

Payment Mechanism at BHEL, Ranipet

(Effective for all tenders issued by BHEL Ranipet from 01 July 2011 onwards unless otherwise

notified of change/s in writing given by an authorized official of BHEL, Ranipet)

BHEL, Ranipet's payment mechanism will be as follows: (All Bidders are requested to read this

carefully and take note of it before submitting their offer)

All bills of Suppliers processed for payment by BHEL, Ranipet shall pass through the following mile

stones:

(1) Receipt of materials at BHEL, Ranipet Stores (evidenced by the Day-Book Number and Date

generated at BHEL Stores, Ranipet) or receipt of materials at Project Site / Destination specified

in the Purchase Order (as evidenced by the acknowledgment given by the Consignee).

(2) Acceptance of the supplied materials at BHEL Stores, Ranipet. (Proof of evidence: Stores

Receipt voucher - Short form "SRV", raised by BHEL Stores, Ranipet referenced by the SRV Number and

Date)

(3) Receipt and Registration of the Bills / Invoices of the Supplier at BHEL, Ranipet Accounts

Department. (evidenced by the ABS Number and Date)

(4) Receipt of clarifications, if any that may be required by BHEL, Ranipet Accounts or Purchase

Department, from the Supplier. (As evidenced by the IOM Inward Date)

(5) Bill processing and passing.

(6) Payment release.

All these events are transparently available in the SCM web-site of BHEL, Ranipet,

{<http://bapscm.bhelirp.co.in/purc>} which can be viewed by all registered supplier with a password.

Allowed Time frames:

A) From DB to SRV: 10 Days

B) From SRV to ABS: 15 Days

C) From ABS to Bill Pass: 07 Days (if Stage 4 above is not applicable)

OR

From IOM to Bill Pass: 07 Days (if Stage 4 above is applicable)

D) From Bill Pass to Payment Release: As per payment terms of the Purchase order.

All Suppliers payment/s would be released based on seniority of receipt of the processed bills at

the payment section of BHEL, Ranipet Accounts Department.

The seniority would be based on the sequence of milestone events listed above.

In the sequence of the bill processing the preceding mile-stone seniority will be void, if the

subsequent event occurs beyond the permitted time frame between two successive events.

Thus for example:

Start seniority would be with the DB date.

If the SRV date is greater than 10 days of the DB date, then the seniority of the DB date would be

replaced by the SRV date.

If the ABS date is greater than 15 days of the SRV date, then the seniority would be reckoned by the

ABS date.

If the Bill pass date is greater than 07 days of the ABS date then the seniority would be the date

of Inward receipt of the IOM.

The logics of these sequence is that SRV, ABS, IOM Inward entry are dependent entirely on submission

of correct documentation by Suppliers, as called for in the Purchase Order. If the documents are

correctly submitted each of the milestone listed above will occur within BHEL, Ranipet within the

timelines specified above.


Hence, in their own interest all Suppliers are requested to take note of this process and comply

with the same.

Caution: Suppliers' payments would get delayed / affected if they fail to adhere to the submission

of the documents specified in the Purchase Order / Contract, since the listed milestone events

occurrence are contingent upon the availability of the requisite documents.

	Technical Delivery Condition (TDC) FOR Cold Rolled Low Carbon Steel Flat Product for Cold Forming (Collecting Electrode Coils)	Doc Ref:	TDC:RTE:257
		Rev.No.	03
		Date:	21.03.2013
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1.0 SCOPE

This TDC specifies the requirements for the supply of cold rolled steel sheet coils for Collecting Electrode.

2.0 MATERIAL SPECIFICATION

2.1 The applicable specifications are as follows;

2.1.1 Carbon steel:

- a) JIS G 3141 SPCD – SD
- b) IS:513 Gr.DD (killed, matt finish & best surface)

2.1.2 Corrosion Resistant Steel:

- a) EN 10130 – DC 03 (1.0347) – B- m
- b) COR-TEN A or equivalent

3.0 ADDITIONAL REQUIREMENTS

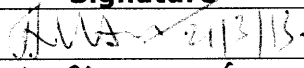
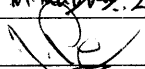
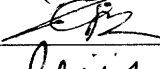
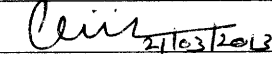
- 3.1 Tolerance on thickness: ± 0.05 mm
- 3.2 Tolerance on width + 3.0 mm, - 0.0 mm
- 3.3 Coil weight shall be restricted between 12-20 MT
- 3.4 ID of the coil shall be restricted to 500-610mm
- 3.5 The camber in the coil shall be maximum of 6 mm for any continuous length of 15 M.

4.0 CHEMICAL AND MECHANICAL PROPERTIES


4.1 Carbon steel:

4.1.1 The chemistry & Mechanical properties including hardness for the carbon steel coils shall be as per respective Specification.

4.1.2 Carbon steel coils of IS 513 Gr. DD – in addition to mechanical testing cupping test has to be conducted and acceptance norm shall be as per IS 513 Gr. DD

Prepared by (QA)	Reviewed by	Signature	Approved by (Head/QA)
	ENGG(AQCS)		
	Material Planning.	M. Madhav. 21/3/13 (m.madhavam)	
	Purchase		
	Quality Control (Proc.)		
	Quality Assurance		

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4.2 Corrosion Resistant Steel :

4.2.1 The chemistry and mechanical properties shall be as follows:

a) Chemical Composition :

-	C	SI	Mn	P	S	Cr	Cu	Ni
MIN	-	0.25	0.20	0.07	-	0.30	0.25	-
MAX	0.12	0.75	0.50	0.15	0.035	1.25	0.55	0.65


b) Mechanical Properties:

- Yield Point: 310 MPa (min),
- Tensile Strength: 445 MPa (min)
- Minimum % Elongation ($L_0 = 5,65 \sqrt{S_0}$) = 20

5.0 Packing:

- 5.1 Before packing, the coils shall be given a sufficient coat of rust preventive fluid on both sides (top & bottom).
- 5.2 Three binding strips through eye of the coil at equal spacing shall tightly be secured.
- 5.3 Polythene sheet (thickness > 20 microns) shall be wrapped over the coil.
- 5.4 Subsequently coil shall be wrapped with polythene bonded 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 ie., full coil is to be covered with GI Sheet / Painted Sheet.
- 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 shall be pasted on the packed OD of the coil.
- 5.9 A metal label containing the details as mentioned in clause no. 5.10 shall be secured at one of the outer cross strapping.

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- 5.10 Label containing following details shall be pasted on the ID and OD of the coils.
- a. Vendors Name
 - b. Purchase Order No.
 - c. Coil No.
 - d. Specification and grade
 - e. Gross weight
 - f. Net weight.

6.0 TEST CERTIFICATE :

Detailed correlated Test Certificates in English, to be submitted along with the supply, for the tests conducted as required in the respective specification and as mentioned in this TDC.


- 7.0 BHEL reserves the right to carry out incoming materials cross inspection checks on receipt of coils at BHEL Stores and reject the same, if found, not conforming to the requirement of PO and TDC.

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RECORD OF REVISIONS

Rev No	Date	Revision details
00	25.11.1995	TDC: RTE: 024, TDC:RTE:025, TDC:RTE:062, TDC:RTE:070 AND TDC:RTE:071 were reviewed and merged together.
01	15.05.2002	Totally reviewed and re-issued.
02	06.06.2007	Modified for better clarity.
03	21.03.2013	Clause no. 3.3 – Coil weight changed to 12 to 20MT instead of 8-10 MT considering the new roll forming machine installed at R1 Bay.

Issued By Quality Assurance

 Ranipet	Technical Delivery Condition (TDC) for Cold rolled corrosion resistant coils / sheets/ Plates	Doc Ref: TDC:RTA:404
		Rev.No. 07
		Date: 26 11 11
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1. SCOPE

1.1. This TDC specifies the requirements of cold rolled coils, sheets of CORTEN A/ASTM A 242 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. Chemical & Mechanical properties:

2.1. Chemical (melt wise)

Specn	C	Mn	Si	P	S	Cu	Cr	Ni	V
CORTEN A/ ASTM A 242 & EQUIVALENT	0.12 Max	0.20- 0.50	0.25- 0.75	0.07- 0.15	0.05 Max	0.25- 0.55	0.35- 1.25	0.65 Max	--
CORTENB/ ASTM A 588 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

2.2. Mechanical Properties


Specification	Yield point (Mpa) (Min)	T S (MPA) (Min)	% of Elonga (Min) 5.65 √ So
CORTEN A/ ASTM A 242 & EQUIVALENT	310	445	20
CORTEN B/ ASTM A 588 GR A & EQUIVALENT	≤ 16 thick 355 >16 thick 345	490 - 630	20

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

3. 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 0.07mm 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.

Prepared by <i>J. Chitambar</i>	Reviewed by	Signature	Approved by <i>[Signature]</i> (Head / QA)
	Engg (APH)	<i>[Signature]</i>	
	Purchase	<i>[Signature]</i>	
	MPL	<i>[Signature]</i>	
	QC (Proc)	<i>[Signature]</i>	
	QA	<i>[Signature]</i>	
Issued by Quality Assurance			

 Ranipet	Technical Delivery Condition (TDC) for Cold rolled corrosion resistant coils / sheets/ Plates	Doc Ref:	TDC:RTA:404
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- 3.4. The ID of the coil shall be 500 mm \pm 20mm, 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 with an oil coat to protect from rusting.

4. Supply conditions (Plates and sheets)


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

5. 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 one of the outer cross strapping.

6. 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.

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7. 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.

- | | |
|-------------------------------------|---------------------------|
| a. Vendor's Name | b. P.O. No. |
| c. Coil No. / Sheet No. / Plate No. | d. Specification & Grade. |
| e. 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. Test certificate

8.1. The TC shall be in English and containing the following details.

- i. PO No.
- ii. Specification and grade
- iii. Coil no.
- iv. Nominal thickness and width
- v. Chemical composition – melt wise.
- vi. Mechanical properties – melt wise / HT batch wise
- vii. Gross and net weight

8.2. BHEL reserves the right to carry out test and reject the items wherever non conformance to the contract is noticed.

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Rev No	Date	Changes made
00	20 05 96	TDC RTA 004 / 00 is revised and re-numbered as RTA 404 Rev.00
01	18 07 96	i. Cl.2.3 table and sketch modified ii. Cl. 6.2, Cl.7.9, Cl.9.1 modified iii. Cl.9.5 deleted.
02	27 11 96	i. Cl. 8.0 deleted ii. Cl. 9.0 re-numbered as 8.0
03	28 03 98	i. Cl. 2.2 min yield strength changed to 310 MPa in line with corten coil specification.
04	22 06 98	Scope of sheets taken out of the purview of the TDC. Please see TDC:RTA:425/001 dt 22 06 98 for corten sheets.
05	10 05 02	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 03	Class 2.1 chemistry details revised. And cl.3.2 modified Clause 2.2 gauge length specified for % of elongation. Cl. 3.4 revised based on supplied feedback. Cl.7.1 modified for better clarity.
07	26 11 11	Cl. 1.1, 2.1 and 2.2 : ASTM A 242 and ASTM A 588 GR A included.