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ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION

R 1460

**DETERMINATION OF THE WEIGHT PER UNIT AREA
OF HOT DIP GALVANIZED COATINGS ON FERROUS MATERIALS
BY CHEMICAL DISSOLUTION OF THE COATING
GRAVIMETRIC METHOD**

1st EDITION

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BRIEF HISTORY

The ISO Recommendation R 1460, *Determination of the weight per unit area of hot dip galvanized coatings on ferrous materials by chemical dissolution of the coating – Gravimetric method*, was drawn up by Technical Committee ISO/TC 107, *Metallic and other non-organic coatings*, the Secretariat of which is held by the Ente Nazionale Italiano di Unificazione (UNI).

Work on this question led to the adoption of Draft ISO Recommendation No. 1460 which was circulated to all the ISO Member Bodies for enquiry in May 1968. It was approved, subject to a few modifications of an editorial nature, by the following Member Bodies :

Australia	India	Portugal
Belgium	Iran	South Africa, Rep. of
Chile	Israel	Spain
Czechoslovakia	Italy	Sweden
Finland	Netherlands	Switzerland
France	New Zealand	Thailand
Germany	Norway	U.A.R.
Hungary	Poland	United Kingdom

The following Member Body opposed the approval of the Draft :

Turkey

This Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided, in April 1970, to accept it as an ISO RECOMMENDATION.

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1. SCOPE

This ISO Recommendation covers a method of determination of the weight per unit area of hot dip galvanized coatings on ferrous materials.

Since exact knowledge of the area of the surface is essential, this ISO Recommendation is mainly applicable to shapes whose areas are easy to determine. If, with heavy samples, the requirements of section 5 cannot be met, then the hot dip galvanized coating weight has to be determined by another method.

2. PRINCIPLE

The hot dip galvanized coating from a surface of known area is dissolved in inhibited acid and the resultant loss in weight is determined by weighing the sample before and after the coating is dissolved.

3. SAMPLING

The method of sampling should be agreed between the contracting parties.

4. STRIPPING SOLUTION

Dissolve about 3.2 g of antimonous chloride (SbCl_3) or 2 g of antimonous oxide (Sb_2O_3) in 500 ml of concentrated hydrochloric acid ($d = 1.19$). Dilute this solution with distilled water to 1 litre.