

ISO 15546:2011-09 (E)

Petroleum and natural gas industries - Aluminium alloy drill pipe

Contents		Page
Foreword		v
Introduction		vi
1	Scope	1
2	Conformance	1
3	Normative references	2
4	Terms, definitions and symbols	2
4.1	Terms and definitions	2
4.2	Symbols	4
5	Information to be supplied when placing orders for drill pipe	5
5.1	Basic information	5
5.2	Optional information	6
6	Process of manufacturing and delivery condition	6
6.1	General	6
6.2	Heat treatment	6
6.3	Traceability	7
6.4	Delivery condition	7
7	Material requirements	7
7.1	Material groups	7
7.2	Metallographic examination	8
7.3	Chemical composition	8
7.4	Steel tool joints	8
8	Configuration and dimensions of pipes	8
8.1	Configuration	8
8.2	Length	8
8.3	Dimensions of pipes and tool joints	8
8.4	Design mass	9
8.5	Upset run-out	21
8.6	Straightness	21
8.7	Ovality and eccentricity of pipes	21
8.8	Drift requirements	22
8.9	Tool joint alignment	22
8.10	Internal coating	23
8.11	Aluminium alloy drill pipe body-tool joint assembly	23
9	Test methods	23
9.1	General	23
9.2	Chemical composition test	23
9.3	Mechanical test	23
9.4	Hydrostatic test	24
9.5	Corrosion test	24
10	Measuring methods	25
10.1	General	25

10.2	Calibration and verification of measuring equipment	26
11	Inspection	26
11.1	General	26
11.2	Levels of non-destructive inspection	26
11.3	Tool joint non-destructive inspection	26
12	Marking	26
12.1	General	26
12.2	Sequence of marking	27
12.3	Marking on the drill pipe body	27
12.4	Tool joint marking	27
12.5	Drill pipe traceability marking	28
12.6	Paint stencilling	28
13	Packaging, transport and storage	28
14	Documents	28
14.1	Certificate of compliance	28
14.2	Retention of records	28
15	Delivery conditions	29
	Annex A (normative) Tables and figures in USC units	30
	Annex B (normative) Purchaser inspection	38
	Annex C (normative) Supplementary requirement -- Fatigue test procedure and analysis of fatigue data	39
	Annex D (normative) Corrosion test	42
	Annex E (informative) Conversion of SI units to USC units	43
	Bibliography	45