

| BHEL :: BAP :: RANIPET | | | | | | | | | | | |
|--|----------------|------------|-----------------------------------|-------------------------------|----------------------------|------|--------------------|--|----|-------|------------------------|
| PURCHASE DEPARTMENT | | | | | | | | | | | |
| ANNEXURE-A | | | | | | | | | | | |
| SCOPE : SUPPLY OF COLD ROLLED COILS IN SIZES/SPEC/QTY AS DETAILED BELOW: | | | | | | | | | | | |
| Enq SNO | SIZES | | MATERIAL SPECIFICATION | APPLICABLE BHEL TDC | INDIVIDUAL COIL WT(MT) | UNIT | QUANTITY (MT) | Delivery Period | | | |
| | THICKNESS (mm) | WIDTH (mm) | | | | | | | | | |
| 1 | 0.80 | 300 | IS 513 Gr. CR3 or IT'S EQUIVALENT | TDC RTA 408 REV03 and Amdt A1 | 02-05 | MT | 120.0 | Within 60 Days from PO | | | |
| 2 | 0.80 | 400 | | | | | 40.0 | | | | |
| 3 | 0.63 | 495 | | | | | 30.0 | | | | |
| 4 | 0.80 | 800 | | | 05-09 | | 410.0 | Lot1-205.0MT Within 60 Days from PO & Lot2-205.0MT Within 90 Days from PO. | | | |
| 5 | 0.80 | 850 | | | | | 500.0 | Lot1-250.0MT Within 60 Days from PO & Lot2-250.0MT Within 90 Days from PO. | | | |
| 6 | 0.63 | 850 | | | | | 420.0 | Lot1-210.0MT Within 60 Days from PO & Lot2-210.0MT Within 90 Days from PO. | | | |
| 7 | 1.214 | 300 | | | CORTEN A/ASTM A 606 TYPE 4 | | TDC RTA-404 Rev 10 | 02-05 | MT | 210.0 | Within 60 Days from PO |
| 8 | 1.214 | 900 | | | | | | | | 80.0 | |
| 9 | 0.63 | 950 | | | | | | | | 30.0 | |
| 10 | 1.214 | 1000 | CORTEN A/ASTM A 606 TYPE 4 | TDC RTA-404 Rev 10 | 05-09 | MT | 750.0 | Lot1-375.0MT Within 60 Days from PO & Lot2-375.0MT Within 90 Days from PO. | | | |
| Total | | | | | | | 2590.0 | | | | |
| Note: | | | | | | | | | | | |
| Only Indigenous Sources will be eligible to bid and Item wise evaluation will be applicable. | | | | | | | | | | | |
| Coils to be supplied in Slit/Trimmed edge condition only. | | | | | | | | | | | |
| Financial PQR to be complied: | | | | | | | | | | | |
| 1) Turnover to be minimum 30% of the tender estimates (Audited last three years summary duly certified by CA). 2) | | | | | | | | | | | |
| Positive - New Worth (Audited last three years summary duly certified by CA) | | | | | | | | | | | |
| 1) BHEL shall be resorting to Reverse Auction (RA) (Guidelines as available on www.bhel.com) for this tender. | | | | | | | | | | | |
| 2) Prices are to be quoted on Per MT basis only. | | | | | | | | | | | |
| 3) All necessary document required to meet the Pre Qualification Criteria to be submitted along with technical bid without fail. | | | | | | | | | | | |
| 4) Quantity Tolerance: Applicable +/-2% on Enq Slnos 05 & 10 and +/-5% on all other items. Supplies beyond this tolerance will be rejected and returned back to the supplier. | | | | | | | | | | | |
| 5) In case of offer with equivalent material grade, then copy of the entire specification of that equivalent grade shall be submitted along with the techno-commercial bid without fail. | | | | | | | | | | | |
| 6) Offer for partial quantity against an individual item is not acceptable and such offers will not be considered for further process for that item. | | | | | | | | | | | |
| 7) Annexure A is to be duly signed, scanned and uploaded during submission of offer. Pointwise specific confirmation to BHEL TDC & SDDR to be given in the Techno-Commercial Bid without fail; otherwise offer may not be considered. | | | | | | | | | | | |
| 8) Bids will be opened on the tender due date and in case of any request for due date extension, the same may not be considered. Hence please ensure submission of bid on or before the due date specified in the tender. | | | | | | | | | | | |
| 9) In case Integrity Pact is applicable, then two original signed copies (duly filled in, signed & stamped) of Integrity Pact to be sent directly to The Sr. Deputy General Manager, Purchase Department (Steel), BHEL, BAP, Ranipet - 632406 by superscribing the tender & NIT No on the envelope without fail and ensure that the same is reaching us on before the tender due date. | | | | | | | | | | | |
| 10) For indigenous suppliers, first inspection will be carried out by BHEL only and subsequent inspections will be by BHEL/BHEL approved Third Party Inspection Agencies (Inspection charges shall be borne by BHEL). | | | | | | | | | | | |
| In case of any clarification, kindly email to ssm@bhel.in / gowthaman@bhel.in / neelkantghode@bhel.in & contact @ 04172 284339 / 284694 / between 0900 hrs to 1730 hrs. | | | | | | | | | | | |
| All corrigenda, addenda, amendments, time extensions, clarifications etc., to the tender will be hosted on BHEL website (www.bhel.com) and EPS(https://eprocurebhel.co.in/nicgep/app). Bidders should regularly visit mentioned website to keep themselves updated. | | | | | | | | | | | |
| Registration process for items required by BHEL is always open at https://supplier.bhel.in. Prospective suppliers (including MSEs & Owned by SCs/STs) may visit this site and apply for registration in the respective unit. | | | | | | | | | | | |
| Senior Deputy General Manager/Purchase | | | | | | | | | | | |

Annexure C- OT Enquiry 3410310E


| SL | CLAUSE | CLAUSE DETAIL / BHEL'S REQUIREMENT | SUPPLIER'S CONFIRMATION | Deviations, if any |
|----|----------------------------|--|-------------------------|--------------------|
| 1 | PRICE | Firm till completion of order. | | |
| 2 | DELIVERY TERMS | For Indigenous suppliers: F.O.R. DESTINATION (Destination: BHEL Stores, Ranipet)For Foreign suppliers: CFR Chennai Sea Port Basis only and insurance in BHEL's scope. | | |
| 3 | PACKING CHARGE | To be included in Basic. | | |
| 4 | FORWARDING CHARGE | To be included in Basic. | | |
| 5 | FREIGHT CHARGES | Please mention in terms of 'PER UNIT' or include it with Basic. | | |
| 6 | INSURANCE | Please mention in terms of 'PER UNIT' or include it with Basic. | | |
| 7 | OTHER CHARGES | Please mention, if any. | | |
| 8 | GST % | To be indicated by supplier. | | |
| 9 | HSN CODE | To be indicated by supplier. | | |
| 10 | GSTN NO. OF ORG. | To be indicated by supplier. | | |
| 11 | BHEL'S PAYMENT TERMS | (i) Indigenous Vendors:100% Direct payment through EFT within 120 days from receipt and acceptance of materials at our stores. For MSE vendors within 45 days from SRV.(ii)Foreign Vendors: 100% Direct payment through EFT within 120 days from receipt and acceptance of materials at our stores.Incase LCis insisted, it shall be 100% Irrevocable Unconfirmed Letter of Credit with 120 days usance period with all charges within India to BHEL account and outside India to Supplier's account. | | |
| 12 | DELIVERY PERIOD | As per Annexure A | | |
| 13 | L.D. CLAUSE | The applicable LD shall be at the rate of 0.5% per week to maximum of 10% for the undelivered portion and for the deliveries made beyond the agreed Delivery Period. Delivery being the essence of BHEL's contract requirements, in the event that a Supplier does not accept the above LD condition, the offer would be loaded to the extent of the shortfall with respect to upper limit specified above. Date of material receipt at our stores (Day Book date) will be considered as the "Delivery date as mentioned in purchase order for indigenous vendors and OBL date shall be reckoned delivery date for import vendors. | | |
| 14 | OFFER VALIDITY | Minimum 90 days from the date of Technical Bid opening and 30 Days from Reverse Auction | | |
| 15 | INSPECTION BEFORE DISPATCH | Inspection before dispatch at supplier's works | | |
| 16 | TEST CERTIFICATE | To be submitted. With Chemical and Mechanical properties and dimensions as per Standards and our Technical Delivery Conditions | | |
| 17 | RISK PURCHASE CLAUSE | Your confirmation to our standard risk purchase clause that alternatively the Purchaser at his option will be entitled to terminate the contract and to purchase elsewhere at the risk and cost of the seller either the whole of the goods or any part which the supplier has failed to deliver or dispatch within the time stipulated as aforesaid or if the same were not available, the best and the nearest available substitute therefor. The supplier shall be liable for any loss which the purchaser may sustain by reason of such risk purchases. | | |

Annexure C- OT Enquiry 3410310E

| SL | CLAUSE | CLAUSE DETAIL/ BHEL'S REQUIREMENT | SUPPLIER'S CONFIRMATION | Deviations, if any |
|----|---|--|-------------------------|--------------------|
| 18 | BHEL STANDARD GUARANTEE CLAUSE | Your confirmation to our standard Guarantee clause that the materials are to be guaranteed for satisfactory performance for a period of twelve months from the date of commissioning / putting into use (or) eighteen months from the dispatch whichever is earlier and if any defect is noticed during the above period, the same shall be rectified/replaced free of cost on Ranipet/ Destination basis within a reasonable time. To this effect a Guarantee certificate should be sent along with the dispatch documents in the event an order. | | |
| 19 | M SME / NON M SME STATUS | Please mention whether your company falls under the category " M SME or non M SME. If M SME - Micro, small or medium enterprise, copy of certificate attested by certified chartered accountant shall be submitted along with the offer. [IM PORTANT NOTE: - M SE suppliers can avail intended benefits only if they submit along with the offer, attested copies of either EM II certificate having deemed validity (Five years from the date of issue of acknowledgement of EM II) or valid NSIC certificate or EM II certificate along with attested copy of a chartered accountant certificate applicable for the relevant financial year (latest audited). Date to be reckoned for determining the deemed documents will lead to consideration of their bid at par with other bidders. No benefits shall be applicable for this enquiry if any deficiency in the above required documents are not submitted before price bid opening. Documents should be notarised or attested by a gazetted officer.] | | |
| 20 | PLACE OF MANUFACTURING | Please mention your complete address of the place of manufacturing. | | |
| 21 | ACCEPTANCE FOR REVERSE AUCTION(BHEL shall be resorting to Reverse Auction (RA) (Guidelines as available on www.bhel.com) for this tender) | Price bid opening through Reverse Auction only | | |
| 22 | CONTRACT EXECUTION BANK GUARANTEE (CEBG): THE SUPPLIER SHALL SUBMIT A BG FOR 2% OF THE CONTRACT VALUE VALID FOR THE AGREED DELIVERY PERIOD + 3 MONTHS. ATTACHED CEBG FORM AT IS TO BE SIGNED AND SUBMITTED AS A TOKEN OF ACCEPTANCE. PLEASE NOTE NO DEVIATION IS ALLOWED. | To be confirmed by supplier | | |
| 23 | SUPPLIER REGISTRATION FORM - ONLINE SUBMISSION IS TO BE DONE AND SOFT COPY OF THE SAME TO BE UPLOADED ALONG WITH TECHNICAL BID BY NEW VENDORS. | To be submitted by supplier | | |
| 24 | FOREIGN OFFERS: COUNTRY OF ORIGIN, MILLS LETTER OF AUTHORITY & AGENCY AGREEMENT | Only Indigenous Sources will be eligible to bid. | | |

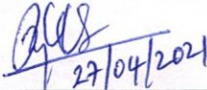
Annexure C- OT Enquiry 3410310E

| SL | CLAUSE | CLAUSE DETAIL / BHEL'S REQUIREMENT | SUPPLIER'S CONFIRMATION | Deviations, if any |
|----|---|---|-------------------------|--------------------|
| 25 | WHENEVER THERE IS AN INDIAN AGENT TO REPRESENT A SUPPLIER, IT IS MANDATORY TO GIVE THE DETAILS OF SERVICES TO BE RENDERED BY INDIAN AGENT AND / OR THE DETAILS OF AGREEMENT BETWEEN SUPPLIER AND AGENT. SUPPLIER TO INDICATE THE AGENCY COMMISSION PAYABLE. INDIAN AGENCY COMMISSION WILL BE PAID ONLY IN INDIAN RUPEES, CALCULATED AT THE RATE OF EXCHANGE PREVAILING ON THE DATE OF PRICE BID OPENING. THIS IS PAYABLE ON SATISFACTORY COMPLETION OF THE CONTRACT. AGENCY AGREEMENT COPY SHALL BE SUBMITTED WITHOUT FAIL.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 SUPPLIERS ALL SUCH OFFERS WILL BE REJECTED. | To be confirmed by supplier | | |
| 26 | TECHNICAL DELIVERY CONDITION (TDC) | As per TDC Attached. Clause wise / Point wise confirmation to be Submitted. | | |
| 27 | CONTACT PERSON NAME, CONTACT NO. & E-MAIL ID. | Please mention | | |
| 28 | ALTERNATE CONTACT PERSON NAME, CONTACT NO. & E-MAIL ID. | Please mention | | |
| 29 | QUANTITY TOLERANCE: | As per Annexure A | | |
| 30 | INVOICING | Actual Net Weight basis only | | |
| 31 | ANY OTHER DEVIATIONS | Please mention | | |
| 32 | CURRENCY QUOTED | Please mention | | |
| 33 | BIS registration certificate as per Ministry of Steel Order, DT:16.02.2018. | To be confirmed by supplier | | |

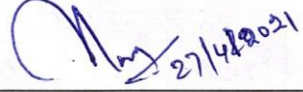
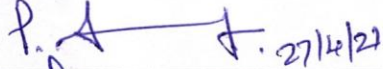
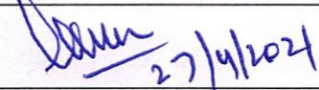
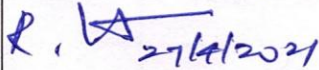
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|  | Technical Delivery Condition (TDC) for Corrosion Resistant Coils / Sheets / Plates | Doc Ref: | TDC:RTA:404 |
| | | Rev .No. | 10 |
| | | Date: | 27.04.2021 |
| | | Page No | 1 of 5 |

**TECHNICAL DELIVERY CONDITIONS FOR CORROSION RESISTANT
COILS / SHEETS / PLATES**

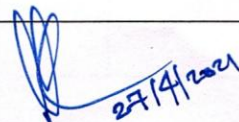
PREPARED BY


| DEPARTMENT | NAME & DESIGNATION S/Shri | SIGNATURE |
|------------|------------------------------|---|
| QA | Renjith K Manager, QA |  27/04/2021 |

REVIEWED BY

| DEPARTMENT | NAME & DESIGNATION S/Shri | SIGNATURE |
|-------------------|-------------------------------------|--|
| ENGG (APH) | K. Thanikachalam SDGM/ APH |  27/4/2021 |
| MATERIAL PLANNING | P. Annamalai SM/ MPLG |  27/4/21 |
| QC (Proc) | R. Kesavan DGM / QC- Proc |  27/4/2021 |
| QA | R. Aruchachalam DGM/ QA & QC-OLI |  27/4/2021 |

APPROVED AND ISSUED BY

| DEPARTMENT | NAME & DESIGNATION S/Shri | SIGNATURE |
|------------------|--|--|
| QC-Shop, QA & BE | K. Saketharaman AGM/ QC-Shop, QA & BE |  27/4/2021 |

| | | | |
|---|---|-----------------|--------------------|
|  | Technical Delivery Condition (TDC) for Corrosion Resistant Coils / Sheets / Plates | Doc Ref: | TDC:RTA:404 |
| | | Rev .No. | 10 |
| | | Date: | 27.04.2021 |
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1.0 SCOPE

1.1 This TDC specifies the requirements of corrosion resistant coils, sheets of CORTEN A / ASTM A 606 Type 4 and equivalent material specification & plates of CORTEN A / ASTM A242 and equivalent material specification & Plates of CORTEN B / ASTM A 588 GR A and equivalent material specification used in APH. Steel shall be in fully killed condition.

2.0 CHEMICAL & MECHANICAL PROPERTIES

2.1 Chemical (melt wise)


| Specification | C | Mn | Si | P | S | Cu | Cr | Ni | V |
|--|-------------|---------------|---------------|---------------|-------------|---------------|---------------|-------------|---------------|
| CORTEN A / ASTM A242 & EQUIVALENT | 0.12 Max | 0.20- 0.50 | 0.25- 0.75 | 0.07- 0.15 | 0.05 Max | 0.25- 0.55 | 0.50- 1.25 | 0.65 Max | -- |
| CORTEN B / ASTM A588 GR A & EQUIVALENT | 0.19 Max | 0.80- 1.25 | 0.30- 0.65 | 0.04 Max | 0.05 Max | 0.25- 0.40 | 0.40- 0.65 | 0.40 Max | 0.02- 0.10 |
| ASTM A606 TYPE 4 | 0.12 Max | 0.20- 0.50 | 0.25- 0.75 | 0.07- 0.15 | 0.04 Max | 0.25- 0.55 | 0.50- 1.25 | 0.65 Max | -- |

2.2 Mechanical Properties

| Specification | Yield point (MPa) (Min) | Tensile Strength (MPa) (Min) | % of Elongation (Min) $5.65 \sqrt{S_0}$ |
|--|----------------------------------|---------------------------------|--|
| CORTEN A / ASTM A242 & EQUIVALENT | 345 | 485 | 22 |
| CORTEN B / ASTM A588 GR A & EQUIVALENT | ≤ 16 thick 355 > 16 thick 345 | 490-630 | 20 |
| ASTM A606 TYPE 4 | 345 | 485 | 22 |

2.3 Bend test shall be conducted for coils as per JIS 3125 SPA-C

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| | | | |
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|  | Technical Delivery Condition (TDC) for Corrosion Resistant Coils / Sheets / Plates | Doc Ref: | TDC:RTA:404 |
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3.0 SUPPLY CONDITION (COILS)


- 3.1 The coils shall be free from slit edges, scales and rust etc.
- 3.2 The tolerance thickness and width shall be as follows:
On width: Plus 0.00 to Minus 1.5 mm.
On thickness: Plus 0.07 mm to minus 0.00 mm
- 3.3 The camber, out of flatness, bend shall be permitted only to the extent specified in the applicable standard.
- 3.4 The ID of the coil shall be 500 mm \pm 20 mm, OD of the coil shall be 1500 mm (max). **Coil Weight:** 2 to 5 MT for coil width of \leq 503 mm and 5 to 10 MT for coil width $>$ 503 mm.
- 3.5 Surface condition shall be cold rolled with matt finish or Ra value in the range of 0.4 to 1.0 micron with an oil coat to protect from rusting.

4.0 SUPPLY CONDITION (PLATE AND SHEETS)

- 4.1 Tolerance for the plates is as per ASTM A6.
- 4.2 Tolerance for sheet on thickness is plus 0.15 mm to minus 0.00 mm
- 4.3 The plates / sheets shall be free from scales and rust.
- 4.4 Plate thickness 12 mm and above shall be ultrasonically tested and accepted as per ASTM A 435.

5.0 PACKING AND PRESERVATION (FOR COILS)

- 5.1 Before packing, the coils shall be given a sufficient coat of rust preventive fluid on the outer part to prevent rusting.
- 5.2 Three binding strips through eye of the coil at equal spacing shall tightly be secured.
- 5.3 Polythene sheet (thickness more than 20 microns) shall be wrapped over the coil.
- 5.4 Subsequently coil shall be wrapped with Hessian cloth.
- 5.5 ID rings shall be provided at both the sides of the coil to protect the coil edges.
- 5.6 Entire circumference of the coil shall be covered with GI sheet / painted sheet. Subsequently, both the faces shall be protected with metal sheets i.e full coil is to be covered.
- 5.7 Three cross strapping shall be tightly secured through the ID of the coil at equal spacing.
- 5.8 Two more strapping along the periphery shall be provided ensuring tight strapping. The outer label containing details as in 7.1 shall be pasted on the packed OD of the coil.
- 5.9 A metal label containing the detail as in 7.1 shall be secured at once of the outer cross strapping.

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|  | Technical Delivery Condition (TDC) for Corrosion Resistant Coils / Sheets / Plates | Doc Ref: | TDC:RTA:404 |
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6.0 PACKING AND PRESERVATION (FOR SHEETS / PLATES)

- 6.1 **The Sheets** shall be coated with a coat of rust preventive fluid on both sides and polythene sheets (thickness more than 20 microns) shall be wrapped over the sheet bundle, subsequently sheets shall be wrapped with Hessian cloth and suitable metal belt.
- 6.2 **The plates** shall be suitably bundled for withstanding the handlings during loading & unloading.

7.0 IDENTIFICATION

- 7.1 **For coils** the following details shall be stenciled with paint / pasted with sticker on the ID of the coil and **for sheets** on the bundle.
- Vendors Name
 - Purchase Order Number
 - Coil Number / Sheet Number / Plate Number
 - Specification & Grade
 - Net Weight


For plates, the details a, c, d in clause 7.1 are to be hard stamped and bordered with paint and b & e are to be painted.

- 7.2 For coils, two more labels containing all the details as in 7.1, shall be pasted, one on the eye and another on the outer surface of the packed coil.

8.0 TEST CERTIFICATE


- 8.1 The TC shall be in English and containing the following details
- Purchase Order Number
 - Specification and Grade
 - Coil Number
 - Nominal thickness and width
 - Chemical composition – melt wise.
 - Mechanical properties – melt wise / HT batch wise
 - Gross and net weight

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|  | Technical Delivery Condition (TDC) for Corrosion Resistant Coils / Sheets / Plates | Doc Ref: | TDC:RTA:404 |
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| | | Date: | 27.04.2021 |
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RECORD OF REVISIONS

| Rev No | Date | Revision details |
|--------|------------|--|
| 00 | 20.05.1996 | TDC RTA 004/00 is revised and re-numbered as RTA 404 Rev. 00 |
| 01 | 18.07.1996 | 1. Clause 2.3 table and sketch modified 2. Clause 6.2, Clause 7.9, Clause 9.1 modified 3. Clause 9.5 deleted. |
| 02 | 27.11.1996 | 1. Clause 8.0 deleted 2. Clause 9.0 re-numbered as 8.0 |
| 03 | 28.09.1998 | 1. Clause 2.2 minimum yield strength changed to 310 MPa in line with Corten coil specification. |
| 04 | 22.06.1998 | Scope of sheets taken out of the purview of the TDC. Please see TDC:RTA:425/001 dated 22.06.98 for corten sheets. |
| 05 | 10.05.2002 | TDC totally reviewed and revised. Requirements of TDC RTA 405 (corrosion resistant plate) TDC RTA 425 (Corrosion resistance sheets) are merged to form this TDC:RTA:405, 425 deleted. |
| 06 | 07.02.2003 | Clause 2.1 Chemistry details revised and Clause 3.2 modified. Clause 2.2 gauge length specified for % of elongation. Clause 3.4 revised based on supplier feedback. Clause 7.1 modified for better clarity. |
| 07 | 26.11.2011 | Clause 1.1, 2.1 and 2.2: ASTM A242 and ASTM A588 Gr. A included. |
| 08 | 09.01.2020 | ASTM A606 added based on engineering feedback (Email dated 16.12.2019 and supplier confirmation through purchase email dated 08.01.2020) |
| 09 | 07.10.2020 | Clause No. 2.1 (minimum Chromium Value 0.35 change for Corten A and ASTM A606 Type 4), Clause 3.5 (Ra values added) revised based on Engineering feedback. |
| 10 | 27.04.2021 | Mechanical properties of Corten-A / ASTM A242 & Equivalent changed based on MOM dated 24.04.2021 (Meeting with Engineering, M&S, Purchase, Material Planning, Marketing, QA and QC-Procurement) |

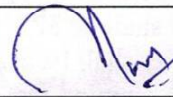

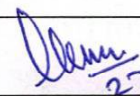

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|  BHEL Ranipet | Technical Delivery Condition (TDC) for Cold rolled carbon sheet coils | Doc Ref: | TDC:RTA:408 |
| | | Rev .No. | 03 |
| | | Date: | 27.04.2021 |
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**TECHNICAL DELIVERY CONDITIONS FOR
COLD ROLLED CARBON SHEET COILS**


PREPARED BY


| DEPARTMENT | NAME & DESIGNATION S/Shri | SIGNATURE |
|------------|------------------------------|--|
| QA | Renjith K Manager, QA |  27/04/2021 |

REVIEWED BY

| DEPARTMENT | NAME & DESIGNATION S/Shri | SIGNATURE |
|-------------------|-------------------------------------|--|
| ENGG (APH) | K. Thanikachalam SDGM/ APH |  27/04/2021 |
| MATERIAL PLANNING | P. Annamalai SM/ MPLG |  27/4/2021 |
| QC (Proc) | R. Kesavan DGM / QC- Proc |  27/4/2021 |
| QA | R. Aruchachalam DGM/ QA & QC-OLI |  |

APPROVED AND ISSUED BY

| DEPARTMENT | NAME & DESIGNATION S/Shri | SIGNATURE |
|------------------|--|--|
| QC-Shop, QA & BE | K. Saketharaman AGM/ QC-Shop, QA & BE |  27/4/2021 |

| | | | |
|---|--|-----------------|-------------|
|  | Technical Delivery Condition (TDC) for Cold rolled carbon sheet coils | Doc Ref: | TDC:RTA:408 |
| | | Rev .No. | 03 |
| | | Date: | 27.04.2021 |
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1.0 SCOPE

- 1.1 This TDC specifies the requirements for cold rolled sheets of deep drawing quality to specification IS 513 GR-CR3 / JIS G 3141 SPCD-SD.

2.0 CHEMICAL & MECHANICAL PROPERTIES

2.1 IS 513

- | | |
|--------------|---------------------------------|
| 1. Chemistry | } shall be as per specification |
| 2. Hardness | |
| 3. Bend Test | |
4. Erich son cupping value shall be as per Figure 1 of IS 513.

JIS G3141

1. Chemistry shall be as per Table 1 under informative reference of JIS G 3141
2. Hardness shall be 57 HRB MAX
3. Bendability shall be as per table 6 of JIS G 3141
4. Erich son cupping test shall be conducted and the value shall be as per Figure 1 of IS 513.


3.0 SUPPLY CONDITION

- 3.1 The coils shall be free from slit edges, visual scales and rust etc.
- 3.2 The tolerance thickness and width shall be as follows:

| | |
|--------------|--------------------------------|
| On width | : Plus 0.00 to Minus 1.5 mm. |
| On thickness | : Plus 0.07 mm to plus 0.00 mm |
- 3.3 The camber, out of flatness, bend shall be permitted only to the extent specified in the applicable standard.
- 3.4 The ID of the coil shall be 500 mm \pm 20 mm, OD of the coil shall be 1500 mm (max) and coil weight 5 to 10 MT.
- 3.5 **Surface condition**
 - 3.5.1 Cold rolled with matt finish with an oil coat to protect rusting and when ordered as per the Japanese standard, it shall be SPCD-SD that is, skin rolled-dull finished by roll whose surface is made rough mechanically or chemically.

4.0 PACKING

- 4.1 Before packing, the coils shall be given a sufficient coat of rust preventive fluid on the outer part to prevent rusting.

| | | | |
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|  | Technical Delivery Condition (TDC) for Cold rolled carbon sheet coils | Doc Ref: | TDC:RTA:408 |
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- 4.2 Three binding strips through eye of the coil at equal spacing shall tightly be secured.
- 4.3 Polythene sheet (thickness more than 20 microns) shall be wrapped over the coil. Subsequently coil shall be wrapped with Hessian cloth.
- 4.4 ID rings shall be provided at both the sides of the coil to protect the coil edges.
- 4.5 Entire circumference of the coil shall be covered with GI sheet / painted sheet. Subsequently, both the faces shall be protected with metal sheets i.e full coil is to be covered.
- 4.6 Three cross strapping shall be tightly secured through the ID of the coil at equal spacing.
- 4.7 Two more strapping along the periphery shall be provided ensuring tight strapping. The outer label containing details as in 5.1 shall be pasted on the packed OD of the coil.
- 4.8 A metal label containing the detail as in 5.1 shall be secured at once of the outer cross strapping.


5.0 IDENTIFICATION

- 5.1 The following details shall be ensured in outer label pasted on the ID of the coil.
 - a. Vendors Name
 - b. Purchase Order Number
 - c. Coil Number
 - d. Specification & Grade
 - e. Net Weight
- 5.2 Two more labels containing all the details as in 5.1, shall be pasted, one on the eye and another on the outer surface of the packed coil.

6.0 TEST CERTIFICATE

- 6.1 The TC shall be in English and containing the following details
 - i. Purchase Order Number
 - ii. Specification and Grade
 - iii. Coil Number
 - iv. Nominal thickness and width
 - v. Chemical composition – melt wise.
 - vi. Bend test result
 - vii. Max. camber
 - viii. Gross and net weight
 - ix. Hardness and Erichson cupping values
- 6.2 BHEL reserves the right to carry out tests and reject the item wherever non-conforming to the requirement of Purchase Order and Technical Delivery Condition.

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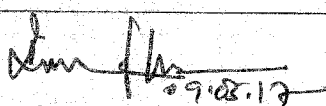
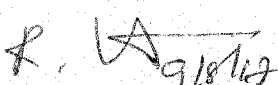
RECORD OF REVISIONS

| Rev No | Date | Revision details |
|--------|------------|--|
| 00 | 26.02.1996 | TDC RTA 008 REV 04 revised and renumbered as TDC RTA 408/REV/00. |
| 01 | 29.11.2002 | Clause 4.0 and Clause 4.1 revised to change tolerance on thickness plus 0.00 to plus 0.015 mm. |
| 02 | 10.05.2002 | TDC totally reviewed and revised. |
| 03 | 27.04.2021 | IS 513 GR.DD terminology based on obsolete standard is revised as IS 513 GR-CR3 based on latest revision. MOM dated 24.04.2021 (Meeting with Engineering, M&S, Purchase, Material Planning, Marketing, QA and QC- Procurement) recommends the above. |

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| QUALITY ASSURANCE | |
| QWI NO: TDC:RTA:408 Rev.02 Dtd.10.05.2002 | |
| <i>Amendment to Quality Work Instruction (QWI)</i> | |
| Amendment No: A1 | Date: 09.05.2017 |
| Title: TDC FOR Cold rolled carbon sheets coils.8 | |

| Details of Amendment | | |
|------------------------|--|---|
| Clause No | Amended As | Basis for Amendment |
| Refer Clause no 3.4 | OD of the Coil shall be 1300mm max and Coil wt. 5 to 9 MT max. | Shop feedback. Refer Email Dated:06.05.2017 |

| | | |
|---|--|--|
| Prepared By (QA) | | Reviewed & Approved By |
|  09.05.17 | |  9/5/17 |

TECHNICAL CONFIRMATION / DEVIATION REPORT

| SI.No | Description | BHEL's requirement | Supplier's comments |
|-------|---|---|---------------------|
| 01 | Sizes | Item wise size quoted in line with our requirement to be confirmed. Any deviation item wise to be mentioned. | |
| 02 | Specification | Quoted specification in line with our requirement to be confirmed. In case of offer with equivalent material grade, then copy of the entire specification of that equivalent grade shall be sent along with the techno-commercial bid without fail. | |
| 03 | TDC | Clause wise confirmation in line with our TDC to be confirmed. In case of any deviation, clause wise to be mentioned in the below SDDR. | |
| 04 | Specification deviation disposition report (SDDR) | Below SDDR to be filled & submit without fail. <u>(Even if no deviation is taken, NIL report to be submitted).</u> | |

| SPECIFICATION DEVIATION DISPOSITION REPORT | | | |
|--|--------|--|---------------------|
| Specn | Item | | |
| Enq.No & Date | | | |
| Vendor Name | | | |
| TDC | | | |
| No | Clause | Details Of Deviation With Reason | Disposition By BHEL |
| | | | |
| Signature Of Vendor | | | Reviewed By |
| " AGREED DEVIATION " | | if any to be incorporated in the PO in the event of order. | APPROVED BY |

DATE:

SIGNATURE WITH SEAL

Annexure – 01 MPLG PQR

**Pre-Qualification Requirement
To
Participate in Tender for Plates, Sheets & Structural Items' Procurement
(To be submitted along with Offer for Technical BID Evaluation)**

Following are the Pre-Qualification Requirement

| Sl No. | Criteria | Document proofs to be submitted | Bidder Compliance (Yes/No/Comment) |
|--------|---|---|------------------------------------|
| 01 | Bidder should be original manufacturers or OEM authorized distributor /agent/trader. | Certificate of being original manufacturer. A valid OEM authorization letter in case of Distributor /Agent/ Trader. Note- Exempted for *PMD Vendor | |
| 02 | Suppliers shall indicate their experience for the tendered specifications. | Copy of PO and Invoice with co-related test certificates to be submitted. Documents should not be older than 2years from tender opening date. Note- Exempted for *PMD Vendor | |
| 03 | Suppliers shall not have been banned / black listed / by BHEL Ranipet or any other unit/region/sector of BHEL. | Self-declaration to be submitted | |
| 04 | Quality Management System (QMS) or Quality Assurance Manual or Written down procedure | a valid ISO 9001 certificate / Quality Management System certificate. Note- Exempted for *PMD Vendor | |
| 05 | BIS Certification for the products which are brought under compulsory certification by the Central Government as per the provision of BIS Act, 2016 | a valid BIS certificate Note- Exempted for product not brought under compulsory certification as per the provision of BIS Act, 2016 | |
| 06 | Confirmation to the Specification / TDC/ Drawing / Dimension / Size /Packing requirements | Signed copy of Specification/ TDC/Drawing shall be submitted as a proof of conformity | |
| 07 | Compliance to all provision of Technical Bid Documents. | Signed copy of "Certificate of Compliance" for No Technical Deviation- Annexure-02 MPLG SDDR | |

*PMD Vendor- Vendor registered with BHEL Ranipet for tendered product with specification.

- BHEL reserves the right to verify information / confirmation furnished by asking additional documents Proofs etc.
- BHEL reserves the right to visit supplier's works to audit and inspect to ensure the capability for technical evaluation.
- Compliance to all the above Pre-qualification requirements is mandatory. In absence of PQR compliance vendor's offer are liable for rejection.

Declaration:

We understand that all the proofs/documents submitted by our firm for all the above points are subject to verification and in case BHEL finds any discrepancy in any of the documents submitted by us like fake/false/forged documents, Certificates or information, action may be taken against our firm as per extant guidelines of BHEL.

Bidder's Seal & Signature

Annexure – 02 MPLG SDDR

CERTIFICATE FOR COMPLIANCE
TO
ALL PROVISIONS OF TECHNICAL BID DOCUMENTS
(Certificate of "NIL" Technical Deviation)
{To be submitted along with Offer for Technical BID Evaluation}

To,

Material Planning/MM
BHARAT HEAVY ELECTRICALS LIMITED
BOILER AUXILIARIES PLANT
RANIPET, PIN-632 406
TAMILNADU-INDIA

Dear Sir,

1. With reference to our Bid submitted against the tender, we hereby confirm that we comply with all terms, conditions and specifications of the Technical Bidding Documents read in conjunction with Amendment(s) / Clarification(s) / Addenda/Errata (if any) issued by the BHEL Ranipet prior to opening of Techno-Commercial Bids and the same has been taken into consideration while making our Technical Bid and we declare that **we have not taken any deviation in this regard except mentioned in the box given below.**

Technical Deviation (if any)-Write "NIL" in case of No Technical Deviation.

2. We understand that in case the Products /Specifications/ additional conditions/ deviations/ variations/exception offered do not meet the Technical requirements, then our bid shall be rejected as Technically non-responsive.
3. We also confirm that in regards to technical requirement we have not written any additional conditions/ deviations/ variations/exception, implicit or explicit, anywhere else in the techno-commercial bid.
4. For technical deviation not acceptable to BHEL Ranipet, we also confirm that in case we refuse/not responding to withdraw additional conditions/ deviations/ variations/ exception regarding any technical requirement, within the stipulated time, our bid shall be rejected as Technically non-responsive.

Bidder's Seal & Signature