

REF : MM: PUR: AS PLATES

DT : 29.01.2020

Pre-Qualification requirements (PQR) for the procurement of Alloy Steel Plates as per Specification SA 387 Gr 12, 22 & 91 through Open Tender – Non IBR Quality (As per TDC : 202 Rev 09 dt 21/11/2017)

A) Organizational Capability:

1. Manufacturers having Plate rolling mill are only eligible to participate. Offer from Traders, Fabricators and Stockists are not acceptable and will not be considered for evaluation. Product catalogue shall be submitted.
2. Suppliers without basic manufacturing facilities in-house, shall not be considered for evaluation. In house facilities for hot finishing or cold finishing, rolling, heat treatment, UT testing as applicable as per TDC are mandatory requirements for consideration of the offer. Details of the mill with list of manufacturing facilities and List of testing equipment & measuring instruments to be submitted.
3. If the supplier is not having steel making facility then source of raw material for the manufacturing shall be indicated. If the supplier is dependent on more than one source for steel making, all the sources should be indicated; and the supplies should be restricted to the indicated list of raw material suppliers. The supplier shall confirm that the raw material test certificate/s will be furnished along with product test certificate/s.
4. Chemical, Mechanical testing shall be done in house or at Labs certified as per ISO 17025 or Government approved labs.
5. Suppliers shall submit a valid ISO 9001 certificate or Quality management system certificate or Written down procedure.
6. BHEL/End Customer reserve the right to inspect the item ordered at any stage at vendor's works and if found not meeting the stipulated conditions, material is liable for rejection.
7. BHEL/End Customer reserves the right to inspect the sample at vendor's works for giving clearance before bulk production.

B) Technical Competence:

1. Confirmation to the tendered specification and TDC are mandatory for consideration of offer and signed TDC shall be submitted.


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C) Past Experience/ Performance:

1. Suppliers shall indicate their annual installed capacity for the tendered specification & it shall be more than the tendered quantity.
2. Suppliers shall have supplied Plates to the tendered specification or any other higher Alloy steel grade in case of alloy steel.
3. Supply credentials in the recent past like unpriced PO copies with corresponding proof of supply (such as invoice/bill of lading copies and test certificates covering minimum and maximum sizes shall be submitted. If credential is not available for any specific tendered size, then a specific declaration shall be submitted by mill stating the capability to produce that quoted size/s.

D) Financial Soundness:

1. Indigenous suppliers shall submit copies of annual reports/complete set of annual reports (Balance Sheets), profit & Loss Statement for the last three years (or from date of incorporation whichever is less) and GST Certificate
2. Import suppliers shall submit latest audited report from any third party business rating agency like D&B report / credit reform report etc. for both principal & mill.

Necessary supporting documents shall be submitted for meeting each of the above Pre-Qualification Criteria for evaluation of the offers.

BHEL reserves the right to consider/Not-consider the offers based on the evaluation of documents submitted for the above Pre-Qualification Criteria. BHEL also reserves the right to have on-site assessment of the facilities at supplier's works during the bid evaluation.

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ANNEXURE-A

ENQUIRY CONDITIONS FOR SUPPLY OF PLATES TO SPECIFICATION SA387 GR 91 CL 2

Note: This Annexure has to be mandatorily filled & signed by the manufacturer (or) mill and submitted along with Technical Bid. Any deviation to the below mentioned terms shall be stated specifically in the comments column for each term and also in case of acceptance to our terms, it will be construed that the whole term is understood and agreed in totality without any deviation (if otherwise mentioned).

SI No	BHEL Requirements	Supplier Comments (Acceptance or otherwise for each point to be given)															
1.	Material specification: SA387 Gr91 CL 2																
	a) The material is required for Non – IBR application, hence creep test and IBR form IV requirement is not applicable.	a)															
	b) Supply shall confirm to the above specification and strictly as per TDC: 202/Rev.09.	b)															
	c) Confirm your acceptance to TDC 202/Rev 09 for all the clause related to the above mentioned specification.	c)															
	d) In case of deviation, pls mention the specific clause no of TDC and the specific deviation against it. Pls avoid mentioning any additional points other than what is required as per the TDC. For deviations separate sheet may also be attached.	d)															
	e) Material shall be supplied in trimmed edge condition only.	e)															
	f) Stamping and certification shall be as per TDC 202 Rev 9, Clause 9 & 10. Deviation not acceptable.	f)															
2.	Material Description : Size & Qty:																
	<table> <tr> <th>SI.No</th><th>Description</th><th>Qty (MT)</th></tr> <tr> <td>1.</td><td>PL 70X1100X8750MM-3Nos/SA387GR91CL2</td><td>15.867</td></tr> <tr> <td>2.</td><td>PL 70X1100X9700MM-2Nos/SA387GR91CL2</td><td>11.726</td></tr> <tr> <td>3.</td><td>PL 65X1060X7200MM-6Nos/SA387GR91CL2</td><td>23.365</td></tr> <tr> <td>4.</td><td>PL 65X1060X6400MM-11Nos/SA387GR91CL2</td><td>38.077</td></tr> </table>	SI.No	Description	Qty (MT)	1.	PL 70X1100X8750MM-3Nos/SA387GR91CL2	15.867	2.	PL 70X1100X9700MM-2Nos/SA387GR91CL2	11.726	3.	PL 65X1060X7200MM-6Nos/SA387GR91CL2	23.365	4.	PL 65X1060X6400MM-11Nos/SA387GR91CL2	38.077	
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	a) Quantity tolerance: Nil. No of pieces ordered to be ensured.	a.															
	b) Offer will be evaluated on Total Package basis only. All the items in the tender are to be quoted without fail. Otherwise offer will be rejected in case of deviation. Hence pls confirm for the total package. Pls refer to note below also.	b.															
	d) Deviation in width & length of plate other than specified in tender is not acceptable.	c.															
	e) No of pieces shall be indicated in invoice/TC.	d.															
	f) Invoicing shall be on theoretical weight basis only with density factor of 7.85 gm/cc. Supplier shall quote only on theoretical weight basis and deviation not acceptable.	e.															
	Note: BHEL reserves the right to change the evaluation criteria on package basis either in part or full (i.e., combining few or all items), at its discretion after part I opening. Such changes will be communicated only to techno commercially suitable offers/bidders. Suppliers may take cognizance of the same and quote accordingly.																
3.	Testing & Certification																
	a. As the material is for Non – IBR application form IV is not applicable. Certification shall be as per EN10204 3.1 and complying to clause 10.d of TDC 202 /Rev.09	a.															
	b. Mill test Certificates are to be duly stamped and signed by Mill's Inspection-in charge	b.															
	c. Corresponding mill TC's should also be provided along with dispatch of plates. Two sets of original copy of all such TC's are to be provided to BHEL, Trichy.	c.															
4.	Delivery Terms:																
	The offer shall clearly indicate delivery period in fixed number of weeks/Months from the date of Purchase Order. Our delivery requirement is indicated for each item in EPS. Supplier shall take note of the same and specifically confirm the delivery schedule. Our required delivery schedule is 75 - 90 days from PO. Suppliers shall quote shortest possible delivery and shall avoid offering longer delivery period. Offers with longer delivery period are liable for rejection considering our project schedules/production requirement. Notwithstanding anything to the contrary, including, but not limited to, provisions relating to extension of time and compensation/or delay, time shall be the essence of the Contract.																

5.	Offer Submission:	
	5.1 Indigenous:	
	a. Submit your FIRM competitive offer rate per MT (basic price & freight) with best possible delivery on FOR BHEL-Trichy basis ONLY . The quoted prices shall be inclusive of all charges (like testing charges, Freight, etc.).	a.
	b. Price Variation Clause (PVC) is not acceptable and offer shall be rejected.	b.
	c. Response to Tenders for Indigenous supplier will be entertained only if the vendor has a valid GST registration number which should clearly mentioned in the offer. Indicate the GST registration number. If any specific exemption is available, a declaration with due supporting documents need to be furnished for considering the offer.	c.
	d. Supplier shall mention their GSTN registration number in all their invoices and invoices shall be in the format as specified/prescribed under GST laws. Invoices shall necessarily contain Invoice number (in case of multiple numbering system is being followed for billing like SAP invoice no, commercial invoice no etc., then the Invoice No which is linked/uploaded in GSTN network shall be clearly indicated), item description as per PO, Quantity, Rate, Value, applicable taxes with nomenclature (like IGST, SGST, CGST & UTGST) separately, HSN/ SAC Code, etc.	d.
	e. All invoices shall bear the HSN Code for each item separately (Harmonized System of Nomenclature)/ SAC code (Services Accounting Code).	e.
	f. A declaration to the effect that all invoice particulars are/were uploaded in the GSTN network/ portal & all tax liability as per GST rules and regulations have been and will be discharged, shall be mentioned in the invoice. If not mentioned in the invoice, a separate declaration (if asked) shall be submitted as per the requirement of BHEL.	f.
	g. All documents like Mill Test Certificate, LR copy, Guarantee/Warranty certificate, work completion certificate, any other document mentioned in PO, shall be sent along with the vehicle/consignment. For all consignments received within the calendar month, input credit will be availed within that month in line with monthly returns filing cycle. In case of any discrepancy in the document or non-submission of documents mentioned in the PO, then BHEL will not be able to accept or account the material, in such case availing of tax credit will be deferred to next month or so.	g.
	h. In case of discrepancy in the data uploaded by supplier in the GSTN portal or in case of any shortages or rejection in the supply, then BHEL will not be able to avail the tax credit and will notify the supplier of the same. Supplier has to rectify the data discrepancy in the GSTN portal or issue credit note (details to be uploaded in GSTN portal) for the shortages or rejections in the supplies, within the calendar month notified by BHEL.	h.
	i. The offer will be evaluated on total landed cost to BHEL, Trichy as below, Total landed cost = FOR Trichy + applicable taxes + commercial loading as applicable - applicable tax credits	i.
	Note: 1. Transit insurance in the scope of supplier only. 2. For any such delay in availing of tax credit for reasons attributable to supplier (as mentioned above), interest (calculated @ SBI Base Rate + 6%) along with penalty if any will be deducted for the delayed period i.e. from the month of receipt till the month tax credit is availed, from the running bills. 3. Under GST regime, BHEL has to discharge GST liability on LD recovered from suppliers/contractors. Hence applicable GST shall also be recoverable from suppliers/contractors on LD amount. For this Debit note will be issued by BHEL indicating the respective supply invoice number. 4. TDS will be deducted in line with Notification 50/2018 –Central Tax dated 13.09.2018 and certificate will be issued for the same.	
	5.2 Imports:	
	a. Suppliers to quote their rates on CFR-Chennai basis only. The quote should be inclusive of all charges, including testing packing, inspection etc. Ocean freight (LIFO basis) for CFR, Chennai shall also be quoted separately. BHEL will finalize order on either FOB or CFR basis keeping its commercial interest.	a)
	Note: Offer on FOB only is not acceptable, both FOB & ocean freight to be quoted separately.	

b. Shipment shall be through container vessel. Accordingly supplier shall quote the freight charges on LILO (LINER IN LINER OUT) basis.	b)
c. For shipment through container, acceptance to the following points are required. i. B/L should bear the endorsement that "14 free days for Container Detention is applicable". ii. For CFR terms, moved through Containers (Suppliers should clearly specify this in their offer) it would be presumed by BHEL that the freight charges quoted is on LILO (LINER IN LINER OUT) basis including extra 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. 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.	c)
d. Price Variation Clause is not acceptable and offer shall be rejected	d)
e. All invoices shall bear the HSN Code for each item separately (Harmonized System of Nomenclature)/ SAC code (Services Accounting Code).	e)
f. The offer will be evaluated on total landed cost to BHEL-Trichy as below: Total landed cost = CFR Chennai + Customs duty as applicable + 22% loading on Freight in case of deviation mentioned in point (5.2.c) above + Import Incidentals (presently 2.20% of CFR Value) + Commercial loading as applicable - applicable tax credits..	
Note 1. For Import Consignments Insurance will be arranged by BHEL, Trichy. 2. Exchange rate for converting such offers to INR will as SBI TT selling rate as on the date of Technical/Un-priced bid opening date in case of two part (technical + price bid) bid and price bid opening date in case of single part bid (only price bid). Multiple PO may also be placed considering the applicable duty structure of the respective requirement/Qty. In case the day of bid opening happens to be bank holiday in India, then exchange rate as on previous bank working day will be considered for evaluation. 3. Multiple PO may also be placed considering the applicable duty structure of the respective requirement/Qty. 4. Indian Customs has imposed a penalty on late filing of Bill of Entries (Air/Sea Shipments) by the importer. The maximum free time allowed is 24 hrs from the time of arrival of cargo at final port of discharge. At present penalty is Rs.5000/- per day (for Initial 03 days) & Rs.10000/- per day (thereafter). Hence the supplier shall submit the Non-Negotiable Documents (Bill of Lading, Commercial Invoice, Packing List, Certificate of Origin, etc.) either by email or post/courier to BHEL well before the landing of cargo at final port of discharge. 5. In case of any penalty due to late filing of Bill of entry for reasons attributable to suppliers (as listed below), the same will be recovered from the bills of supplier: i. Non availability of Non-Negotiable Documents (NNDs) before the cargo arrival ii. Discrepancy in documents iii. Short landing of Consignments (For shipments on CFR- Chennai Port) 6. For all the shipments for the contracts (POs) finalized on CFR- Chennai Port basis, a) Delivery Orders involving multiple agencies like liners/freight forwarders are not allowed. To avoid any delay, BHEL prefers Single agency office at the final discharge Port (Chennai) for issuing the Delivery Order to BHEL. b) The detention/demurrage charges arise due to the delay in collection of Delivery Orders from multiple agencies of liner/freight forwarder also whose offices are not at available Chennai, the same amount will be deducted from Supplier's bills. c) Apart from the Terminal Handling Charges, Container cleaning Charges & Delivery Order Charges at final port of discharge, any other charges will not be borne by BHEL. d) The liner/freight forwarders shall be informed by the Vendor not to claim any additional charges (like charges listed below) for issuing Delivery Order. In case if the liner/freight forwarder claims such charges, the same amount will be deducted from the Vendor bills with/without any prior intimation in order to avoid the delay in Customs clearance. The likely additional/hidden charges are listed below.	
1. CIC - Container Imbalance Charges/Surcharges	4. EIC - Equipment Imbalance Charge/Surcharges
2. CAF - Container/Currency Adjustment Factor	5. BAF - Bunker Adjustment Factor
3. RDS - Rupee Depreciation Surcharge	6. CDS - Currency Depreciation Surcharge

6.	Payment terms:	
	6.1 Import	
	a) BHEL Payment term is 100% payment on CAD basis after 60 days from the date of receipt of documents, specified in PO, at BHEL bank. Respective bank charges to respective account.	a)
	b) In the case of Usance LC (60 days) from the date of receipt of documents, specified in PO, at BHEL bank) the loading will be considered @ 1.5% on the offered Value.	b)
	c) If the LC payment is insisted, TWO sets of original TCs to be submitted prior to dispatch and a certificate to that effect from BHEL should form a part of the documents to be negotiated. If this condition is not complied by the vendor, the offer is liable for rejection.	c)
	d) Quoted currency to be indicated	d)
	Note: LC will be opened one month prior to material readiness. Hence supplier shall intimate the material readiness accordingly for opening of LC. LC validity period will be 90 days and for any extension applicable charges will be to supplier account.	
	6.2 Indigenous	
	a) Payment term is 100% direct EFT payment after 60 days from the date of receipt and acceptance of materials.	a)
	6.3 Indigenous / Import suppliers not registered with BHEL, Trichy for Alloy steel plates to specn SA387Gr91Cl2	
	a. If the supply (this item) is first time to BHEL/Trichy, then supplier have to supply minimum quantity on mutually agreed basis. After acceptance of material at our end after testing by BHEL, clearance for the balance quantity shall be given.	a.
	b. For new suppliers not registered with BHEL, Trichy for the tendered specification Payment shall be made after 60 days from receipt and acceptance of materials after testing at BHEL, Trichy lab. Pls confirm your acceptance.	b.
	c. In case of foreign supplier quoting for LC payment, first lot of mutually agreed quantity shall be supplied with payment as CAD basis after 60 days from the date of receipt & acceptance of material after testing at our Lab. After acceptance of first lot, only Usance LC with 60 days credit will be opened one month prior to material readiness and loading shall be considered @1.5% on the offered value.	c.
	Note: New suppliers not registered with BHEL, Trichy for supply of Plates & Sheets shall register on line at our web page: https://supplier.bhel.in/ . Pls note this material is covered in item code "SPI91"	
7.	LD Clause Confirm acceptance for	
	Liquidated damages shall be 0.5% of the undelivered portion /value per week or part thereof subject to a maximum of 10% of the total order.	
	NOTE: Any deviation from the above LD clause, loading will be applied to the extent to which it is not agreed by the bidder (at offered value).	
	For Info. :	
	☞ Imports: CFR order- LD will be reckoned from B/L date	
	☞ Indigenous: FOR order - LD will be reckoned from the date of LR/RR/BL / Invoice whichever is later	
	However inordinate delay in delivering the materials will not suffice the case. Also informed that for staggered delivery and single lot delivery separate PO will be placed.	
8.	Pre-qualifying requirement:	
	In addition to the TDC requirements, suppliers shall meet the Pre-qualification Requirements (Pre-Qualification requirements (PQR) for the Procurement of Alloy steel plates as per specification SA387Gr12, 22 & 91 through open tender - Non IBR quality (as per TDC: 202 rev.09 dt 21/11/2017) ref: REF:MM:PUR:AS:PLATES dt 29.01.2020) for enclosed herewith. Pls submit all the required documents in line with the respective PQR. The offers of the suppliers who fail to do so will be liable for rejection.	
9.	List of Documents to be submitted along with offer (only offer of manufactures will be considered)	
	a. For Pre-qualifying requirements as per Clause-8 of this annexure and submit the relevant documents as per the same. If incorrect or part of the required documents are provided, then in that case will not be able to evaluate and qualify the offer. Hence Pls submit documents as mentioned in Pre-qualifying requirements.	a.
	b. In case of foreign suppliers representing through their Indian/foreign agents, agency agreement should be submitted, along with registration documents else offer is liable for rejection. Agency agreement requirements attached as separate file and full compliance to it shall be ensured while submitting the same.	b.
	c. Along with the offer document the following documents shall be submitted in Part-I bid without fail. This is apart from Pre-qualifying requirements as mentioned in Clause-8	c.

	i. Mandatory requirements (Supplier must submit the below mentioned documents or else offer will be liable for rejection): 1. Agency agreement (in case of Foreign or Indian agents). Requirements for agency agreement enclosed. 1. latest audited report from any reputed third party business rating agency like D&B /Credit reform (In case of import vendor) of foreign agent or principal. 2. Incorporation certificate & IT returns of Indian Agent. 3. Tax certificates for Indigenous supplier. ii. Additional details required (not mandatory and these shall be submitted additionally for establishing the credentials) 1. Approval certificates issued by international agencies such as Lloyds, TUV etc. 2. Customer appreciation letter for using the offered grade of material. 3. Product catalogue and other related documents.	
10.	Material Warranty Free replacement of whole material in case of notification of defect in material within the period of One year from TC/Invoice date. Warranty certificate to be produced.	
11.	Agency commission, if any should be clearly given in the offer (% on FOB / CFR Chennai inclusive).	
12.	Service charges, commission charges and any other incidentals will NOT be paid extra.	
13.	Defective Material replacement Supplier shall replace defective material free of cost (inclusive of all Testing, Inspection, TPI, Service charges etc.) up to destination within two months from defect notification date.	
14.	Port of discharge shall be Chennai Sea Port . Pls confirm specifically	
15.	Indicate the Port of shipment	
16.	Indicate the Mill (Name, Location) & Country of origin	
17.	Offer validity of 30 days is required after price bid opening in case you are technically qualified. Normally price bid will be opened with 60 days from technical bid opening. Otherwise offer is liable for rejection. Thus total of 90 days is required from Part-I bid opening. Offer with shorter validity are liable for rejection.	
18.	One Indian agent can represent one foreign principal only and submit one offer for these tender items. Note: In order to maintain sanctity of the tender system it is mandatory that one agent cannot represent two suppliers or quote on their behalf in a particular tender enquiry. If any agent represents more than one supplier, all such offers will be rejected.	
19.	Agency Commission : a) In respect of offers from overseas suppliers, agency commission, if any, payable to their agents in India, shall invariable be shown separately in the Performa invoice & shall be declared in techno-commercial offer itself and this will be paid by us in India, in Indian rupees, on satisfactory completion of the contract. b) For calculation of rupee equivalent for agency commission, exchange rate as prevailing on the date of order will be taken.	
20.	Any other conditions which might have been quoted by the seller and are in contravention to the terms prescribed in the order and which have not been specifically accepted in by purchaser will not be applicable to the contract	
21.	Bidders are requested to submit their best competitive prices at the first instant itself and no revision of prices will be entertained after the tenders are opened.	
22.	The due date mentioned in the enquiry is the date of opening of techno-commercial bid. After the scrutiny of technical bids, price bids of only technically accepted offer shall be opened with prior intimation.	
23.	Offer is to be submitted in two part bids system in the E-Procurement portal. Scan copy of the filled Annexure-A, Tender documents etc., shall be uploaded in the EPS portal	
24.	BHEL will consider the ranking after the loading is applied as referred above wherever deviations are observed.	

25.	Cartel Formation	
	All the firms should desist from forming cartel as the practice is prohibited under Section 3(3) (a) & (d) of the competition Act 2002. If any such instance is observed during this tender will attract disciplinary action as per BHEL policies.	
26.	Documents required for Indigenous suppliers	
	1. DFT copy invoice. LR & original TC (Invoice no. & vehicle reference to be mentioned) to be sent along with each vehicle. Without T.C. Vehicle/wagon will not be unloaded. One set of photocopy of all the said documents to be sent along with vehicle. Invoice should mention the no of pieces/bundles.	
	2. One set of MTC, Original invoice (Plus one copy), LR copy shall be sent to MM/Purchase for bill processing.	
27.	Documents required for Import suppliers	
	a. Bill of Lading.	
	b. Invoice, should show the description of the goods and the unit rate of each item as in the purchase contract. Against each item in the invoice and packing list, the serial number of the corresponding item in the purchase contract or as per order acknowledgement should be indicated. HSN code to be indicated for each item.	
	c. Packing list must indicate case identification, case dimension, and case contents, no of bundles, gross and net weight.	
	d. Country of origin Certificate. HSN code to be indicated for each item.	
	e. Mill test certificate.	
	All the above documents should be submitted in triplicate & in all documents Contract No., L.C. No. and Import License No. are to be indicated.	
28.	Risk Purchase Clause:	
	BHEL at its 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 thereof. The supplier shall be liable for any loss which BHEL may sustain by reason of such risk purchases in addition to LD at the maximum rate mentioned in the LD clause above. Confirm your acceptance. <u>The value under Risk purchase clause shall be calculated as follows:</u> Risk & Cost Amount= [(A-B) + (A x H/100)] Where, i. A= Value of Balance scope of Work/ Supply (*) as per rates of new contract ii. B= Value of Balance scope of Work/ Supply (*) as per rates of old contract being paid to the contractor/supplier at the time of termination of contract i.e. inclusive of PVC & ORC, if any. iii. H = Overhead Factor shall be taken as 5 In case (A-B) is less than 0 (zero), value of (A-B) shall be taken as 0 (zero). * Balance scope of work/ supply Difference of Tendered/Contract Quantities and Executed Quantities as on the date of issue of Letter for 'Termination of PO/Contract', shall be taken as balance scope of Supply for calculating risk & cost amount. Note: In case vendor fails to fulfil any of the PO / Contract obligations as per PO/Contract, PO/contract shall be cancelled and appropriate cost shall be deducted from the vendor's pending bills in BHEL Trichy (or) across the BHEL units.	
29.	Conditions for transportation:	
	In the event there is a delay by the Supplier in negotiating / submitting the document, any demurrage / wharfage arising out of the same shall be to the account of the Supplier and shall be deducted from the final payment. Also, in such cases, the Supplier shall authorize the Steamer / Shipping agent / transporter to freely release the consignment to BHEL by providing a "Surrender Bill of Lading". Over-seas Suppliers have to give a No-Objection Certificate to BHEL, authorizing BHEL to get the Delivery Order from the Steamer Agent without producing the Original Bill of Lading. This is required to ensure avoidance of incidence of demurrage at Chennai Sea-port that may arise in case of delayed presentation of documents by the Seller.	

30.	Fraud Prevention Policy	
	Bidder along with its associate /collaborators /sub-contractors /sub-vendors / consultants / service providers shall strictly adhere to BHEL Fraud Prevention Policy displayed on BHEL website http://www.bhel.com and shall immediately bring to the notice of BHEL Management about any fraud or suspected fraud as soon as it comes to their notice.	
31.	Authorisation for participation in EPS portal through DSC	
	a. E-Tender Participation requirements	
	Either Principal or authorised agent shall register their Digital Signature Certificate (DSC) (Class 3-SHA2- 2048 BIT- SIGNING & ENCRYPTION). You are advised to pls go through the FAQ available in the web portal (https://bhel.abcpocure.com/). DSC shall be registered for the authorised person and all transaction done using that DSC against our tenders shall be taken as valid communication and shall be binding on principal/agent and is valid legally.	
	b. For foreign Principal	
	In case of Principal (being foreigner) they may apply for DSC through Indian embassy at their country and can register with us for participating in E-tenders. Details of the applicable procedure is available in the webpage http://www.cca.gov.in/cca/ .	
	For Indian agent	
	In case of agents participating/registering their DSC (of authorised person), it will be at the sole authorisation of principal to their agents to participate on their behalf and all transactions done using that DSC against our tenders shall be known as valid communication and shall binding on principal and is legally valid.	
	DSC Authorisation	
	Pls intimate the authorised person name, Mail ID for registering DSC with us to participate in E-Tenders.	
32.	In the event of Force Majeure:	
	a. Notwithstanding the provisions contained in other clauses, the supplier shall not be liable for imposition of any such sanction so long the delay and/or failure of the supplier in fulfilling its obligations under the contract is the result of an event of Force Majeure. For purposes of this clause, Force Majeure means an event beyond the control of the supplier and not involving the supplier's fault or negligence and which is not foreseeable and not brought about at the instance of the party claiming to be affected by such event and which has caused the non – performance or delay in performance. Such events may include, but are not restricted to, wars or revolutions, hostility, acts of public enemy, civil commotion, sabotage, fires, floods, explosions, epidemics, quarantine restrictions, strikes excluding by its employees , lockouts excluding by its management, freight embargoes and Acts of GOD.	a.
	b. If a Force Majeure situation arises, the supplier shall promptly notify the Purchaser/Consignee in writing of such conditions and the cause thereof within twenty-one days of occurrence of such event. Unless otherwise directed by the Purchaser/Consignee in writing, the supplier shall continue to perform its obligations under the contract as far as reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.	b.
	c. If the performance in whole or in part or any obligation under this contract is prevented or delayed by any reason of Force Majeure for a period exceeding sixty days, either party may at its option terminate the contract without any financial repercussion on either side.	c.
	d. In case due to a Force Majeure event the Purchaser/Consignee is unable to fulfil its contractual commitment and responsibility, the Purchaser/Consignee will notify the supplier accordingly and subsequent actions taken on similar lines described in above sub-paragraphs.	d.
33.	Role of Agents:	
	a. BHEL will deal directly with manufacturers only. Offers from Traders & Stockist will not be considered.	
	b. BHEL strongly discourages the engagement of Agents in India by foreign principals, to deal with BHEL, in BHEL's tenders.	
	c. BHEL, due to business reasons would ban, would have banned Indian agents from dealing with BHEL. Any foreign principal who engages such a banned agent, or an employee of the banned agency, or any other person connected with the banned agency, at any time during the tender proceedings, would be disqualified from the tender proceedings. The decision of BHEL in this regard shall be final and be binding on the OEM. Hence in their own interests, prospective tenderers may check with BHEL, the status of their proposed agent vis-à-vis BHEL.	

	d. In view of the requirement of BHEL, it is strongly suggested that in their own interest, foreign principals may desist from engaging any Indian agent and deal with BHEL directly and it is stressed that any Main producer proposing to deal with BHEL by engaging and through an Indian Agent does so at their own risk. BHEL shall in no way be responsible for any consequences that may arise to the foreign principal on account of the antecedents / actions of their Indian Agent.	
34.	Resolution of Disputes	
	a. Except as provided elsewhere in this Contract, in case amicable settlement is not reached between the Parties, in respect of any dispute or difference; arising out of the formation, breach, termination, validity or execution of the Contract; or, the respective rights and liabilities of the Parties; or, in relation to the interpretation of any provision of the Contract; or, in any manner touching upon the Contract, then, either party may, by a notice in writing to the other Party refer such dispute or difference to the sole arbitration of an arbitrator appointed by Head of the BHEL Unit/Region/Division issuing the Contract.	
	b. The Arbitrator shall pass a reasoned award and the award of the Arbitrator shall be final and binding upon the Parties.	
	c. Subject as aforesaid, the provisions of Arbitration and Conciliation Act 1996 (India) or statutory modifications or re-enactments thereof and the rules made thereunder and for the time being in force shall apply to the arbitration proceedings under this clause. The seat of arbitration shall be Trichy (the place from which the Contract is issued)	
	d. The cost of arbitration shall be borne as per the award of the Arbitrator.	
	e. Subject to the arbitration in terms of clause as above, the courts at Trichy shall have exclusive jurisdiction over any matter arising out of or in connection with this Contract.	
	f. Notwithstanding the existence or any dispute or differences and/or reference for the arbitration, the Contractor shall proceed with and continue without hindrance the performance of its obligations under this Contract with due diligence and expedition in a professional manner except where the Contract has been terminated by either Party in terms of this Contract.	
	g. In case of Contract with Public Sector Enterprise (PSE) or a Government Department, the following shall be applicable: In the event of any dispute or difference relating to the interpretation and application of the provisions of the Contract, such dispute or difference shall be referred by either Party for arbitration to the sole arbitrator in the Department of Public Enterprises to be nominated by the Secretary to the Government of India in-charge of the Department of Public Enterprises. The Arbitration and Conciliation Act, 1996 shall not be applicable to arbitration under this clause. The award of the arbitrator shall be binding upon the Parties to the dispute, provided, however, any Party aggrieved by such award may make further reference for setting aside or revision of the award to Law Secretary, Department of Legal Affairs, Ministry of Law and Justice, Government of India. Upon such reference the dispute shall be decided by the Law Secretary or the Special Secretary or Additional Secretary when so authorized by the Law Secretary, whose decision shall bind the Parties hereto finally and conclusively. The Parties to the dispute will share equally the cost of arbitration as intimated by the Arbitrator.	
35.	Execution of the Order	
	a. BHEL will have the option to pre-inspect the materials at Supplier's works by BHEL's own inspector or by third party agency appointed by BHEL or BHEL's end customer/s. The mere act of the pre-dispatch inspection (PDI) does not absolve the Supplier from giving the specifications as agreed upon in the Purchase Order.	
	b. In the case of overseas suppliers Inspection call for carrying out the inspection shall be given 30 days before the scheduled contract delivery date. The Inspection date/s given by the Supplier shall be on firm basis. For local Suppliers the Notice period of Inspection shall be 10 working days.	
	c. In the event of any short supply, it shall be the responsibility of the supplier to deliver such short supplied/ missing items on Free-of-Cost basis at BHEL stores, including customs clearances at Indian Ports in the case of foreign suppliers.	

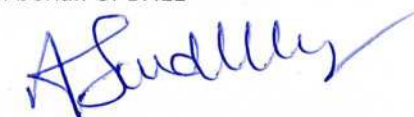
36.	Evaluation of offer	
	a. The price bids including the impact price (if any) of the technically acceptable offers alone shall be opened.	
	b. Offers with pre-conditions (like conditional discounts) for price are liable to be not considered / rejected. For evaluation such conditions would be removed and only the base offer would be considered for evaluation and comparison.	
	c. BHEL reserves the right to conduct negotiations on the "Price" and "Other Commercial Terms and Conditions" with the lowest ranked offerer at any time after the bid opening but before the release of the Purchase Order.	
	d. In case of more than one bidder happens to occupy L-1 status, effective L-1 will be decided by soliciting discounts from respective L-1 bidders. In case more than one bidder happens to occupy the L-1 status even after soliciting discounts, the L-1 bidder shall be decided by a toss/draw of lots, in the presence of the respective L-1 bidder(s) or their representative(s). Ranking will be done accordingly, BHEL's decision in such situations shall be final and binding.	
	e. In the event of any change in scope / quantity arising out of the discussions, offerer would be given a chance to submit their revised offer / Impact bids. The option for the revised offer / impact offer will be triggered by BHEL. The Supplier then will have the facility to feed-in the revised price / impact price as per the provision given by BHEL. The impact price can be positive or negative (or nil). The impact price option shall contain only the price addition / deletion for such change in the scope / quantities, over and above the original scope and price quoted. The original price quoted would remain unchanged. The total price would then be computed by the arithmetic addition of the original price and the impact price. Where BHEL gives the option of submitting the revised offer, the impact would be computed as the arithmetic difference of the revised price and the original price.	
37.	General terms	
	1. Bids including all enclosures and supporting documents like catalogues, pamphlets, etc., shall be submitted / uploaded in ENGLISH language only. If the documents submitted have other than English language, translation of the same shall be provided for evaluation.	
	2. A person signing (manually or digitally) the tender form or any documents forming part of the contract on behalf of another shall be deemed to warrant that he has authority to bind such other persons and if, on enquiry, it appears that the persons so signing had no authority to do so, the purchaser may, without prejudice to other civil and criminal remedies, cancel the contract and hold the signatory liable for all cost and damages.	
	3. All uploaded/submitted documents against this tender shall be signed in each page and sign shall be by principal / Mill.	
	4. Supplier shall mention the HSN code for each item quoted by them in the offer.	
	5. Offers for part quantities on item level basis are not acceptable to BHEL. While tenderers can quote for some or all the tendered items, no supplier shall quote for partial quantity of any given enquiry item. Such partial offer would not be considered in the enquiry for that item.	
	6. Any clarification regarding tender shall be done before Part -I due date itself through EPS portal itself, and in case of immediate non-availability of DSC you can clarify through with the following mail id <u>sudheer@bhel.in & mrsamy@bhel.in</u> . The above mail id is provided for initial clarification purpose only and no further correspondences shall be entertained through this mail ids.	
	7. Unloading of the materials is in the scope of BHEL. However, Demurrages on account of delay in unloading due to improper packing, non-availability of proper dunnage, not adhering to the tender conditions and other reasons attributable to supplier shall be on supplier's accounts only.	
	8. Applicable INCO term for this tender is INCOTERMS 2010	
	9. Foreign suppliers has to submit the Non-Negotiable Document to bank/directly to BHEL as per the relevant payment term, well before the shipment reaches the port or else the demurrage and detention charges due to the delay in submission by supplier will be deducted from suppliers invoice.	

10. The supplier shall arrange for packing suitably in all respects for normal transport by sea / rail / road and Materials shall be suitably protected against effect of tropical salt laden atmosphere in the event of shipment being delayed at ports / store yards. In case of dispatch through sea then materials shall be shipped in Sea worthy packing condition. Packing charges will be supplier's account.	
11. In case the day up to which the tenders are to remain valid falls on/ subsequently declared a holiday or closed day for the purchaser, the tender validity shall automatically be extended up to the next working day.	
12. In exceptional cases, the tenderers may be requested by the purchaser to extend the validity of their tenders up to a specified period. Such request(s) and responses thereto shall be conveyed by EPS / e-Mail message. The tenderers, who agree to extend the tender validity, are to extend the same without any change or modification of their original offer.	
13. BHEL Reserves the right to negotiate and re-float the tender if the lowest offered price is not found competitive	
14. Any of the terms and conditions not acceptable to supplier, shall be explicitly mentioned in the tender. Otherwise, it will be treated as that all those terms and conditions as mentioned in the tender are acceptable in Toto.	
15. Deviations shall be summarized and provided in a "Deviation Statement", listing the points and the deviation against each point.	
16. At its option, BHEL may consider extending the due date/s for the tender openings. Sufficient notice would be given by BHEL for such extensions and it will be published as corrigendum in following websites, https://bhel.abcpocure.com/ , http://eprocure.gov.in	
17. The price break-up should be in line with technical specification / scope of the tender. (Cost of material, packing charges, forwarding charges, freight and insurance charges shall be shown appropriately, as applicable).	
18. In case, there is a discrepancy in the term quoted in techno-commercial bid and price bid, the term as per the techno-commercial bid (Part I) shall hold good and the commercial term quoted in the Price Bid (Part II) shall not be considered.	
19. Indigenous suppliers should submit the prices in Indian Rupees only. Import suppliers may submit their bid in foreign currency. The currency for quoting shall be selected from the drop-down menu provided.	
20. Set-off Clause: BHEL shall have the right to recover any money which in the sole opinion of BHEL is due from the Contractor from any money due to the Contractor under this Contract or any other contract or from the Security Deposit furnished by the Contractor under this Contract or any other contract.	
21. If any Supplier attempts to bribe, or pay commission, gift or any advantage or bring in undue influence either by himself or on his behalf any one including a stranger to the tender, in addition to instituting legal proceedings as per the extant laws prevailing, will disqualify the supplier from this tender and all future tenders of BHEL. Decision of the Purchaser would be final in this matter.	
22. In their own interest, all Tenderers are advised to double check their prices, applicable duties and taxes. Incomplete documents / offer will be rejected.	
23. Duty benefits for Import Vendors	
a. In case CEPA or any other agreement/treaty between respective Governments/Countries exists for the enquired Items/tender, which entails concessional custom duty or any other benefits for importing the same in India, supplier shall declare/ mention it in their offer. Pls confirm whether any such concessional duty for importing in India is applicable or not.	
b. For such cases, pls mention the Concessional Customs Duty (% of Basic custom duty) for the offered item/s. Pls mention in percentage only.	
c. Documentary proof for the applicable Concessional Customs Duty (e.g. CEPA or other agreement) shall be submitted along with the Part-1 bid.	
d. Relevant documents to avail the above concessional duty benefits by BHEL shall be submitted by the supplier along with dispatch documents. Confirm your acceptance.	
e. In the event of seller failing to provide appropriate documents along with dispatch documents for purchasers to avail disclosed concessional duty benefits in India, financial loss, so incurred, will be to the seller's account.	
<i>Note: Evaluation of the Price bids will be based on the above details. Unless specifically mentioned/furnished by the supplier in the offer document, Customs Duty benefit may not be applied for evaluation purposes.</i>	

38.	a) "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 (bid in EPS), 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. Confirm your acceptance for participation in Reverse Auction. b) 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). c) The bidders have to necessarily submit online sealed bid less than or equal to their envelope sealed price bid (bid in EPS) already submitted to BHEL along with the offer. The envelope sealed price bid of (bid in EPS) 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 (bid in EPS)) thus obtained. The bidder having submitted this offer specifically agrees to this condition and undertakes to execute the contract on thus awarded rates. d) If it is found that L1 bidder has quoted higher in online sealed bid in comparison to envelope sealed bid (bid in EPS) 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)." e) "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 (bid in EPS), 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. Confirm your acceptance for participation in Reverse Auction.	a) b) c) d) e)
39.	For this procurement, Public Procurement (Preference to Make in India), order 2017 dated 15.06.2017 & 28.05.2018 and subsequent orders issued by the respective Nodal ministry shall be applicable even if issued after issue of this NIT but before finalization of contract/PO/WO against this NIT. In the event of any Nodal Ministry prescribing higher or lower percentage of purchase preference and/ or local content in respect of this procurement, same shall be applicable. Default margin of purchase preference shall be 20% to local suppliers with default minimum local content of 50%.	
40.	Patent Right: The supplier shall, at all times, indemnify and keep indemnified the purchaser, free of cost, against all claims which may arise in respect of goods & services to be provided by the supplier under the contract for infringement of any intellectual property rights or any other right protected by patent, registration of designs or trademarks. In the event of any such claim in respect of alleged breach of patent, registered designs, trademarks etc. being made against the purchaser, the purchaser shall notify the supplier of the same and the supplier shall, at his own expenses take care of the same for settlement without any liability to the purchaser.	
41.	Suspension of Business Dealings with Suppliers/ Contractors The offers of the bidders who are under suspension as also the offers of the bidders, who engage the services of the banned firms, shall be rejected. The list of banned firms is available on BHEL web site www.bhel.com. Integrity commitment, performance of the contract and punitive action thereof: 1. Commitment by BHEL BHEL commits to take all measures necessary to prevent corruption in connection with the tender process and execution of the contract. BHEL will during the tender process treat all Bidder(s) in a transparent and fair manner, and with equity 2. Commitment by Bidder/ Supplier/ Contractor a) The bidder/ supplier/ contractor commit to take all measures to prevent corruption and will not directly or indirectly influence any decision or benefit which he is not legally entitled to nor will act or omit in any manner which tantamount to an offence punishable under any provision of the Indian Penal Code, 1860 or any other law in force in India.	

b	The bidder/ supplier/ contractor will, when presenting his bid, disclose any and all payments he has made, and is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract and shall adhere to relevant guidelines issued from time to time by Govt. of India/ BHEL
c	The bidder/ supplier/ contractor will perform/ execute the contract as per the contract terms & conditions and will not default without any reasonable cause, which causes loss of business/ money/ reputation, to BHEL
	If any bidder/ supplier/ contractor during pre-tendering/ tendering/ post tendering/ award/ execution/ post-execution stage indulges in mal-practices, cheating, bribery, fraud or and other misconduct or formation of cartel so as to influence the bidding process or influence the price or acts or omits in any manner which tantamount to an offence punishable under any provision of the Indian Penal Code, 1860 or any other law in force in India, then, action may be taken against such bidder/ supplier/ contractor as per extant guidelines of the company available on www. bhel.com and/or under applicable legal provisions. Guidelines for suspension of business dealings is available in the webpage: http://www.bhel.com/vender_registration/vender.php
42.	In the event of our customer order covering this tender being cancelled /placed on hold / otherwise modified, BHEL would be constrained to accordingly cancel / hold / modify the tender/ PO at any stage of execution.
43.	Caution: ➤ The suppliers are severely cautioned to note that the price bid document accepts the price in figures only. It does not allow the supplier to write the value by words. Therefore all care shall be exercised by the supplier while filling in the figures. Once the price bid is opened no option is available for the supplier to retract the offer under any grounds. If a supplier, for any reason whatsoever approaches BHEL with a request for change in the price, it would be treated as going back on the offer submitted. In such cases, action would be initiated by BHEL for suspending further business dealings with such suppliers as per policy of BHEL which prevails at that point of time. ➤ The language in the tender documents downloaded by the Bidders shall at no point of time be changed, altered or modified in any manner by the Tenderer. If such changes are made by any tenderer, it shall be considered as tampering with BHEL's terms and the offer shall be summarily rejected, whenever it is noticed by BHEL. Such Bidders would be disqualified from the Bidding Process and their offers would be forfeited / Bank Guarantees invoked. They would also not be allowed to participate in future tenders of BHEL.
44.	Offers shall be submitted in TWO PART bids system (TECHNO-COMMERCIAL BID + PRICE BID).The bidder shall submit his response through bid submission to the tender on e-procurement platform at https://bhel.abcprocure.com/ within 14:00 Hrs of the due date of this tender. The bidder would be required to register on the e-procurement market place https://bhel.abcprocure.com/ and submit their bids online. SEALED COVER BIDS/ E-MAILS / FAX / MANUAL OFFERS WILL NOT BE ACCEPTED. Supplier shall upload any other tender documents in the E-Procurement Portal only.

On behalf of BHEL



SUDHEER APPIRE DDYGARI
Senior Engineer / Purchase
Materials Management / Steel
BHEL, TRICHY - 620 014.

To be filled & Signed by Original Manufacturer/Mill

Name of the mill / Principal:

Signature:

(Affix Seal)

(All conditions were read & clearly understood and agreed in totality with the mentioned deviations only)

Offer submission check list

Sl. No	List of Documents to be submitted along with offer	√ (Enclosed with offer)	X (Not enclosed)	Not applicable
1.	Product catalogue	☐	☐	☐
2.	Point wise confirmation to PQR (Prequalifying requirements)	☐	☐	☐
3.	Details of In-House manufacturing facilities	☐	☐	☐
4.	list of testing equipments & instruments	☐	☐	☐
5.	Certification of Labs as per ISO 17025, if available	☐	☐	☐
6.	ISO 9001 certification / Quality management system / Written down procedure	☐	☐	☐
7.	Proof of supply (Unpriced PO copies, Mill Test Certificates and unpriced Invoice / Bill of lading copy) covering minimum and maximum sizes of the quoted specifications.	☐	☐	☐
8.	Approval certificates issued by international agencies or your customers such as Lloyds, TUV etc.	☐	☐	☐
9.	Audited copies of annual report for last three years for Indigenous suppliers & GST certificate	☐	☐	☐
10.	Latest audited report for Import suppliers (For both Principal & Mill)	☐	☐	☐
11.	Agency agreement (in case of Foreign or Indian agents).	☐	☐	☐
12.	Incorporation certificate & IT returns of Indian Agent.	☐	☐	☐
13.	Tax certificates for Indigenous supplier	☐	☐	☐

	BHEL – Tiruchirappalli - 620014, India. Quality Assurance Department TECHNICAL DELIVERY CONDITIONS	DOC No: TDC:0:202 Rev No: 09 Effective Date: 21/11/2017 Page: 1 of 2
Product: BOILER QUALITY STEEL PLATES AS PER SA 515, SA 516 & SA 387 SPECIFICATIONS		

Record of revisions:

Rev 04: 18/07/2008 Cl 1.0 to Cl 6.0 modified.
Rev 05: 02/02/2011: SA387 Gr 91 Class 2 added, Cl 2.0, 3.0, 5.0, 6.0, 9.0, and 10.0 modified.
Rev 06: 28/06/2014 Cl 1.0: Material spec SA516 included. CL 3.0 and 5.0 modified.
Rev 07: Dt: 27/04/2016 – Cl 1 modified; Cl 3- Heat treatment temperatures revised; Cl 4 to 8- modified; Cl 10- revised as per latest IBR requirements.
Rev 08: Dt: 04/10/2017: Cl 2 (b), 2 (d), 10 (iii), 10(v) modified and Cl 5.0 (e), 10 (c) & 10 (d-ix) added.
Rev 09: Dt: 21/11/2017: Cl. 5(c), Cl.10 (ix)- modified.

1.0 MATERIALS

Specification : ASME (Latest as on the date of Enquiry or PO, whichever is earlier)
Carbon steel (CS) : SA515 Gr.70, SA516 Gr.70
Alloy Steel (AS) : SA387 Gr.12 Class 2, Gr. 22 Class 2, Gr. 91 Class 2
Additional Requirements : As listed below (Supplementary to the above material specifications)
Size and Quantity : As per Purchase Order (PO)

2.0 CHEMICAL COMPOSITION & PROCESS

- All plates shall be of Fully Killed steel.
- Drum plates shall be Vacuum Degassed. (S1 of SA20).
- Final rolling: Length-wise.
- Plates may be made from ingots or strand cast slabs. Reduction ratio in thickness from slab/ingot to plate shall be at least 3:1.
Sufficient "Top of Ingot" to be discarded to ensure plate free of segregation. After top discard, the increase in Carbon content at the top-mid width, mid thickness of the plate shall not exceed 20% of the reported ladle analysis value. This value shall be reported in Test Certificate.
- Ladle analysis: 1 sample per cast; Product analysis: Min.1 sample per plate as rolled.
Max. Carbon: CS: 0.25%. Max. Carbon Equivalent for Carbon Steel: As per S20 of SA20.

3.0 HEAT TREATMENT (HT) (as delivered condition)

Materials	Heat Treatment Temperature (°C)	
	Normalising	Tempering
CS: SA 515 Gr 70, SA 516 Gr 70	880-920	-
AS: SA387 Gr 12 Class 2	920-960	650-700
AS: SA387 Gr 22 Class 2	920-960	680-750
AS: SA387 Gr 91 Class 2	1040-1080	750-780

4.0 SIMULATION HEAT TREATMENT for test coupons in addition to Cl.:3.0 (For CS Drum plates only as indicated in the Enquiry/PO):

Normalizing: 880-920°C, Stress Relieving (SR): 615±10°C, 3 hr/inch of thick (t), furnace cool to 400°C;
ROH/ROC for SR: <220°C/hr divided by t in inches, but need not be slower than 55°C/hr.

5.0 MECHANICAL TESTS (In simulation heat treated condition for CS Drum plates and in as delivered condition for other CS plates & all AS plates):

Extent of test: For each rolled/mother plate.

- Tensile Test
- Bend Test: Angle of bend: 180 deg. Diameter of the Mandrel = 2xThickness of the plate as rolled.
- High temperature tensile test for carbon steel drum plates shall be as per S7 of SA 20. Min yield strength at 350°C: 19.7 kg/mm².
- For Gr 91 - Hardness: 195 – 250 HBW, Tensile strength: Min: 630 MPa, Yield Strength: Min: 450 MPa.
- Creep testing shall be carried out as per SIP:RM:01 (latest revision) whenever indicated in the Enquiry/Purchase Order/Engineering Drawing.*

6.0 NON DESTRUCTIVE TEST (For all plates of thickness >10mm)

Ultrasonic test: As per SA578. Acceptance: Level B.

7.0 DIMENSIONAL CHECKS

All dimensions shall be as per PO. Tolerance on thickness of plates shall be positive only.

8.0 REPAIRS AND FINISH

Plates to be free of mill scales, edge crack & other injurious defects. Repairs by fusion welding are prohibited. Mechanical removal of defects are permitted subject to availability of min. thickness & smooth surface.

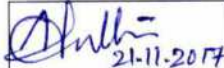
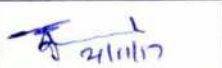
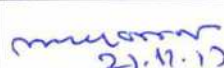
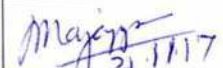
	BHEL – Tiruchirappalli - 620014, India. Quality Assurance Department TECHNICAL DELIVERY CONDITIONS	DOC No: TDC:0:202 Rev No: 09 Effective Date: 21/11/2017 Page: 2 of 2
Product: BOILER QUALITY STEEL PLATES AS PER SA 515, SA 516 & SA 387 SPECIFICATIONS		

9.0 MARKING

- Specification, grade, Melt number, Size, Plate number, Maker's emblem/ code and Inspecting Authority's seal to be stamped on each plate.
- For plates of thickness > 6mm, marking shall be by stencilling & steel die stamping
- For plates of thickness ≤ 6mm, marking shall be by stencilling & steel die stamping using low stress on each plate & bordered by white paint.
- In addition, for SA387, each plate shall be legibly stamped with the letter N to indicate for normalised and tempered plate. Rolling direction shall be marked by paint. PO No., "BHEL - Tiruchirappalli" & weight to be painted on the product.

10.0 INSPECTION AND CERTIFICATION:

- Products shall be inspected at works & the test certificates (in English only) countersigned by Inspecting Authority as below:
 - ☐ **Imported:** Inspecting Authority approved by IBR for the country of origin (to be concurred by BHEL).
 - ☐ **Indigenous Supply:** Director of Boilers/Chief Inspector of Boilers/Inspecting Authority approved by IBR, for the respective state.
- All the products shall be accompanied by IBR Form-IV (for IBR well-known steel makers & others) and manufacturer's mill test certificate (in English only) supplied against every purchase order.
- For Non-IBR application, Form IV is not applicable and certification shall be as per EN 10204 3.1
- Additionally, manufacturer's test certificate shall be submitted meeting all the requirements contained in the purchase order, this TDC, and the applicable ASME Specification with the following details:
 - Purchase Order No (BHEL), TDC No & Rev No, Test certificate number & Date, Quantity.
 - Specification and Grade with applicable year of code, Heat Number, Plate number.
 - Steel making process, Chemistry including incidental elements - Ladle and Product analysis [as per Cl 2(d) & 2(e)].
 - Heat Treatment details of material and test coupons like temperature, soaking time, cooling medium etc.
 - The certification of reduction ratio in thickness ≥ 3:1 from a strand-cast slab/ingot to plate shall be reported in the test certificate.
 - Mechanical, NDE & other test results with reference & acceptance standards.
 - Print of the stamp of Inspecting Officer, which is used on the plate.
 - The manufacturer shall furnish a certificate of compliance stating that the plates have been manufactured, inspected, and tested in accordance with the requirements of the applicable product specification.
 - Creep test report as per SIP:RM:01 (latest revision) whenever indicated in the Enquiry/Purchase Order/Engineering Drawing.*

 21.11.2017	 21/11/17	 21.11.17	 21/11/17	 21/11/17	 21/11/17
Abdur Rahman	G. Panneer Selvam	N. Kirubakaran	R. Rajappan	R. Dharmar	Amit Roy
Sr.Engineer /QA	DGM/QA	SDGM/PE/FB	SDGM/MM	AGM/QC	AGM/QA&BE
Prepared By	Reviewed By				Approved By