International Standard



INTERNATIONAL ORGANIZATION FOR STANDARDIZATION® MEX HAPODHAR OPPAHUSALUR TO CTAHDAPTUSALUN® ORGANISATION INTERNATIONALE DE NORMALISATION

Shipbuilding – Deck machinery – General requirements

Construction navale — Auxiliaires de pont — Prescriptions générales

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iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>ISO 7825:1985</u> https://standards.iteh.ai/catalog/standards/sist/72bd3af2-b804-4de3-b15a-068d37e3c054/iso-7825-1985

Descriptors : shipbuilding, decks, machinery, machine components, specifications, safety requirements.

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.

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. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting. iTeh STAI

International Standard ISO 7825 was prepared by Technical Committee ISO/TC 8, standards.iten.ai) Shipbuilding and marine structures.

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NDARD PREVIEW

International Organization for Standardization, 1985 • Ô

Shipbuilding — Deck machinery — General requirements

1 Scope and field of application

This International Standard specifies the characteristics common to all deck machinery of any type not detailed in the relevant specific International Standards. If in any items this International Standard contradicts the specific International Standard, it shall be overruled by the specific International Standard.

Construction 2

The material used for the construction of the various parts shall be in accordance with the International Standards for materials. The machinery maker shall be responsible for the strength of all the components regarding the stresses to which they are commonly subjected and according to the service for S 1421 Pedals which they are intended, provided that the deck machinery is The pedal shall operate the brake according to the requirements used under the conditions agreed in the contract.

The maximum travel of the levers shall not exceed 600 mm if movable in one direction only, or 300 mm to either side from a central position if movable in both directions. They shall move toward the right when hauling and toward the left when paying out. Alternatively, they should move backward when hauling and forward when paying out.

Generally speaking, the lever shall move in the direction of the intended movement.

For lever-operated brakes, the brake shall engage when the lever is pulled and disengage when the lever is pushed.

The manual effort on the brake for the operator shall not exceed 160 N.

ISO 7825:198 of the brake itself¹⁾. The maximum travel shall not exceed https://standards.iteh.ai/catalog/standards/sis 250 mm. The physical effort for the operator shall not exceed All weldings and allied processing are to be in accordance with 320 NS the relevant International Standards.

3 Drums

If no relevant International Standard exists, dimensions of drums and their storage capacity shall be determined taking into account the diameter and other characteristics of the cable wound on the drum (steel cable or synthetic rope).

The height of flanges shall be such that the flange exceeds the top laver of the cable by 2 times the cable diameter for steel cables and 1,5 for synthetic ropes. This is relevant for those drums not equipped with spooling gear.

4 Levers, pedals, handwheels and crankhandles, push-buttons

4.1 Levers

Levers shall be fitted in accessible, readily visible positions so as to ensure complete operation safety. They shall be constructed and placed in such a way that they can be operated and read unmistakeably; they shall moreover be protected against unintentional operation.

4.3 Handwheels and crankhandles

The handwheel or crankhandle shall actuate the brake when turned clockwise and release it when turned counterclockwise. The manual effort for the operator shall not exceed 250 N for speed regulation and 500 N at any moment.

4.4 Push-buttons

When not associated with automatic sequential control, separate push-buttons shall be provided for each direction of operation.

In any case, if depressed the push-buttons shall actuate the machinery and when released shall stop and effectively brake it.

Where advisable, the above-mentioned push-buttons may be replaced by two "start" and "stop" push-buttons.

4.5 Operational marks

All control elements shall be permanently marked for identification, unless their functions are clearly recognized. If required, instructions should be permanently marked in a readily visible position.

¹⁾ Normally engaged or normally released brakes.

5 Inspection access

Adequate and easy access shall be provided for inspection of reduction gears, bearings, brakes, etc.

Lubrication 6

Adequate and easily accessible manual lubrication points shall be provided, both for oil and grease, in order to ensure that all parts are correctly lubricated.

Nipples shall be standard type and in accordance with International Standards.

Nipples shall be fitted so as not to be damaged by mechanical shocks and chafing, and protected against dirt and/or upsetting of paint. Moreover, the nipples shall be always easily accessible.

Gear-boxes shall be provided with easily accessible means for level checking and drainage plugs.

Lubrication shall also be efficient when machinery is inclined at any angle up to 15° in any direction.

Suitable protection shall be provided for preventing persons from coming into contact with surfaces having temperatures over 50 °C.

This temperature is not applicable for hydraulic systems.

Surface protection 8

Metallic surfaces shall be free from any trace of moisture, oil, grease, dirt, weld spatter, burrs or other imperfections before a protective finish is applied.

All steel surfaces not protected by lubricant or coating of any other type shall be sandblasted to near white metal and painted with one coat of zinc-rich epoxy paint, of a type and a thickness to be agreed upon between manufacturer and customer.

9 **Environmental conditions**

Deck machinery shall be designed for correct operation of its components at temperatures between -20 and +60 °C.

NOTE - Greater extremes of temperatures for continuous service may be indicated by the customer at the time of enquiry.

iTeh STANDARD PRE VIEW **19** Markings

7 Safety protection

Adequate protection shall be provided for all external gears and all moving surfaces.

All machinery shall be permanently marked with the following ISO 7data and information :

Electrical cables and all electrical equipment exposed to shocks a cast in and country of the manufacturer; e3c054/iso) 7825-1985 and chafing by ropes or cargo shall be protected by pipes or other means. Standard.

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