

ISO 11223:2004-08 (E)

Petroleum and liquid petroleum products - Direct static measurements - Measurement of content of vertical storage tanks by hydrostatic tank gauging

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	2
4	System description	6
4.1	General	6
4.2	Sensors	7
4.3	HTG data processor	8
5	Installation and initial commissioning	9
5.1	Pressure sensors	9
5.2	Temperature sensors	13
5.3	Reference points for the HTG system	14
5.4	Commissioning	14
6	Maintenance	16
6.1	General	16
6.2	Validation	16
6.3	Calibration	18
7	Safety	20
7.1	Mechanical safety	20
7.2	Electrical safety	20
Annex A (normative)	Calculation overview	21
Annex B (normative)	Volume measurement using independent density	36
Annex C (informative)	Volume measurement with density measured by hydrostatic tank gauge	38
Annex D (normative)	Second-order influences	53
Bibliography		54