

Approval & Reception Procedure

DMC – Departamento de Materiais de Construção	
Paint for Iron and Steel Work	Document No. ARP/DMC/01
	Date : 2010-07-01
	Page No. 1 of 2

1. Reference Standard

The reference standard is ISO 12944: Part 1~8.

2. Approval Procedure

Proposal of paint system: including number of coats and nominal dry film thickness of each coat.

For approval of the proposed materials, the following basic information of paintwork should be considered:

- Design specification of paint materials
- Constituent elements
- Type of substrate
- Environment
- Required durability

Painting schedule: substrate preparation, methods and location of application of each coating. If prefabrication primer is to be used, application method and location.

3. Reception Procedure

Inspection of paintwork: Inspection results of substrate preparation, application of paints and cured paint should be recorded.

For structural steelwork, one thickness test shall be made per each 20 tons of steel materials. The reference areas should be selected representative location.

For other steel articles such as guardrail, pipeline etc, one thickness test shall be made per each 500 m² painted area. The reference areas should be selected representative location.

4. Acceptance Criteria

For paint on steel articles: The average of all point values recorded should equal or exceed the nominal thickness, and there should be no values less than 80 % of the nominal thickness.

For paint on galvanized steel articles: The average of all point values recorded should equal or

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	Date : 2010-07-01
	Page No. 2 of 2

exceed the sum of the nominal thickness of zinc coating and nominal thickness of paint, and no single value should be less than the sum of the nominal value of zinc coating and 80 % of the nominal value of paint thickness. For galvanized steel in accordance with ISO 1461, the nominal value should be either taken from Table 2 or from the project specification, depending on whichever is greater.

For galvanized tubes used in water supply installation, the nominal value should be taken as 55 micron (with reference to EN 10240:1997).

The non-conforming area shall be re-painted and re-tested.

Remark: Care shall be taken in the utilization of paint, to adjust the coating to the nominal dry film thickness and to avoid excessive thickness in any areas. It is recommended that the maximum dry film thickness shall not be 3 times greater than the nominal dry film thickness.