ISO 12917-1:2002-07 (E)

Petroleum and liquid petroleum products - Calibration of horizontal cylindrical tanks - Part 1: Manuel methods

Contents

Page

Foreword iv

Introduction iv

1 Scope 1

2 Normative references 1

3 Terms and definitions 1

4 Precautions 2
4.1 General 2
4.2 Internal method 2
4.3 External method 2

5 Equipment 2
5.1 Equipment as used in the ISO 7507 series 2
5.2 Telescopic rod 2

6 General requirements 2

7 Calibration procedures 3

8 External measurements 3
8.1 Introduction 3
8.2 General 3
8.3 Repetition of measurements 4
8.4 Tolerances 4
8.5 Other measurements on tank-shell plates 4

9 Internal measurements 5
9.1 General 5
9.2 Repetition of measurements 5
9.3 Tolerances 5
9.4 Other measurements on tank-shell plates 5

10 Additional measurements 6
10.1 Deadwood 6
10.2 Measurement of tilt 6

11 Other parameters 7

12 Recalibration 7

13 Descriptive data 7

14 Computation of tank capacity tables -- General rules 7

15 Effects of tilt 8

16 Systematic calculations (summary) 8

16.1 General 8
16.2 Cylindrical volume 8
16.3 Volume of the knuckle-dish ends 9
16.4 Elliptical ends 11
16.5 Spherical head 11
16.6 Deadwood 12

Annex A (normative) Tilt 13

Annex B (informative) Corrections of volume of tank table 15

Bibliography 18