ISO 19203:2018 (E)

Hot-dip galvanized and zinc-aluminium coated high tensile steel wire for bridge cables — Specifications

Contents

Foreword

- 1 Scope
- 2 Normative references
- 3 Terms and definitions
- 4 Symbols
- 5 Designation of the product
- 6 Information needed by the manufacturer
- 7 Requirements
 - 7.1 Materials and manufacture
 - 7.2 Standard properties
 - 7.2.1 Geometrical properties
 - 7.2.2 Straightness
 - 7.2.2.1 General
 - 7.2.2.2 Bow height
 - 7.2.3 Mechanical and coating properties
 - 7.2.4 Appearance
 - 7.3 Special properties
 - 7.4 Traceability

8 Inspection

- 8.1 Inspection and inspection documents
- 8.2 Number of samples and test pieces
- 8.3 Evaluation of test results
- 8.4 Sorting and reprocessing

9 Test methods

- 9.1 Testing of standard properties
- 9.1.1 Measurement of geometrical characteristics
- 9.1.2 Tensile test
- 9.1.3 Elasticity modulus test
- 9.1.4 Torsion test
- 9.1.5 Ductility wrapping test
- 9.1.6 Mass of coating
- 9.1.7 Adhesive of coating
- 9.1.8 Surface quality
- 9.2 Testing of special properties
- 9.2.1 Uniformity of zinc or zinc-aluminium coating (dipping test)
- 9.2.2 Corrosion resistance test
- 9.2.3 Axial force fatigue test
- 9.2.4 Isothermal stress relaxation test

10 Delivery conditions

- 10.1 Identification
- 10.2 Coil dimensions
- 10.3 Coil weight
- 10.4 Transport and storage

Annex A (normative) Additional test methods — Axial force fatigue test

- A.1 Principle of test
- A.2 Test piece
- A.3 Test conditions
- A.4 Test procedure

Annex B (normative) Additional test methods — Isothermal stress relaxation test

- B.1 Principle of test
- B.2 Test piece
- B.3 Test conditions
- B.4 Test procedure

Annex C (informative) Calculation of the density of steel wire and diameter of bare steel wire

Page count: 13