ISO 3506-1:2009-11 (E)

Mechanical properties of corrosion-resistant stainless steel fasteners - Part 1: Bolts, screws and studs

Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 Normative references 2

3 Symbols 2

4 Designation, marking and finish 3
4.1 Designation 3
4.2 Marking 4
4.3 Finish 6

5 Chemical composition 6

6 Mechanical properties 7

7 Testing 9
7.1 Test programme 9
7.2 Test methods 10

Annex A (normative) External thread - Calculation of stress area 14

Annex B (informative) Description of the groups and grades of stainless steels 15

Annex C (informative) Stainless steel composition specifications 18

Annex D (informative) Stainless steels for cold heading and extruding 21

Annex E (informative) Austenitic stainless steels with particular resistance to chloride induced stress corrosion 23

Annex F (informative) Mechanical properties at elevated temperatures; application at low temperatures 24

Annex G (informative) Time-temperature diagram of intergranular corrosion in austenitic stainless steels, grade A2 (18/8 steels) 25

Annex H (informative) Magnetic properties for austenitic stainless steels 26

Bibliography 27