

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	Terms and definitions	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	Initial setting and initial verification of ALGs in the field	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	Subsequent verification of ALGs	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