ISO 4266-1:2023-05 (E)

Petroleum and liquid petroleum products - Measurement of level and temperature in storage tanks by automatic methods - Part 1: Measurement of level in atmospheric tanks

Contents

Page

Foreword iv

1 Scope 1

2 Normative references 1

3 Termsanddefinitions 1

4 Precautions 3
4.1 Safety precautions 3
4.2 Equipment precautions 3
4.3 General precautions 3

5 Accuracy 4
5.1 Intrinsic error of ALGs 4
5.2 Calibration prior to installation 4
5.3 Error caused by installation and operating conditions 4
5.4 Overall accuracy 5
5.4.1 General 5
5.4.2 Use of ALGs for fiscal/custody transfer purposes 5

6 Installation of ALGs 5
6.1 General 5
6.2 Mounting location 5
6.3 Manufacturer's requirements 5
6.4 Installation 5
6.5 Still-well design 11

7 InitialsettingandinitialverificationofALGsinthefield 12
7.1 General 12
7.2 General precautions 12
7.2.1 Initial requirements 12
7.2.2 Manual reference level measurement procedure 12
7.2.3 Reference measurement tape and weight certification 12
7.2.4 Effect of weather 12
7.2.5 ALG technology-specific considerations 12
7.2.6 Application-specific considerations 12
7.3 Initial settings of ALGs 13
7.3.1 Setting against manual reference ullage measurements 13
7.3.2 Setting against manual reference dip (innage) measurements 13
7.4 Initial verification 14
7.4.1 General 14
7.4.2 Verification conditions 15
7.4.3 Initial verification procedures 15
7.5 Record keeping 17

8 SubsequentverificationofALGs 17
8.1 General 17
8.2 Frequency of subsequent verification 17
8.3 Procedure for subsequent verification 17
8.4 Tolerance for subsequent verification 17

9 Data communication and receiving 18

Bibliography 19