DIN EN ISO 2179:2016-08 (E)

Electroplated coatings of tin-nickel alloy - Specification and test methods (ISO 2179:1986)

Contents

Page

European foreword ... 3

Foreword ... 4

Introduction ... 5

1 Scope and field of application ... 6

2 References ... 6

3 Definition ... 7

4 Information to be supplied by the purchaser to the electroplater ... 7
4.1 Essential information ... 7
4.2 Additional information ... 7

5 Basis material ... 7

6 Sampling ... 8

7 Classification ... 8
7.1 Service condition number ... 8
7.2 Coating classification code ... 8

8 Heat treatment of steel ... 9
8.1 Stress relief before electroplating ... 9
8.2 Hydrogen embrittlement relief after electroplating ... 9

9 Requirements for undercoats ... 9

10 Requirements for coatings ... 9
10.1 Appearance ... 9
10.2 Thickness ... 10
10.3 Adhesion ... 10
10.4 Porosity ... 10

Annex A Determination of coating thickness ... 11
A.0 Introductory notes ... 11
A.0.1 Routine methods ... 11
A.0.2 Referee methods ... 11
A.1 Measurement of local thickness ... 12
A.1.1 Microscopical method ... 12
A.1.2 Beta backscatter method ... 12
A.1.3 X-ray spectrometric method ... 12
A.1.4 Coulometric method ... 12
A.2 Measurement of average thickness ... 12

Annex B Guidance notes ... 13
B.1 Properties of the coating ... 13
B.2 Properties and preparation of the basis material ... 14
B.2.1 Surface condition ... 14
B.2.2 “Difficult” basis materials ... 14
B.2.3 Aluminium, magnesium and zinc alloys ... 14
B.3 Electroplating practice ... 14
B.3.1 Coating thickness requirements ... 14