International Standard ISO 5480

Shipbuilding — Guardrails for cargo ships

Construction navale — Garde-corps pour navire de charge

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO member bodies). The work of developing International Standards is carried out through ISO technical committees. Every member body interested in a subject for which a technical committee has been set up 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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 5480 was developed by Technical Committee ISO/TC 8, *Shipbuilding*, and was circulated to the member bodies in June 1978.

It has been approved by the member bodies of the following countries :

Australia	India	Poland
Austria	Ireland	Romania
Belgium	Italy	Spain
Brazil	Japan	Sweden
Bulgaria	Korea, Dem. p. Rep. of	Turkey
Czechoslovakia	Korea, Rep. of	United Kingdom
Finland	Mexico	USSR
France	Netherlands	Yugoslavia
Germany, F. R.	Norway	

No member body expressed disapproval of the document.

Shipbuilding — Guardrails for cargo ships

0 Introduction

This International Standard specifies requirements for marine guardrails and stanchions for cargo ships to comply with the regulations of the International Convention on Loadlines 1966, Annex I, Chapter II, Regulation 25, Paragraphs 2 and 3.

NOTE — Users of this International Standard should note that while observing the requirements of the standard, they should at the same time ensure compliance with such statutory requirements, rules and regulations as may be applicable to the individual ship concerned.

1 Scope and field of application

This International Standard specifies dimensions, materials, quality of manufacture and finish for guardrails and stanchions which are fitted on exposed freeboard and superstructure decks of cargo ships to prevent personnel falling overboard or to lower decks. It does not concern guardrails which are fitted near compasses.

2 References

ISO 31, Part 3 : *Quantities and units of mechanics.*

ISO 65, *Steel tubes suitable for screwing in accordance with International Standard ISO 7.*

ISO/R 887, *Washers for hexagon bolts and nuts — Metric series.*

ISO 898/1, *Mechanical properties of fasteners, Part 1 : Bolts, screws and studs.*

ISO 1461, *Metallic coatings — Hot dip galvanized coatings on fabricated ferrous products — Requirements.*

3 Definitions

For the purposes of this International Standard, the following definitions shall apply :

3.1 guardrail : A construction comprising stanchions, rails, toprails and stays (see figures 1 and 4).

3.2 stanchion : The principal vertical structural member of a guardrail system.

3.3 rails and toprails : Rails are the horizontal members between stanchions, the toprail being the uppermost rail in a series of rails.

3.4 stay : A secondary structural support attached to stanchions and deck.

4 Materials

The materials for the manufacture of individual components shall be as shown in the table.

TABLE — **Components and materials of guardrails**

Item No.	Component	Material	ISO No.	Remarks
1	Stanchions	Mild steel		Weldable
2	Stays	Mild steel		Weldable
3	Toprails, tube	Steel	65	Weldable
	Toprails, wooden	Teak	—	Or other suitable hardwood
4	Rails	Steel		Weldable
5	Washers	Brass or steel	R 887	
6	Nuts	Brass or steel	—	
7	Bolts	Steel	898	
8	Screws	Brass or steel	—	Wood screws