DIN EN ISO 19598:2017-04 (E)

Metallic coatings - Electroplated coatings of zinc and zinc alloys on iron or steel with supplementary Cr(VI)-free treatment (ISO 19598:2016)

Contents

Page

European foreword ... **3**

Foreword ... **4**

Introduction ... **5**

1 Scope ... **6**

2 Normative references ... **6**

3 Terms and definitions ... **6**

4 Designation ... **7**
4.1 Electrodeposited coatings ... 7
4.2 Passivation ... 7
4.3 Post treatment ... 7
4.4 Significant (functional) surfaces ... 8
4.5 Examples of designations ... 8

5 Information to be supplied by the purchaser to the electroplater ... **8**

6 Basis materials ... **9**

7 Coating and processing ... **9**
7.1 Surface preparation and deposition of zinc or zinc-alloy coating ... 9
7.2 Supplementary treatments ... 9
7.2.1 Passivation layers ... 9
7.2.2 Post treatment ... 10
7.3 Barrel-/rack-plating (handling of parts) ... 10
7.3.1 Barrel electroplating ... 10
7.3.2 Rack electroplating ... 10
7.4 Hydrogen embrittlement ... 10
7.4.1 Basic factors ... 10
7.4.2 Choice of procedure ... 11

8 Requirements to be met by coatings and test methods ... **12**
8.1 Thickness ... 12
8.2 Adhesion ... 12
8.3 Absence of Cr(VI) ... 13
8.4 Accelerated corrosion testing ... 13
8.4.1 General ... 13
8.4.2 Minimum corrosion resistance of passivated zinc and zinc-alloy coatings ... 13

9 Test report ... **15**
9.1 General information ... 15
9.2 Coatings on materials having a tensile strength ≥1 000 N/mm^2 ... 15
9.3 Test results ... 15

Bibliography ... **16**