

ISO 16440:2016-10 (E)

Petroleum and natural gas industries - Pipeline transportation systems - Design, construction and maintenance of steel cased pipelines

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Design	2
4.1	General	2
4.2	Carrier pipe design	3
4.3	Casing design	3
4.4	Electrical isolation	4
4.5	Corrosion protection	4
5	Installation	4
5.1	General	4
5.2	Handling and storage	4
5.3	New casing	4
5.3.1	General	4
5.3.2	Carrier pipe installation	5
5.3.3	Casing end seals	6
5.3.4	Test leads	6
5.3.5	Backfilling	7
5.4	Split-sleeve type casing extensions and installations	7
6	Inspection and monitoring	8
6.1	General	8
6.2	Integrity inspection of carrier pipe	8
6.3	Monitoring of carrier pipe and casing	9
6.4	Leakage survey	9
6.5	Corrosiveness of the annular space	9
7	Maintenance and repair	9
7.1	General	9
7.2	Maintenance of vents and test leads	10
7.3	Clearing of shorted casings	10
7.4	Filling of casings	11
7.5	Removal of casings	11
Annex A (informative)	Casing filling procedures for dielectric filler materials	12
Annex B (informative)	Examples of cathodic protection testing and monitoring techniques for carrier pipes and casings	15
Annex C (informative)	Inspection tools for cased carrier pipe	30
Annex D (informative)	Clearing a shorted casing	35

Annex E (informative) Removing and cutting a casing	37
Bibliography	39