DIN EN ISO 21809-5:2010-09 (E)

Petroleum and natural gas industries - External coatings for buried or submerged pipelines used in pipeline transportation systems - Part 5: External concrete coatings (ISO 21809-5:2010); English version EN ISO 21809-5:2010

Inhalt

Seite

Foreword 4

Introduction 5

1 Scope 6

2 Normative references 6

3 Terms and definitions 8

4 Symbols and abbreviated terms 11
4.1 Symbols 11
4.2 Abbreviated terms 11

5 General requirements 12
5.1 Rounding 12
5.2 Compliance with this part of ISO 21809 12

6 Information supplied by the purchaser 12
6.1 General information 12
6.2 Additional information 13

7 Materials 13
7.1 Pipe 13
7.2 Cement 13
7.3 Supplementary cementitious materials 14
7.4 Aggregate — Fine and coarse 14
7.5 Heavyweight aggregate 15
7.6 Lightweight aggregate 15
7.7 Recycled concrete as aggregate 15
7.8 Water 16
7.9 Steel reinforcement 16
7.10 Concrete admixtures 16
7.11 Reclaimed concrete 16

8 Concrete mix 16

9 Coating application 17
9.1 Qualification 17
9.2 Application of concrete coating 19
9.3 Environmental conditions 19
9.4 Pipe 19
9.5 Steel reinforcement 19
9.6 Concrete cutback 21
9.7 Anode installation 21

10 Curing methods 21

11 Inspection and testing 21
11.1 General 21
11.2 Test procedures 23
11.3 Retesting 25
11.4 Test results 26

12 Repair of concrete coated pipe 26
12.1 General 26

12.2 Damaged areas **27**
12.3 Cracks **27**
12.4 Gaps **27**
12.5 Stripping **27**
13 Markings **27**
14 Handling and storage **27**
15 Test reports and certificate of compliance **28**
Annex A (normative) **Water absorption test** **29**
Annex B (normative) **Shear resistance test** **32**
Bibliography **33**