ISO 16120-1:2017-05 (E)

Non-alloy steel wire rod for conversion to wire - Part 1: General requirements

Contents

Page

Foreword iv

1 Scope 1

2 Normative references 1

3 Termsanddefinitions 2

4 Classification 3

5 Ordering information to be supplied by the purchaser 3

6 Production process 4

7 Requirements 4
7.1 General 4
7.2 Quality system 4
7.3 Method of delivery 4
7.4 Delivery condition 5

8 Dimensions, mass and tolerances 5

9 Inspection 5
9.1 Inspection and inspection documents 5
9.2 Extension of inspection 5
9.3 Acceptance unit, number of samples and test pieces 5
9.4 Sampling and preparation of samples and test pieces 6
9.4.1 Chemical composition 6
9.4.2 Tensile strength 6
9.4.3 Decarburization, surface discontinuities, non-metallic inclusions, core segregation and microstructure 6
9.5 Test methods 6
9.5.1 Chemical composition 6
9.5.2 Tensile strength 6
9.5.3 Surface discontinuities 6
9.5.4 Decarburization 7
9.5.5 Non-metallic inclusions 7
9.5.6 Core segregation 7
9.5.7 Microstructure 7
9.5.8 Determination of cementite network in high-carbon steel wire rod 7
9.6 Retest 7

10 Marking 7

11 Disputes 7

Annex A (normative) Determination of core segregation 8

Annex B (informative) Measurement of surface discontinuities 11

Annex C (informative) Mechanical damage 14

Annex D (normative) Determination of percentage of resolvable pearlite in high-carbon steel wire rod 18

Annex E (normative) Determination of cementite network in high-carbon steel wire rod 22

Bibliography 27