# INTERNATIONAL STANDARD

ISO 13617

Second edition 2001-11-15

## Ships and marine technology — Shipboard incinerators — Requirements

Navires et technologie maritime — Incinérateurs de bord pour navires — Exigences



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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.

The main task of technical committees is to prepare International Standards. 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 25 % of the member bodies casting a vote.

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

ISO 13617 was prepared by Technical Committee ISO/TC 8, Ships and marine technology, Subcommittee SC 3, Piping and machinery.

This second edition cancels and replaces the first edition (ISO 13617:1995). It was revised for continued consistency with International Maritime Organization previsions for shipboard incinerators.

Annexes A, B and D form a normative part of this International Standard. Annex C is for information only.

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## Ships and marine technology — Shipboard incinerators — Requirements

## 1 Scope

This International Standard covers the design, manufacture, performance, operation, functioning and testing of incinerators intended to incinerate garbage and other shipboard wastes generated during the ship's normal service (i.e. maintenance, operational, domestic and cargo associated wastes).

This International Standard applies incinerator plants with capacities up to 1 500 kW per unit.

This International Standard does not apply to systems on special incinerator ships, e.g. for burning industrial wastes such as chemicals, manufacturing esidues, etc.

It does not address the electrical supply to the unit, nor the foundation connections and stack connections.

This International Standard provides emission requirements in annex A, and fire protection requirements in annex B. Provisions for incinerators integrated with heat recovery units and provisions for flue gas temperatures are given in informative annex C and normative annex D, respectively.

This International Standard may involve hazardous materials, operations, and equipment. It does not purport to address all of the safety problems associated with its use. It is the responsibility of the user of this International Standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

#### 2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amenabents to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard 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.

International Maritime Organization, *International Convention on the Safety of Life & Sea, 1997 (SOLAS)*, Chapter II-2, Regulations 3, 26, and 44.

International Maritime Organization, International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78).

IEC 92, Electrical installations in ships

IEC 60092-201:1980, Electrical installations in ships — Part 201: System design — General

IEC 60092-202:1994, Electrical installations in ships — Part 202: System design — Protection

IEC 60092-301:1980, Electrical installations in ships — Part 301: Equipment — Generators and motors

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IEC 60092-352:1997, Electrical installations in ships — Part 352: Choice and installation of cables for low-voltage power systems

IEC 60092-503:1975, Electrical installations in ships — Part 503: Special features — A.C. supply systems with voltages in the range above 1 kV and up to and including 11 kV

IEC 60529:2001, Degrees of protection provided by enclosures (IP Code)

### 3 Terms and definitions

For the purposes of this International Standard, the following terms and definitions apply.

#### 3.1

#### cargo-associated waste

all materials which have become wastes as a result of use on board a ship for cargo stowage and handling, including, but not limited to, duniage, shoring pallets, lining and packing materials, plywood, paper, cardboard, wire, and steel strapping

#### 3.2

#### cargo residues

remnants of any cargo material on board that cannot be placed in proper cargo holds (loading excess and spillage) or which remains in cargo holds and elsewhere after unloading procedures are completed (unloading residual and spillage)

#### 3.3

#### contaminated rags

rags that have been saturated with a substance defined as a harmful substance in certain annexes to MARPOL 73/78

#### 3.4

#### domestic waste

all types of food wastes, sewage and wastes generated in the living spaces on board the ship

### 3.5

#### fishing gear

any physical device or part thereof or combination of items that may be paced on or in the water with the intended purpose of capturing, or controlling for subsequent capture, living marine or neshwater organisms

#### 3.6

#### food wastes

any spoiled or unspoiled victual substances, such as fruits, vegetables, dairy products, poultry, meat products, food scraps, food particles, and all other materials contaminated by such wastes, generated aboard ship, principally in the galley and dining areas

## 3.7

#### garbage

all kinds of victual, domestic and operational waste excluding fresh fish and parts thereof, generated during the normal operation of the ship and liable to be disposed of continuously or periodically, except those substances which are defined or listed in certain annexes to MARPOL 73/78

#### 3.8

#### incinerators

shipboard facilities for incinerating solid wastes approximating in composition to household waste and liquid wastes arising from the operation of the ship, e.g., domestic waste, cargo-associated waste, maintenance waste, operational waste, cargo residues, and fishing gear, etc.

NOTE These facilities may be designed to use or not to use the heat energy produced.