

ISO 10308:2006-01 (E)

Metallic coatings - Review of porosity tests

Contents		Page
Foreword		iv
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Principle	2
5	Common features of porosity tests	2
6	Test specimens	2
7	Specific porosity tests	2
7.1	Alizarin test	2
7.2	Anthraquinone test	3
7.3	Cadmium sulfide test	3
7.4	Copper sulfate (Preece) test	3
7.5	Copper sulfate (Dupernell) test	3
7.6	Corrodkote test (CORR)	4
7.7	Electrographic tests	4
7.8	Ferrocyanide test	5
7.9	Ferron test	5
7.10	Ferroxyl test	6
7.11	Flowers-of-sulfur porosity test	6
7.12	Hot-water test	6
7.13	Hydrogen sulfide or sulfur dioxide/hydrogen sulfide test	6
7.14	Haematoxylin test	7
7.15	Magneson test	7
7.16	Nitric acid vapour test	7
7.17	Oxine test	8
7.18	Permanganate test	8
7.19	Polysulfide test	8
7.20	Porotest test	8
7.21	Salt spray tests [neutral (NSS), acetic (AASS) and cuproacetic (CASS)]	9
7.22	Sulfur dioxide test	9
7.23	Sulfurous acid/sulfur dioxide vapour test	9
7.24	Thiocyanate test	9
7.25	Thioacetamide test (TAA)	10
7.26	Watch-case acetic acid test	10
7.27	Watch-case sodium bisulfite test	10
Annex A (normative)	Tables of porosity tests	11
Annex B (informative)	Typical report and evaluation of porosity tests	14
Annex C (informative)	Schematic representation of types of pore	16
Annex D (informative)	Classification of discontinuities in metallic and other inorganic coatings	17
Annex E (informative)	Classification of methods of testing coating porosity	18
Annex F (informative)	Alphabetical list of tests by substrate and coating	19
Bibliography		30