

	Technical Delivery Condition (TDC) FOR Hot Rolled Carbon Steel Sheet coils for Module Mounting Structures	Doc Ref:	TDC:RTE:262
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1.0 1 SCOPE

This TDC specifies the requirements for the supply of Hot Rolled steel sheet coils for Module Mounting Structure (MMS).

2.0 MATERIAL SPECIFICATION

The applicable specifications are as follows:

- 2.1 Material shall conform to IS 2062 or IS:1079 Grade DD or equivalent.
- 2.2 Yield strength of supplied material shall be 350 Mpa (Min.)
- 2.3 The specification, thickness, width shall be as per the enquiry / Purchase Order.

3.0 ADDITIONAL REQUIREMENTS

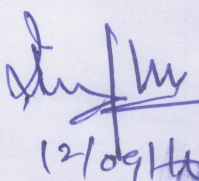
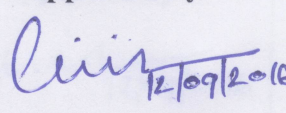
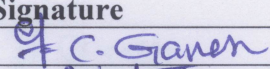
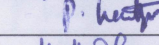
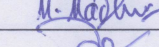
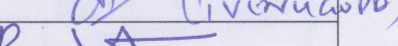
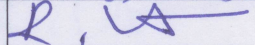
- 3.1 Tolerance on thickness: - 0.05mm / +0.15mm
- 3.2 Tolerance on width + 3.0 mm, - 0.0 mm
- 3.3 Coil weight shall be restricted between 4 to 8 MT
- 3.4 ID of the coil shall be restricted to 500 to 610mm
- 3.5 The camber in the coil shall be maximum of 3 mm for any continuous length of 6 Meters.

4.0 CHEMICAL AND MECHNAICAL PROPERTIES:

4.1. Carbon steels (E350):

- 4.1.1 The Chemical & Mechanical properties including hardness for the carbon steel coils shall be as per respective Specification.
- 4.1.2 The material shall not develop crack near the bend during cold forming.
- 4.1.3 Mechanical Properties:

- Yield Point: 350 MPa (min),
- Tensile Strength: 490 MPa (min)
- Minimum % Elongation ($L_0 = 5,65 \sqrt{S_0}$) = 22

Prepared by  12/09/16	Reviewed by	Signature	Approved by  12/09/2016 (Head/QA)
	ENGG(AQCS)		
	QC(Proc)		
	Material Planning.		
	Purchase		
	QA		
Issued by QUALITY ASSURANCE			

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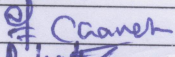
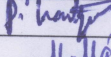
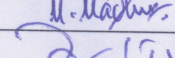
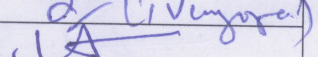
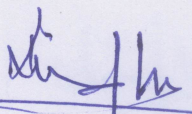
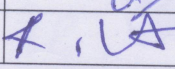
5.0 PACKING:

- 5.1 Three binding strips through eye of the coil at equal spacing shall tightly be secured.
- 5.2 Polythene sheet (thickness > 20 microns) shall be wrapped over the coil.
- 5.3 Subsequently coil shall be wrapped with Hessian cloth.
- 5.4 ID rings shall be provided at both the sides of the coil to protect the coil edges.
- 5.5 Three cross strapping shall be tightly secured through the ID of the coil at equal spacing.
- 5.6 Two more strappings along the periphery shall be provided ensuring tight strapping. The outer label shall be pasted on the packed OD of the coil.
- 5.7 A metal label containing the details as in 5.8 shall be secured at one of the outer cross strapping.
- 5.8 Label containing following details shall be pasted on the ID, eye, 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 in this TDC.

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

Prepared by	Reviewed by	Signature	Approved by (Head/QA)
	ENGG(AQCS)		
	QC(Proc)		
	Material Planning.		
	Purchase		
 12.09.2016	QA		
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