

ISO 19598:2016-11 (E)

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

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Designation	2
4.1	Electrodeposited coatings	2
4.2	Passivation	2
4.3	Post treatment	2
4.4	Significant (functional) surfaces	3
4.5	Examples of designations	3
5	Information to be supplied by the purchaser to the electroplater	3
6	Basis materials	4
7	Coating and processing	4
7.1	Surface preparation and deposition of zinc or zinc-alloy coating	4
7.2	Supplementary treatments	4
7.2.1	Passivation layers	4
7.2.2	Post treatment	5
7.3	Barrel-/rack-plating (handling of parts)	5
7.3.1	Barrel electroplating	5
7.3.2	Rack electroplating	5
7.4	Hydrogen embrittlement	5
7.4.1	Basic factors	5
7.4.2	Choice of procedure	6
8	Requirements to be met by coatings and test methods	7
8.1	Thickness	7
8.2	Adhesion	7
8.3	Absence of Cr(VI)	8
8.4	Accelerated corrosion testing	8
8.4.1	General	8
8.4.2	Minimum corrosion resistance of passivated zinc and zinc-alloy coatings	8
9	Test report	10
9.1	General information	10
9.2	Coatings on materials having a tensile strength 1 000 N/mm ²	10
9.3	Test results	10
Bibliography		11