

ICS 77.140.75

CCS H 48



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 34204-2025

Replacing GB/T 34204-2017

Coiled tubing

连续油管

Issued on: August 1, 2025

Implemented on: February 1, 2026

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

Table of Contents

Preface	V
1 Scope	1
2 Normative references	1
3 Terms and Definitions	3
4 Symbols and abbreviations	5
4.1 Symbols	5
4.2 Abbreviations	6
5 Order Contents	6
5.1 Contents that the purchaser should provide	6
5.2 Contents that the buyer can choose	6
5.3 Internal pipe/cable coiled tubing	8
6 Technical Requirements	8
6.1 Material Requirements	8
6.2 Manufacturing Process	8
6.3 Steel grade, designation and chemical composition	11
6.4 Tensile properties	15
6.5 Hardness	17
6.6 Impact	18
6.7 Flatten	18
6.8 Flaring	19
6.9 Weld Macro	20
6.10 Metallography	20
6.11 Fatigue test	20
6.12 Crush Test	20
6.13 Corrosion test of stainless steel coiled tubing	20
6.14 Anti-sulfur coiled tubing corrosion test	20
6.15 Hydrostatic Pressure	21
6.16 Diameter	21
6.17 Length, dimensions and weight per unit length	21
6.18 Weight per unit length	23
7 Inspection and testing	23
7.1 Chemical composition	23

7.2 Mechanical properties	24
7.3 Macroscopic view of weld seams	27
7.4 Metallographic Examination	27
7.5 Fatigue test	27
7.6 Crush test	27
7.7 Stainless Steel Coiled Tubing Corrosion Test	27
7.8 Anti-sulfur coiled tubing corrosion test	29
7.9 Hydrostatic pressure test	29
7.10 Diameter test	30
7.11 Length and size inspection	30
7.12 Invalid Test	30
7.13 Retest and determination	31
7.14 Inspection by the Buyer	33
8 Non-destructive Testing (NDT)	33
8.1 General Principles	33
8.2 Verification by comparison with standard sample	33
8.3 Personnel Qualifications	33
8.4 Testing standards	33
8.5 Nondestructive testing methods	34
8.6 Radiographic testing of steel strip butt welds and pipe-to-pipe butt welds	34
8.7 Other non-destructive testing of welds	36
8.8 Ultrasonic and electromagnetic testing of longitudinal welds	36
8.9 Magnetic Particle and Liquid Penetrant Testing	38
8.10 Handling of defects and imperfections	38
9 Logo	39
9.1 General Principles	39
9.2 Flag Order	39
9.3 Length	39
10 Packaging and Protection	39
10.1 Coating	39
10.2 Protection	39
10.3 Transport reel	40
11 File	40
11.1 General requirements	40
11.2 Quality Certificate	40

11.3 Record keeping	40
Appendix A (Normative) Welding Procedure Qualification for Steel Strip Butt Welding, Pipe-to-Pipe Butt Welding and Union Butt Welding	47
Appendix B (Normative) Pipe-to-pipe butt welding requirements	47
Appendix C (Normative) Minimum elongation after fracture	48
Appendix D (Informative) Coiled Tubing Full-Scale Fatigue Test Method	57
Appendix E (Normative) Dimensions of ball gauges and clearances from the inner surface of steel pipes	61
Appendix F (Normative) Dimensions, weight per unit length and hydrostatic test pressure	66
Appendix G (Normative) Buyer Inspection	76
Appendix H (Normative) Supplementary Nondestructive Testing Requirements	77
Appendix I (Informative) Coiled Tubing Transport Reel	80
Reference	82
Figure 1 Full cross-section specimen	24
Figure 2 Longitudinal arc specimen	24
Figure 3 Sampling position and direction of longitudinal arc specimen	24
Figure 4 Full wall thickness hardness test indentation position	25
Figure 5 NDT comparison standard	37
Figure A.1 Guided bending test specimen	44
Figure A.2 Bending die for guided bending test	44
Figure A.3 Schematic diagram of union macro test specimen	45
Figure D.1 Coiled tubing fatigue testing machine	57
Figure D.2 Bending die structure	58
Figure D.3 Sectional structure of bending die	58
Figure D.4 Specimen straightness measurement method	58
Figure I.1 Schematic diagram of transport reel and shift fork	80
Table 1 Symbols and descriptions	5
Table 2 Abbreviations and Explanations	6
Table 3 Information to be provided by the purchaser	6
Table 4 Requirements that can be selected by the purchaser	7
Table 5 Scrape groove depth	10
Table 6 Chemical composition of carbon steel and alloy steel coiled tubing	11
Table 7 Chemical composition of quenched and tempered coiled tubing	12
Table 8 Chemical composition of sulfur-resistant coiled tubing	12

Table 9 Common stainless steel coiled tubing grades and unified digital codes and their chemical compositions	13
Table 10 Tensile properties of carbon steel and alloy steel coiled tubing.....	15
Table 11 Tensile properties of stainless steel coiled tubing.....	16
Table 12 Hardness	17
Table 13 Impact Absorption Energy	18
Table 14 Distance between two plates for flattening test.....	18
Table 15 Intergranular corrosion test acceptance requirements	20
Table 16 Acceptance requirements for resistance to hydrogen-induced cracking.....	21
Table 17 Acceptance requirements for sulfide stress development (SSC).....	21
Table 18 Permissible deviation of outer diameter.....	22
Table 19 Wall thickness tolerance.....	22
Table 20 Variation of wall thickness of adjacent steel strips.....	23
Table 21 4% Metal Wire Image Quality Meter	35
Table 22 2% Metal Wire Image Quality Meter	35
Table 23 Qualified Limit	37
Table 24 Record keeping	41
Table A.1 Guided bending test bend die dimensions	45
Table C.1 Elongation after fracture	48
Table D.1 Bend die radius corresponding to typical pipe diameter specimens.....	59
Table E.1 Ball gauge dimensions and clearance from the inner surface of the steel pipe	61
Table F.1 Steel pipe dimensions, unit length weight and hydrostatic test pressure (SI).....	66
Table I.1 Ratio of reel diameter to steel pipe diameter Table I.2 Reel fork dimensions.....	81

Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document replaces GB/T 34204-2017 Coiled Tubing. Compared with GB/T 34204-2017, except for structural adjustments and editorial changes, In addition to the dynamic, the main technical changes are as follows.

- Added the content of built-in pipe/cable coiled tubing (see 5.3);
- Added stainless steel coiled tubing products and related requirements (see Chapter 6 and Chapter 7);