

ISO 4954-2:2024-06 (E)

Steels for cold heading and cold extruding - Technical delivery conditions - Part 2: Stainless steels

Contents

Page

Foreword.....	v
1 Scope.....	1
2 Normative references.....	1
3 Terms and definitions.....	2
4 Classification and designation.....	2
4.1 Classification.....	2
4.2 Designation.....	3
5 Information to be supplied by the purchaser.....	3
5.1 Mandatory information.....	3
5.2 Options and/or supplementary or special requirements.....	3
5.3 Ordering example.....	4
6 Manufacturing process.....	4
6.1 General.....	4
6.2 Deoxidation.....	4
6.3 Heat-treatment condition and surface condition at delivery.....	4
6.3.1 Heat-treatment condition.....	4
6.3.2 Particular surface conditions.....	4
6.4 Traceability of the cast.....	4
6.5 Statistical evaluation.....	5
7 Requirements.....	5
7.1 Chemical composition, mechanical properties and hardenability.....	5
7.1.1 General.....	5
7.1.2 Chemical composition.....	5
7.1.3 Mechanical properties.....	6
7.2 Grain size.....	6
7.3 Non-metallic inclusions.....	6
7.4 Internal soundness.....	6
7.5 Aptitude to cold forming.....	6
7.6 Surface quality.....	7
7.6.1 General.....	7
7.6.2 Wire rod and bars.....	7
7.6.3 Bright products and wire.....	7
7.6.4 Removal of surface discontinuities.....	7
7.6.5 Non-destructive testing of the surface.....	7
7.7 Corrosion resistance.....	7
7.8 Shape, dimensions and tolerances.....	7
8 Inspection.....	7
8.1 Testing procedures and types of documents.....	7
8.2 Summary of specific inspection and frequency of testing.....	8
9 Preparation of samples and test pieces.....	9
9.1 Selection and preparation of samples for product analysis.....	9
9.2 Selection and preparation of samples and test pieces for the mechanical test.....	9
10 Test methods.....	9
10.1 Chemical analysis.....	9
10.2 Mechanical tests.....	9

10.3	Non-destructive testing	10
10.4	Aptitude to cold forming — Upsetting test.....	10
10.5	Visual and dimensional test.....	10
10.6	Retests	10
11	Surface treatment, marking and packaging.....	10
11.1	Surface treatment.....	10
11.2	Marking.....	10
11.3	Packaging.....	10
Annex A (normative) Supplementary or special requirements.....		18
Annex B (informative) Commonly used stainless steel grades for fasteners applications.....		19
Annex C (informative) Designation of steels in this document and the comparable grades covered in various designation systems.....		21
Bibliography.....		22