

DIN EN ISO 14310:2009-03 (E)

Petroleum and natural gas industries - Downhole equipment - Packers and bridge plugs (ISO 14310:2008); English version EN ISO 14310:2008

| Inhalt | Seite |
|--|-------|
| Foreword | 4 |
| Introduction..... | 5 |
| 1 Scope | 6 |
| 2 Conformance | 6 |
| 2.1 Dual citing of normative references | 6 |
| 2.2 Units of measurement..... | 6 |
| 3 Normative references..... | 7 |
| 4 Terms, definitions, symbols and abbreviated terms | 8 |
| 4.1 Terms and definitions | 8 |
| 4.2 Symbols and abbreviated terms | 13 |
| 5 Information to be supplied when placing orders for drill-pipe | 15 |
| 6 Requirements for drill-pipe | 16 |
| 6.1 General | 16 |
| 6.2 Dimensions, masses and connections | 16 |
| 6.3 Material requirements | 17 |
| 6.4 Process of manufacture for drill-pipe | 19 |
| 6.5 Traceability..... | 20 |
| 6.6 Inspection and testing — General | 20 |
| 6.7 Testing of welds | 21 |
| 6.8 Tensile test..... | 21 |
| 6.9 Hardness test..... | 22 |
| 6.10 Charpy V-notch impact test..... | 23 |
| 6.11 Transverse side-bend test..... | 24 |
| 6.12 Imperfections and defects in drill-pipe | 25 |
| 6.13 Visual inspection of the drill-pipe weld zone | 25 |
| 6.14 Non-destructive examination of the weld zone..... | 25 |
| 6.15 Marking of drill-pipe | 27 |
| 6.16 Minimum facility requirements for drill-pipe manufacturers | 29 |
| 6.17 Documentation requirements of drill-pipe..... | 29 |
| 7 Requirements for drill-pipe body..... | 29 |
| 7.1 Information to be supplied when placing orders for drill-pipe bodies | 29 |
| 7.2 Dimensional and mass requirements..... | 30 |
| 7.3 Material requirements | 32 |
| 7.4 Process of manufacture..... | 33 |
| 7.5 Traceability..... | 34 |
| 7.6 Inspection and testing — General | 34 |
| 7.7 Testing of chemical composition | 34 |
| 7.8 Tensile tests..... | 35 |
| 7.9 Charpy V-notch impact tests..... | 36 |
| 7.10 Drill-pipe-body wall thickness..... | 37 |
| 7.11 Drill-pipe-body length | 37 |
| 7.12 Internal upset..... | 37 |
| 7.13 Internal profile..... | 38 |
| 7.14 Straightness | 38 |
| 7.15 Upset alignment..... | 38 |
| 7.16 Mass determination..... | 38 |
| 7.17 Imperfections and defects of drill-pipe body | 38 |

| | | |
|--------------|---|-----|
| 7.18 | Visual inspection of drill-pipe body | 39 |
| 7.19 | Non-destructive examination | 40 |
| 7.20 | Marking | 43 |
| 7.21 | Minimum facility requirements for drill-pipe-body manufacturer..... | 44 |
| 7.22 | Documentation requirements..... | 44 |
| 8 | Requirements for tool joints..... | 45 |
| 8.1 | Information to be supplied when placing orders for tool joints | 45 |
| 8.2 | Dimensional requirements..... | 46 |
| 8.3 | Material requirements | 47 |
| 8.4 | Process of manufacture | 47 |
| 8.5 | Traceability | 48 |
| 8.6 | Inspection and testing — General..... | 48 |
| 8.7 | Testing of chemical composition..... | 49 |
| 8.8 | Tensile tests | 49 |
| 8.9 | Hardness tests | 50 |
| 8.10 | Charpy V-notch impact tests | 51 |
| 8.11 | Imperfections and defects | 52 |
| 8.12 | Non-destructive examination | 52 |
| 8.13 | Marking | 53 |
| 8.14 | Minimum facility requirements for tool-joint manufacturers | 54 |
| 8.15 | Documentation requirements for tool joints..... | 54 |
| Annex A | (normative) Tables in SI units | 56 |
| Annex B | (normative) Figures in SI (USC) units..... | 74 |
| Annex C | (normative) Tables in USC units | 88 |
| Annex D | (normative) Purchaser inspection | 106 |
| Annex E | (informative) Supplementary requirements | 107 |
| Annex F | (informative) Procedures used to convert from USC units to SI units for drill-pipe..... | 110 |
| Annex G | (normative) Product specification levels | 114 |
| Annex H | (informative) API monogram..... | 116 |
| Bibliography | | 117 |