FOR PRICE WILL NOT BE ACCEPTED.

BOTH THE ABOVE REFERRED PARTS OF THE BID EACH SEALED IN A SEPARATE COVER SHALL BE PUT IN A SEALED OUTER COVER DULY INDICATING TENDER NO. & DATE, TENDER OPENING DATE AND TO BE SENT TO

DGM / PURCHASE BHEL : PIPING CENTRE 80, G.N CHETTY STREET T.NAGAR, CHENNAI 600 017

- VENDORS WILL BE EVALUATED FOR TECHNICAL CAPABILITY AND ONLY TECHNICALLY ACCEPTABLE VENDORS
 PRICE OFFER WILL BE CONSIDERED FOR THIS ENQUIRY. TECHNICALLY NOT ACCEPTABLE OFFERS SHALL BE
 REJECTED.
- VENDORS SHALL SUBMIT THEIR OFFER FOR THE ITEMS WHICH ARE WITHIN THEIR MANUFACTURING RANGE
 ONLY. VENDORS SHALL PROVIDE DETAILS OF THEIR PAST EXPERIENCE IN MANUFACTURING OF SA 387 GR 91
 PLATES.
- OTHER THAN BHEL APPROVED VENDORS WILL BE EVALUATED FOR APPROVAL BEFORE CONSIDERING THE
 OFFERS.
- BHEL RESERVES THE RIGHT TO CANCEL THIS TENDER WITHOUT ASSIGNING ANY REASONS WHAT SO EVER

- DEVIATION TAKEN AFTER PLACEMENT OF ORDER WILL NOT BE ACCEPTED (BOTH TECHNICAL & ON DELIVERY)
- SUPPLIERS TO ANALYZE IN DETAIL, AT THE TIME OF SUBMISSION OF OFFER WITH REFERENCE TO OUR "DELIVERY" REQUIREMENT OF PLATES AND CONFIRM COMPLIANCE OR OTHERWISE.
- TO ENSURE CORRECT & TIMELY SUBMISSION OF ALL ORIGINAL TEST CERTIFICATES. THERE SHOULD NOT BE ANY DISCREPANCIES IN DETAIL LEADING TO TIME WASTAGE IN CLARIFICATION AND REVISIONS.
- BHEL RESERVES THE RIGHT TO INCREASE OR DECREASE THE TENDERED QUANTITY WHICH MAY VARY BY PLUS MINUS 15%.
- 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.
- THE PRICES QUOTED SHALL BE FIRM UNTILL THE FULL EXECUTION OF THE CONTRACT. PRICE VARIATION CLAUSE IS NOT ACCEPTABLE. NO ADVANCE PAYMENT SHALL BE MADE.
- BHEL RESERVES THE RIGHT TO NEGOTIATE OR RE-FLOAT THE TENDER OPENED IF L1 PRICE /OR OTHER DETAILS
 ARE NOT ACCEPTABLE TO THEM
- BHEL RESERVES THE RIGHT TO NEGOTIATE THE L1 RATE.
- BHEL RESERVES THE RIGHT TO ORDER ON MORE THAN ONE VENDOR AT THE LOWEST ACCEPTABLE PRICE TO
 BHEL
- BHEL reserves the right to go for a Reverse Auction instead of Opening the submitted sealed bid, which will be decided after technical evaluation.
- VENDORS ARE REQUESTED TO FILL THE CHECK LIST AND SEND ALONG WITH THE TECHNICAL OFFER.

ENQUIRY NO: PC9020 DT 29.04.2010 - CHECK LIST (FOREIGN)

Vendors are requested to give confirmation against each point and send it along with the technical cum commercial part without fail.

Sl No	Detalis of Enquiry	Confirmation by vendor			
1	This is a Two part bid				
	a. Technical cum commercial part and				
	b. Price part				
	Please Submit your offer as per the terms				
	and conditions.				
2	Kindly confirm supply as per TDG: 110 rev0.				
	Point wise confirmation shall be given.				
3	Rates shall be quoted in weight basis.				
4	Please quote on FOB - Loading Sea port basis				
	or C&F / Chennai sea port / India. Price				
	shall include inspection, packing and				
	forwarding charges. Please do not quote on				
	Ex-works basis. Delivery shall be within 4 months from the				
5	date of LOI/Purchase Order.				
6	Third Party Inspection shall be by IBR				
U	approved agency. (Name of the inspection				
	agency to be mentioned to be concurred by				
	BHEL.)				
7	Validity of your offer shall be for 90 days				
	from price bid opening date/ final reverse				
	auction date.				
8	Payment terms shall be 100% through LC.				
9	PBG for 10% of PO Value shall be provided.				
10	LD of 0.5% per week subject to a max of 15%				
	for the undelivered portion.				
11	Vendors shall guarantee the supplies for a				
	period of 24 months from the date of				
	dispatch of materials or 18 months from the				
	date of their commissioning whichever is				
	earlier.				
12	BHEL reserves the right to order in Part quantity. No Minimum order condition is				
	acceptable to BHEL.				
13	BHEL reserves the right to go for a Reverse	 			
13	Auction instead of Opening the submitted				
	sealed bid, which will be decided after	- Company of the Comp			
-	technical evaluation.				

Vendors signature.

ENQUIRY NO: PC9020 DT 29.04.2010 - CHECK LIST (INDIGENOUS)

Vendors are requested to give confirmation against each point and send it along with the technical cum commercial part without fail.

SI No	Detalis of Enquiry	Confirmation by vendor
1	This is a Two part bid	
	a. Technical cum commercial part and	
	b. Price part	
	Please Submit your offer as per the terms	
	and conditions.	
2	Kindly confirm supply as per TDG: 110 rev0.	
	Point wise confirmation shall be given.	
3	Rates shall be quoted in weight basis.	
4	Please quote on FOR/Trichy. Price shall	
	include inspection, packing and forwarding	
	charges. Please do not quote on Ex-works	
	basis.	
5	Delivery shall be within 4 months from the	The state of the s
	date of LOI/Purchase Order.	
6	Third Party Inspection shall be by IBR and	
-	BHEL.	
7	Validity of your offer shall be for 90 days	
	from price bid opening date/ final reverse auction date.	
	Payment terms shall be 90% against dispatch	
8	documents and 10% acceptance of material.	
9	PBG for 10% of PO Value shall be provided.	
10	LD of 0.5% per week subject to a max of 15% for the undelivered portion.	
11	Vendors shall guarantee the supplies for a	
11	period of 24 months from the date of	
	dispatch of materials or 18 months from the	
	date of their commissioning whichever is	
	earlier.	
12	BHEL reserves the right to order in Part	
14	quantity. No Minimum order condition is	
	acceptable to BHEL.	
13	BHEL reserves the right to go for a Reverse	<u> </u>
	Auction instead of Opening the submitted	
	sealed bid, which will be decided after	
	technical evaluation.	

Vendors signature.



BHARAT HEAVY ELECTRICALS LTD. PIPING CENTRE, CHENNAI - 17.

BANK GUARANTEE

In accordance of M/s Bharat Heavy Electricals Limited (A Government of India Undertaking a
company incorporated under the companies Act, 1956 having its Registered office at "BHEL House", SIRI
FORT, New Delhi 110 049") through its Piping Centre, 80, G.N. Road, T. Nagar, Chennai - 17. (hereinafter
called the company)' having agreed to exempt(hereinafter called
the said contractor' which term includes suppliers' for the purpose of this Bond) from the demand under the terms and conditions of the Agreement dt made between
and for
(hereinafter called the said agreement') for Security Deposit
for the due fulfillment by the said Contractor of the terms and conditions contained in the said Agreement on production of a Bank Guarantee for Rs(Rupees
Only) We (indicate the name of the Nank), (hereinafter referrede to as the
Only) we (indicate the name of the relative, (indicate the composition
Bank') at the request of
or would be caused to or suffered by the Company by reason of any/breach by the said Contractor (s) of
any or the terms and conditions contained in the said Agreement.

- 2. We (indicate the name of the bank with full address). do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from the Company stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the company by reason of breach by the said Contractor (s) of any of terms and conditions contained in the said Agreement or by the reason of the Contractor (s) fallure to perform' the said Agreement. 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 guarant shall be restricted to an amount not exceeding Rs.
- 3. We undertake to pay unconditionally to the Company any money so demanded not with standing any dispute (s) raised by the contractor in any suit, or proceedings pending before any Court or Tribunal or Arbitration or before any other authority relating thereto our liability under this present being absolute and unequivocal.

The payment so made by us under this Bond shall be a valid discharge pf liability for payment thereunder and the Contactors (s) shall have no claim against us for making such payment. The payment under this guarantee would not wait till the wait till the disputes have been decided by any Court or Tribunal or in the arbiration proceedings or by any other authority.

- (ii) For the purpose of this clause any letter making demand on the Bank M/s. BHEL despatched by the Registered Post with Ack Due or by telegram addressed to the above mentioned address of the Bank shall be deemed to the claim/deemed in writing referred to above inrespective of the fact as to whether and when the said letter reaches the Bank, as also any letter containing the said demand or claim is lodged with the Bank personally.
- 6. We, (indicate the name of Bank) further agree with company that the Company shall have the fullest liberty without our consent and without affecting in any manner our obligation hereunder to vary any of the terms and conditions of the said Agreement or to extend time of performance by the said Contractor (s) from time to time or to postpone for any time or from time to time any of the powers exercicable by the Company against the said Contractor(s) and to forbear or enforce any or the terms and conditions relating to the said Agreement and we shall not be relieved from our liability by any reason of any such variation or extension being granted to the said Contractor (s) or for any forbearance, act or omission on the part of the company or any indulgence by the company to the said Contractor (s) or by any such matter or thing whatsoever which under the law relating would but for the provision have effect of so relieving us.
- 7. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor (s).
- 8. It shall not be necessary for the company to proceed against the contractor before proceeding against the guaranter bank and the guarantee herein contained shall be enforceable against them netwithstanding any security. Which the company may have obtained or obtain from the Contractor shall, at the time when proceeding are taken against the guaranter hereunder be outstanding or unrealised.
- 9. Any claim or dispute arising under the terms of this document shall only be enforced or settled in the Courts at Tiruchirappalli.
- 10. The guarantor hereby declare that it has power to execute this guarantee and the executant has full powers to do so on its behalf under the Power of Attorney dated granted to him by the proper authorities of the guarantor.
- 11. We (indicate the name of Bank) lastly undertake not to revoke this guarantee during its currency except with the previous consent of the company in writing.

	In witness whereof w	e, (indicate t	he name o	f Bank) have	hereunto	setout our Bar	nk Seal
the	*************	,	day	000000000000000000000000000000000000000	000000000000000000000000000000000000000	month	