INTERNATIONAL STANDARD

ISO 4266-1

First edition
2002-11-15

Petroleum and liquid petroleum products — Measurement of level and temperature in storage tanks by automatic methods —

Part 1: Measurement of level in atmospheric tanks

Pétrole et produits pétroliers liquides — Mesurage du niveau et de la température dans les réservoirs de stockage par méthodes automatiques —

Partie 1: Mesurage du niveau dans les réservoirs à pression atmosphérique

Reference number
ISO 4266-1:2002(E)

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Printed in Switzerland

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this part of ISO 4266 may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 4266-1 was prepared by Technical Committee ISO/TC 28, *Petroleum products and lubricants*, Subcommittee SC 3, *Static petroleum measurement*.

ISO 4266-1, together with ISO 4266-2 to ISO 4266-6, cancels and replaces ISO 4266:1994, which has been technically revised.

ISO 4266 consists of the following parts, under the general title *Petroleum and liquid petroleum products — Measurement of level and temperature in storage tanks by automatic methods*:

— *Part 1: Measurement of level in atmospheric tanks*

— *Part 2: Measurement of level in marine vessels*

— *Part 3: Measurement of level in pressurized storage tanks (non-refrigerated)*

— *Part 4: Measurement of temperature in atmospheric tanks*

— *Part 5: Measurement of temperature in marine vessels*

— *Part 6: Measurement of temperature in pressurized storage tanks (non-refrigerated)*

Petroleum and liquid petroleum products — Measurement of level and temperature in storage tanks by automatic methods —

Part 1:
Measurement of level in atmospheric tanks

1 Scope

This part of ISO 4266 gives guidance on the accuracy, installation, commissioning, calibration and verification of automatic level gauges (ALGs), of both intrusive and non-intrusive types, for measuring the level of petroleum and petroleum products having a Reid vapour pressure less than 100 kPa, stored in atmospheric storage tanks.

This part of ISO 4266 is not applicable to the measurement of level in refrigerated storage tanks with ALG equipment.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO 4266. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO 4266 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 1998 (all parts) *Petroleum industry — Terminology*

ISO 4512:2000, *Petroleum and liquid petroleum products — Equipment for measurement of liquid levels in storage tanks — Manual methods*

3 Terms and definitions

For the purposes of this part of ISO 4266, the terms and definitions given in ISO 1988, and the the following, apply.

3.1
anchor weight
weight to which the detecting element guide wires of an automatic level gauge are attached to hold them taut and vertical

3.2
automatic level gauge
ALG
automatic tank gauge
ATG
instrument that continuously measures liquid height (dip or ullage) in storage tanks

3.3
dip
innage
vertical distance between the dipping datum point and the liquid level