

ISO 10665:2024-11 (E)

Ships and marine technology - Ship design - CNG and LNG propulsion system

Contents		Page
Foreword		v
Introduction		vi
1	Scope	1
2	Normative references	1
3	Terms and Definitions	2
4	Components	6
4.1	General provisions	6
4.2	CNG cylinders and LNG containers	7
4.2.1	General provisions	7
4.2.2	Cylinders	7
4.2.3	Fixed container	7
4.2.4	Components fitted to the cylinder or fixed container	7
4.3	Fuel system components	8
4.3.1	Vaporizer	8
4.3.2	Other components	8
5	Installation requirements	9
5.1	General requirements	9
5.2	Installer of the CNG or LNG system	10
5.3	Additional CNG or LNG systems not connected to the propulsion system	10
5.4	Modifications to the structure of the ship or craft	10
5.5	Container or cylinder installation	11
5.5.1	General	11
5.5.2	Fixed containers/cylinders	11
5.5.3	Cylinders and Containers	12
5.5.4	Cylinders and containers lockers	12
5.6	Components fitted to the fixed container/cylinder	13
5.6.1	General requirement	13
5.6.2	Remote-controlled service valve and excess flow valve on the container	13
5.6.3	Pressure relief valve	13
5.6.4	Filler valve	13
5.6.5	Level indicator	13
5.6.6	Fittings	13
5.6.7	Pressure relief device	13
5.7	Gas pipes and hoses	14
5.8	Other components	15
5.8.1	Gas connections between components of the CNG or LNG system	15
5.8.2	Remote-controlled shut-off valve	16
5.8.3	Filling unit	16
5.9	Electrical installation	16
5.10	Fuel selection system	17
5.11	Gas detection	17
5.11.1	General	17
5.11.2	Alarm position	18
5.11.3	Sensors position	18
5.12	Forced ventilation	18
5.12.1	General	18

5.12.2	Purging of engine space	18
5.12.3	Position of venting	18
6	Fire-extinguishing equipment	18
7	Owner's manual	18
8	Commissioning	19
8.1	Tightness test	19
8.2	Leakage test	19
8.3	Initial filling of the container and cylinder and the system with LNG/CNG	19
8.4	Fuel System test	19
8.5	Water trial	20
Annex A (normative) Owner's manual		21
Annex B (informative)Exampleofinstallationcertificate		24
Annex C (informative)ExampleCNGorLNGidentificationlabel		25
Bibliography		27