ISO 19970:2025-07 (E)

Refrigerated hydrocarbon and non-petroleum based liquefied gaseous fuels - Metering of gas as fuel on LNG carriers during cargo transfer operations

Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 Normative references 1

3 Terms and definitions 1

4 Design requirements 3
4.1 General 3
4.2 BOG measurement system 3
4.2.1 General 3
4.2.2 Flowmeter 4
4.2.3 Associated measuring instruments 4
4.2.4 Flow computer 4
4.2.5 Indicating device 4

5 Uncertainty requirement 4

6 Calibration and uncertainty verification 5
6.1 General 5
6.2 Calibration at laboratory or factory before installation 5
6.3 Calibration and verification after installation 5
6.4 Periodic uncertainty verification of BOG measurement system 5

7 Metering and calculation 6
7.1 General 6
7.2 Metering 6
7.3 Calculation of heating value 6

Annex A (informative) Typical installation of fuel gas flowmeters 7

Annex B (informative) Calculation of energy transferred 8

Annex C (informative) Uncertainty calculation examples 9

Bibliography 13