INTERNATIONAL STANDARD

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Ships and marine technology — Loose gear of lifting appliances on ships — Hooks

Navires et technologie maritime — Accessoires mobiles des appareils de levage sur les navires — Crocs

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Foreword

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 8, *Ships and marine technology*, Subcommittee SC 4, *Outfitting and deck machinery*.

Ships and marine technology — Loose gear of lifting appliances on ships — Hooks

1 Scope

This International Standard specifies the types and basic parameters, technical requirements, marking, storage, and transportation, use and maintenance of hooks as loose gear of lifting appliances on ships.

This International Standard is applicable to lifting appliances on ships.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 1837, *Lifting hooks — Nomenclature*

ISO 16855, *Ships and marine technology — Loose gear of lifting appliances on ships — General requirements*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 16855 and ISO 1837 apply.

4 Types

4.1 Common hook types

4.1.1 Shank hook with point (S-shaped)

For the shapes and dimensions of a shank hook with point, see A.1.

4.1.2 Shank ramshorn hook (D-shaped)

For the shapes and dimensions of a shank ramshorn hook, see A.2.

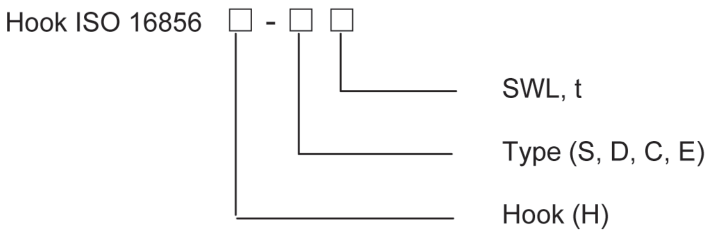
4.1.3 C-hook (C-shaped)

For the shapes and dimensions of a C-hook, see A.3.

4.2 Other types (E-shaped)

Types of hooks in ISO 1837 other than common hook types that can also be used as ship hooks fall under E-shaped.

4.3 Model designation



Figure

EXAMPLE Designation of a shank hook with point with 20 t SWL:

Hook ISO 16856 H-S20

4.4 Locking device requirement

Various types of hooks shall be provided with automatic locking devices.

5 Technical requirements

5.1 Materials

5.1.1 Hook materials must use solid steel manufactured by Martin furnaces, electric furnaces, or oxygen top-blown converters; it is recommended to use the electroslag remelting process.

5.1.2 For the chemical composition of hook materials, see Table 1. Other materials can be used (see 5.6).

Table 1 — Chemical composition of hook materials

Materials	Chemical composition (heat analysis) %						
	C	Si	Mn	P	S	Cr	Al
Carbon steel	0,17–0,24	0,17–0,35	0,45–0,80	≤0,035	≤0,035	≤0,030	≥0,025
Carbon-manganese steel	0,17–0,24	0,20–0,35	1,20–1,50	≤0,035	≤0,035	≤0,030	≥0,025

5.1.3 For the mechanical properties of hook materials, see Table 2. Other mechanical properties can be used (see 5.6).