ISO 13617:2019 (E)

Ships and marine technology — Shipboard incinerators — Requirements

Contents

Foreword

1 Scope

2 Normative references

3 Terms and definitions

4 General design requirements

- 4.1 Piping
- 4.2 Rotating parts
- 4.3 Insulation and cooling
- 4.4 Corrosion
- 4.5 Liquid waste incineration
- 4.6 Combustion chamber
- 4.7 Combustion pressure
- 4.8 Charging solid waste
- 4.9 Feeding system
- 4.10 Ash removal
- 4.11 Observation port
- 4.12 Design temperature values
- 4.13 Pre-purging and post-purging
- 4.14 Mass fraction of oxygen in the discharge gases
- 4.15 Warning plate(s)
- 4.16 Instruction plate(s)
- 4.17 Flue gas cooling

5 Electrical requirements

- 5.1 General requirements
- 5.2 Disconnects
- 5.3 Live parts
- 5.4 Failure design
- 5.5 Control-circuit connections
- 5.6 Component voltage ratings
- 5.7 Weather endurance
- 5.8 Control device testing and acceptance
- 5.9 Control-circuit design
- 5.10 Overcurrent protection
- 5.11 Motors
- 5.12 Ignition systems
- 5.13 Wiring
- 5.14 Bonding

6 Materials

7 Operating controls

- 7.1 Disconnect switch
- 7.2 Emergency stop switch
- 7.3 Control equipment failures
- 7.3.1 General provisions
- 7.3.2 Safety thermostat
- 7.3.3 Flame failure/low oil pressure
- 7.3.4 Loss of power condition
- 7.4 Fuel-control valves
- 7.5 Alarms and indicators

7.6 Fire box cooling

8 Other requirements

8.1 Instruction and maintenance manual
8.2 Operation while inclined
8.3 Energy source
8.4 Drip trays

9 Testing

9.1 Prototype testing
9.2 Factory testing
9.3 Installation tests
9.3.1 Flame safeguard system
9.3.2 Limit controls
9.3.3 Combustion controls
9.3.4 Programming controls
9.3.5 Fuel control valves
9.3.6 Low voltage controls
9.3.7 Switches

10 Certification

11 Marking

12 Quality assurance

Annex A (normative) Emission requirements for shipboard incinerators with capacities of up to 4 000 kW on ships subject to MARPOL

A.1 Type approval
A.2 Test measurements
A.3 Duration of the test operation
A.4 Fuel/waste specification for the type approval test
A.5 Acceptance criteria for type-approval testing
A.6 Fuel-related emissions
A.6.1 Oxides of sulphur
A.6.2 Principal organic hazardous constituents
A.6.3 On board operation/emission controls
A.7 Passenger/cruise ships with incinerator installations having a total capacity of more than 1 500 kW
A.7.1 Typical conditions
A.7.2 Flue gas scrubbing
A.7.3 Oxides of nitrogen

Annex B (normative) Location requirements for incinerators

B.1 Application of International Maritime Organization (IMO) documents
B.2 Passenger ships
B.3 All other ships, including ships not carrying more than 36 passengers
B.4 Location on the open deck
B.5 Underdeck fire-fighting equipment
B.6 Open deck firefighting equipment
B.7 Hot surfaces
B.8 Garbage chutes

Annex C (informative) Incinerators integrated with heat recovery units

C.1 Flue gas system
C.2 Alarms
C.3 Cleaning and inspection

Annex D (normative) Flue gas temperature

Page count: 22