Only the Danish version is authentic

Technical Regulation no. 5 of 13 September 2006 on towing and anchor handling winches and towing hooks in ships [1)]

In accordance with section 1 (2), sections 2-5, section 17 (5), section 28 and section 32 of the Safety at Sea Act, cf. Promulgation Order no. 627 of 26 July 2002, Act no. 1465 of 22 December 2004, and in accordance with Decree no. 607 of 25 June 2001 on entry into force for Greenland of the Safety at Sea Act, after consulting Greenland Home Rule, and following authorisation in accordance with Order no. 154 of 10 March 2005, the following is laid down:

Scope

Section 1. This Regulation shall apply to towing, harbour towing and anchor handling winches and towing hooks installed in Danish ships.

Subsection 2. In the case of towing, harbour towing and anchor handling winches and towing hooks installed prior to the entry into force of the Regulation, sections 4-9 shall not apply if the arrangement is designed, arranged and approved in accordance with the previously applicable provisions.

Definitions

Section 2. The following definitions shall apply in this Regulation:

1) "Anchor handling winch": Any winch specifically constructed for anchor handling and similar operations for other ships, drilling platforms and the like.
2) "Harbour towing winch": Any winch specifically constructed and adapted for towing tasks.
3) "Existing installations": Installations constructed before the date of entry into force of the Regulation.
4) "Approved": Approved by the Danish Maritime Authority or in accordance with the provisions in section 3 (2).
5) "Classification society": An organisation recognised and authorised by the Danish Maritime Authority in accordance with the provisions of the Danish Maritime Authority's Technical Regulation on the recognition and authorisation of organisations that conduct inspections and surveys of ships.
6) "Rendering force": The force that must be delivered to induce the winch drum to move in the opposite direction of the torque, which is supplied by the winch drive unit.
7) "Towing hook": A hook or similar used in connection with towing operations, and which can be readily and rapidly released in any situation in connection with towing.
8) "Towing winch": Any winch specifically constructed for use in towing operations at sea.
9) "Maximum bollard pull": The maximum static towing force (bollard pull) that the ship can deliver, and as measured by a recognised method and documented in the bollard pull certificate.
10) "SWL": Safe Working Load.

[1)] The Regulation has been notified as a draft in accordance with Directive 98/34/EC of the European Parliament and of the Council 98/34/EC (the Information Procedure Directive), as last amended by Directive 94/48/EC.

Equivalence, etc.

Section 3. If this Regulation stipulates that a particular accessory, material, device or appliance, or type thereof, must be fitted or exist in a ship, or that a particular measure must be taken, the Danish Maritime Authority may permit the fitting or existence of another accessory, material, device or appliance, or type thereof, that has been legitimately manufactured or placed on the market in another EU Member State or in Turkey, or that has been legitimately manufactured in another EFTA State that is a contracting party in the EEA Agreement, with an equivalent level of protection to the Danish standards, or that a different measure be taken in the ship if it is just as effective as that required under the Regulation.

Subsection 2. The Danish Maritime Authority shall accept tests conducted by recognised test bodies, including test bodies in other EU Member States, in EFTA States that are contracting parties to the EEA Agreement, and in Turkey that provide appropriate and satisfactory guarantees of the technical, professional and independent nature of the tests.

Design and construction

Section 4. Any arrangement of towing, harbour towing and anchor handling winches and towing hooks shall, throughout its structure, have the strength required for the purpose and shall in normal operation not be capable of being overloaded.

Subsection 2. Towing, harbour towing and anchor handling winches and towing hooks used on tugs, supply ships or the like used for towing, anchor handling or the like shall, in addition to the requirements in this Regulation, with respect to design, strength, materials, material dimensions, welding and installation as well as electrical and hydraulic installations, conform to recognised international standards[2)] and comply with the rules issued by a classification society.

Subsection 3. Towing, harbour towing and anchor handling winches shall be fitted with an emergency brake system that is independent of the ship's main power source.

Subsection 4. Towing winches shall be fitted with automatic spooling devices.

Subsection 5. Winches for towing or anchor handling shall be designed and fitted with instruments in such a way that it is at all times possible to read the load on the wire during not only traction but also lowering and braking operations.

Subsection 6. Adjustment of braking, tensile and lowering forces shall normally be capable of being carried out from the control panel of the towing winch.

Subsection 7. The ship's hull shall, in areas where towing hooks or winches are attached, be strengthened with respect to the maximum load that may be expected during operation and in accordance with the rules of a recognised organisation.

Arrangements on board for towing, harbour towing and anchor handling winches

Section 5. Towing, harbour towing and anchor handling winches shall be located on board in such a way that operation and work in connection with them can proceed safely.

Subsection 2. Movable parts shall be shielded to such an extent that accidents are prevented. All necessary passages at winches or towing hooks shall have a minimum width of 0.6 m.

Subsection 3. From all the control points of the winch(es) and from the wheel house, there shall, where appropriate with the aid of TV monitoring, be an adequate overview of the movable parts of the winches, including winding devices, drums and cable fittings. The control point shall further be located in such a way that the operator is protected in the event of wire breakage. The same applies to the release points for towing hooks.

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2) Reference is made to, among other things, International Standard ISO 7365, Towing winches for deep sea use.

Subsection 4. Shackles, mountings, pad-eyes, direction sign rollers and the like shall be fitted as necessary. These shall be dimensioned and fastened taking due account of the maximum force effects that may arise in connection with their use.

Subsection 5. Ships used for anchor handling shall have stern rollers of sufficient diameter or equivalent arrangements.

Subsection 6. The mobility of the wire or hawser shall be limited to the extent necessary by bollards, shackles, supports or the like that are rounded to ensure at all times good manoeuvring with the tow line and prevent the wire/hawser from jamming or being damaged in some other way.

Subsection 7. Where stop bollards are fitted close to the railing on board, these shall be located and designed so that they can "catch" the towing hawser.

Subsection 8. Controls for heaving and lowering shall automatically switch to the neutral position when released.

Subsection 9. Towing and anchor handling winches shall be fitted with a manually operated emergency shutdown device that cuts off the power supply and rapidly actuates the brake.

Subsection 10. Emergency release shall be capable of being carried out from all the control panels of the winch, from the control point and from suitable locations on deck.

Subsection 11. Following emergency release, the winch brakes shall immediately be capable of being used normally again.

Subsection 12. Control buttons or the like for emergency release shall be secured against accidental operation.

Subsection 13. Emergency release shall be capable of being carried out even if the ship's main power source fails and under any conditions arising with respect to heeling and trim for the ship and with any possible tensile direction of the wire.

Subsection 14. Ships used for anchor handling shall be fitted with remote controlled wire/cable stoppers that must be capable of being emergency-released from the wheel house or from a control point from which there is communication with the bridge. Emergency release shall also be capable of being performed in the event of black out.

Arrangements on board – towing hooks

Section 6. Towing hooks shall be located on board in such a way that operation and work in connection with them can proceed safely.

Subsection 2. Movable parts shall be shielded to such an extent that accidents are prevented. All necessary passages at towing hooks shall have a minimum width of 0.6 m.

Subsection 3. There shall be an adequate overview of the towing hook from control points and from the wheel house. Release points for the towing hook shall further be located in such a way that the crew is protected in the event of wire breakage.

Subsection 4. Shackles, mountings, pad-eyes, direction guiding rollers or the like shall be fitted as necessary. These shall be dimensioned and fastened taking due account of the maximum force effects that may arise in connection with their use.

Subsection 5. The travel of the wire or hawser shall be limited to the extent necessary by bollards, shackles, supports or the like that are rounded to ensure at all times good manoeuvring with the tow line and prevent the wire/hawser from jamming or being damaged in some other way.

Subsection 6. The towing hook shall be fitted as low down and close to the midship as practicable, and the entire towing arrangement shall be organised so that the tension in the towing hawser or wire, when this grows athwartships, delivers the lowest possible heeling moment. The towing hook arrangement shall, where necessary, be fitted with riders.

Subsection 7. The towing hook shall be fitted with a mechanism for releasing the hawser or wire, where the latter is loaded. Such release shall be capable of taking place from the wheel house or the control point. The release mechanism must not be capable of being blocked and shall be of such a

nature that release cannot take place inadvertently owing to jerking or movements in the towing hawser.

Subsection 8. The travel of the towing hawser in the transverse direction shall be limited by bollards or supports corresponding to the maximum movement of the towing hook so that the tension in the towing hook is always in its longitudinal direction. Stop bollards fitted in tables shall be designed so that they can "catch" the wire or the hawser.

Subsection 9. In the vicinity of the towing hook, there shall be one or two axes mounted in straps arranged for this purpose and suspended so that it is possible to access them from both sides of the ship.

Subsection 10. Controls or the like for emergency release shall be secured against accidental operation.

Subsection 11. Emergency release shall be capable of being carried out even if the ship's main power source fails and under any conditions arising with respect to heeling and trim for the ship and within any possible tensile direction of the wire.

Testing and approval

Section 7. All towing, harbour towing and anchor handling winches and towing hooks shall, prior to being taken into service, be tested[3)] and approved by the Danish Maritime Authority or an organisation authorised by the Danish Maritime Authority, however cf. section 3 (2).

Subsection 2. Towing and anchor handling winches and towing hooks shall be supplied with a certificate showing that these have been designed, installed and tested in accordance with the rules issued by a classification society.

Subsection 3. Hooks and loose equipment shall be trial-loaded and certified in accordance with accepted standards and marked with the maximum SWL.

Subsection 4. Testing on board shall, among other things, demonstrate that the wire spools satisfactorily onto the drum. This shall be tested in both a loaded and unloaded state.

Maintenance and inspection

Section 8. Prior to every towing or anchor handling task[4)], the winch shall be functionally tested in accordance with a programme drawn up by the winch manufacturer or the shipping company (cf. Subsection 3.4). The result shall be entered in the ship's Supervisory Log, the Register of the ship's hoisting gear and cargo gear or the ship's log.

Subsection 2. At least once a year, a thorough examination of towing hooks and towing winches with associated equipment and fastenings, including bolts and welds, shall be performed to identify wear, deformation, crack formation and similar damage. This examination shall be conducted under the management and responsibility of the ship's master and chief engineer. The result shall be entered in the Supervisory Log or in the Register of the ship's hoisting gear and cargo gear.

Subsection 3. On board the ship shall be all the necessary instruction books and drawings, etc. for the winch in question and towing hooks, including the following:

1) Information needed to understand the mode of operation of the winch or towing hook and to perform the necessary and general adjustments, repairs and replacements.
2) All information on the limitations of the winch or towing hook when used under normal circumstances.
3) Bollard pull certificate.
4) A simple functional testing programme for winches and towing hooks for the performance of emergency release.

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3) The testing shall take place in accordance with internationally recognised standards or the rules issued by a recognised classification society.

4) Reference is also made to the IMO's guidelines: MSC/Circ.884 Guidelines for safe ocean towing.

5) A lubrication plan.
6) Arrangement drawings relating to the winch.
7) Certificates for wires, hawsers, shackles, drive gear and lifting hooks and any other loose equipment incorporated in the towing and anchor handling arrangement.

Miscellaneous provisions

Section 9. All loose equipment incorporated in the towing and anchor handling arrangement, such as shackles, rings, wires, hawsers, pelican hooks, carpenter stoppers and the like, shall be tested as indicated in section 7 and supplied with a certificate.

Subsection 2. Cutting blowpipe equipment shall always be ready for immediate use during towing and anchor handling operations in which an axe cannot be used as a result of the wire's size.

Subsection 4. Under conditions in which there are substantial loads on towing and anchor handling equipment, the master shall ensure that there are no unnecessary personnel on deck.

Penalties and entry into force, etc.

Section 10. Infringement of this Regulation shall be punished by a fine or a term of imprisonment of up to 1 year.

Subsection 2. The penalty may rise to a term of imprisonment of up to 2 years if

1) in connection with the infringement, damage to life or health has occurred,
2) a ban or injunction has been issued previously for the same or equivalent circumstances, or
3) in connection with the infringement, an economic benefit for the party in question or others has been achieved or sought.

Subsection 3. The occurrence of harm to the life or health of young people under the age of 18 shall be regarded as a particularly aggravating circumstance, cf. subsection 2 (1).

Subsection 4. If the profits gained through the contravention are not confiscated, particular account shall, when meting out penalties, including additional penalties, be taken of the scale of any economic benefit achieved or sought.

Subsection 5. Liability to punishment may be imposed on companies, etc. (legal entities) in accordance with the provisions of Chapter 5 of the Penal Code.

Section 11. If the circumstance is covered by Decree concerning the entry into force for Greenland of Act on safety at sea, measures may be laid down in accordance with the Criminal Code for Greenland.

Subsection 2. The circumstance refered to in section 10 (2) and (3) shall be regarded as aggrevating circumstances.

Subsection 3. If the profits gained through the contravention are not confiscated, cf. section 116 (1) of the Penal Code, particular account shall, when meting out penalties, including additional penalties, be taken of the scale of any economic benefit achieved or sought.

Stk. 4. If the infringement is committed by companies etc. (legal entities), liability to pay a fine may be incurred by the legal entity as such. If the infringement is committed by the State, Greenland's Home Rule, a municipality, a municipal cooperative covered under section 64 of the Landsting Act on municipal councils and local authorities etc. or a local authority, liability to pay a fine may be incurred by the relevant public authority as such.

Subsection 5. If the relevant party is not resident in Greenland, or their connection to Greenland society is otherwise so remote that the prerequisites for measures to be taken do not exist, legal proceedings may be instigated or the case may be referred for trial in Denmark.

Section 12. The Regulation shall come into force on 1 October 2006.

Subsection 1. The following shall be abolished:

1) Regulations of 4 June 1985 for the design, testing and inspection, etc. of towing and anchor handling winches with associated equipment and arrangements, cf. the Ship Inspectorate's Notifications 391.
2) Technical Regulation no. 3 of 12 June 2006 on towing and anchor handling winches and towing hooks in ships.

The Danish Maritime Authority, on 13 September 2006
STEEN NIELSEN

/Søren Enemark Jensen

Explanatory notes for Technical Regulation no. 5

In June 2006, the Danish Maritime Authority issued Technical Regulation no. 3 of 12 June 2006 on towing and anchor handling winches and towing hooks in ships.

After issuing the Regulation, the Danish Maritime Authority became aware of errors in the numbering of the sections, so that section 13 was instead numbered as section 2.

During this revision of the Regulation, it was furthermore considered appropriate to remove section 10 and consequently abolish Regulations of 4 June 1985 for the design, testing and inspection, etc. of towing and anchor handling winches with associated equipment and arrangements, cf. the Ship Inspectorate's Notifications 391.

Therefore, the Danish Maritime Authority has chosen to re-issue the Regulation in its entirety with the mentioned changes.