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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 37770.2-2019

Refrigerated light hydrocarbon fluids -- General requirements for automatic level gauges -- Part 2: Gauges in refrigerated-type shore tanks

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Foreword

GB/T 37770 "General Requirements for Automatic Leveling of Frozen Light Hydrocarbon Fluids" is divided into three parts.

--- Part 1. Automatic level gauge for liquefied gas transport vessels;

--- Part 2. Automatic level gauge for onshore frozen storage tanks;

--- Part 3. Automatic level gauges for liquefied petroleum gas and chemical gas marine carriers and floating roof tanks.

This part is the second part of GB/T 37770.

This part is drafted in accordance with the rules given in GB/T 1.1-2009.

This section uses the redrafting method to modify the general requirements for the use of ISO 18132-2.2008 "Fast Light Hydrocarbon Fluid Automatic Level Gauge"

Part 2. Automatic Level Gauge for Onshore Frozen Storage Tanks.

Compared with ISO 18132-2.2008, this part of the structure changes. delete ISO 18132-2.2008 Chapter 5, will be related to OIMLR85

The content is moved into the 4.1 General Rules.

The main technical differences and their causes in this section compared with ISO 18132-2.2008 are as follows.

--- Increase the reference to GB/T 3836.6, GB/T 3836.7, GB 3836.14 to adapt to the technical conditions of China.

1 Scope

This part of GB/T 37770 specifies the general performance, installation, testing and calibration of an automatic level gauge for onshore frozen storage tanks.

Claim.

This section applies to automatic liquid level measurement of frozen light hydrocarbon fluids such as liquefied natural gas and liquefied petroleum gas storage tanks without pressure and near atmospheric pressure.

system.

This section does not apply to automatic level gauges for pressurized storage tanks.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only dated versions apply to this article.

Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 3836.6 Explosive atmosphere - Part 6. Equipment protected by liquid immersion "o" (GB/T 3836.6-2017,

IEC 60079-6.2015, MOD)

GB/T 3836.7 Explosive atmosphere - Part 7. Equipment protected by sand-filled "q" (GB/T 3836.7-2017,

IEC 60079-5.2015, MOD)

GB 3836.14 Explosive atmospheres - Part 14. Classification of explosive atmospheres (GB 3836.14-2014,

IEC 60079-10-1.2008, IDT)

OIMLR85 Automatic level gauge for measuring the level in a fixed tank (Automaticlevelgaugesformeasuringthelevel

Ofliquidinfixedstoragetanks)

3 Terms and definitions

The following terms and definitions apply to this document.

3.1

Automatic level gauge automaticlevelgauge; ALG

A device that is installed in a tank to automatically measure the tank liquid level (or empty height).

Note. ALG is also commonly referred to as a tank automatic level gauge (ATG).

3.2

Datum level datumlevel

The lowest level of the tank, corresponding to the zero and zero volume of the tank in the tank capacity table.

3.3

Hazardous place hazardousarea

The presence or expected number of explosive atmospheres is sufficient to require specialization in the construction, installation and use of electrical equipment.

The area of the measure.

[GB 3836.14-2014, definition 3.3]