

Translation: Only the Danish document has legal validity.

*Order No. 160 of 28 of January 2022
issued by the Danish Maritime Authority*

Order on towing, tug and anchor handling winches and towing hooks on ships

Pursuant to Sections 3(1) and 32(9) of the Maritime Safety Act, cf. Consolidated Act No. 1629 of 17 December 2018, and Sections 3(1) and 32(2) of the Order on the entry into force for Greenland of the Maritime Safety Act, cf. Order No. 1674 of 16 December 2015, shall be adopted by virtue of the authorisation granted under Article 1(1)(3) of Order No. 261 of 23 March 2020 on the transfer of certain powers to the Danish Maritime Authority and on the right of appeal, etc, and Section 1(1)(2) of Order No. 279 of 23 March 2020 for Greenland on the transfer of certain powers to the Danish Maritime Authority and on the right to appeal, etc:

Scope

Section 1. The Order shall apply to towing, tug and anchor handling winches and towing hooks installed on ships registered in Denmark and Greenland, cf. Subsection 2.

Subsection 2. Towing, tug and anchor handling winches and towing bridges constructed, installed and approved before 1 October 2006 in accordance with the regulations in force at that time shall not be subject to this Order.

Subsection 3. Ships with a maximum bollard pull of 500 kN (50 tonnes) used for towing ships, barges or other floating structures shall not be subject to this Order where a classification company has approved the arrangement in accordance with the classification company's own rules, cf. Subsection 4. The vessel must be able to produce appropriate evidence of approval in the form of the class notation 'Tug' or 'Escort Tug'.

Subsection 4. Subsection 3 shall not apply to ships engaged in Escort Tug operations.

Definitions

Section 2. The following definitions shall apply for the purposes of the Order:

- 1) Anchor handling winch: any winch specially designed for anchor handling and similar operations for ships, drilling rigs and the like.
- 2) Tug winch: any winch specifically built and designed for towing tasks.
- 3) Existing installations: installations carried out before the date of entry into force of the Order.
- 4) Classification company: an organisation recognised and authorised by the Danish Maritime Authority in accordance with the provisions of the Order on the recognition and authorisation of organisations carrying out inspection and survey of ships in force at any time.
- 5) Rendering force: the force required to cause the winch drum to move in the opposite direction to the torque applied by the winch drive.
- 6) Towing hook: a hook or similar device used in towing operations that can be easily and quickly released in any towing situation.
- 7) Towing winch: any winch specially designed for use in towing operations at sea.
- 8) Maximum bollard pull: the maximum static towing force (bollard pull) that the ship can achieve, measured according to a recognised method and documented in the Bollard Pull Certificate.
- 9) SWL: Safe Working Load.

Translation: Only the Danish document has legal validity.

*Order No. 160 of 28 of January 2022
issued by the Danish Maritime Authority*

10) Tug: vessels used for towing ships, barges or other floating structures and approved with the class notation "Tug".

11) Escort Tug: vessels used for "Escort Tug operations" and approved with the class notation "Escort Tug".

12) Escort Tug operations: towing operation involving close assistance to navigation, steering, braking through a combination of propulsive and hydrodynamic forces, generated from the tug through a towline attached to the assisted vessel.

Equivalence, etc.

Section 3. The Danish Maritime Authority may, in accordance with the criteria in Subsection 2, permit,

- 1) The use on board of other equipment, materials, appliances, etc,
- 2) Another measure is taken in the vessel; or
- 3) The vessel is built or otherwise designed, including to recognised international standards.

Subsection 2. The authorisation of the Danish Maritime Authority under Subsection 1 may be granted when it is demonstrated that equivalent measures are at least as effective and represent an equivalent level of protection to that required by this Order. This may be demonstrated, for example, by testing equivalent measures, but also by other means.

Subsection 3. Where this Order requires that a particular accessory, material, device or appliance, or type thereof, shall be placed or provided in a ship, or that the Danish Maritime Authority may permit the fitting or location of any other accessory, material, appliance or apparatus, or type thereof, which is lawfully manufactured or marketed, or which is lawful or type of device or equipment which is legally manufactured or marketed in another EU Member State or in Turkey, or which is legally manufactured in another EFTA State which is a contracting party to the EEA Agreement, with an equivalent level of protection to the Danish standards, or that another measure is taken in the ship if it is as effective as that required by the Order.

Subsection 4. The Danish Maritime Authority shall accept tests carried out by recognised testing institutes, including testing institutes in other EU Member States, in EFTA States which are Contracting Parties to the EEA Agreement and in Turkey, which provide appropriate and satisfactory guarantees of the technical, professional and independent nature of the tests.

Construction

Section 4. Every arrangement of towing, tug and anchor handling winches and towing hooks shall have in all its arrangements the strength necessary for the purpose and shall not be capable of being overloaded during normal operation.

Subsection 2. Towing, tug and anchor handling winches and towing hooks used on tugs, supply vessels or similar craft for towing, tugs, anchor handling or similar operations shall, in addition to the requirements of this Order, follow the standards and comply with the rules of a classification society as regards construction, strength, materials, material dimensions, welding and installation, and electrical and hydraulic installations.

Subsection 3. Towing, tug and anchor handling winches shall be fitted with an emergency braking system independent of the ship's main source of power.

Subsection 4. Towing winches shall be fitted with a spooling device.

Translation: Only the Danish document has legal validity.

*Order No. 160 of 28 of January 2022
issued by the Danish Maritime Authority*

Subsection 5. Winches for towing or anchor handling shall be designed and instrumented in such a way that it is possible to read the load on the wire at any time, whether it is being pulled, hoisted or braked.

Subsection 6. Regulation of the braking, pulling and rebound forces shall normally be possible from the winch control panels.

Subsection 7. The hull of the ship shall be strengthened in areas where towing hooks or winches are attached, in accordance with the maximum load to be expected during operation and in accordance with the rules of a classification company.

Subsection 8. Subsections 4, 5 and 6 shall not apply to vessels with a maximum bollard pull of 500 kN (50 tonnes) used for towing ships, barges or other floating structures, cf. Subsection 9.

Subsection 9. Subsection 8 shall not apply to ships engaged in Escort Tug operations.

Requirements for towing, tug and anchor handling winches on board

Section 5. Towing, tug and anchor handling winches shall be placed on board in such a way that they can be operated and worked on safely.

Section 6. Movable parts must be shielded to such an extent that accidents are prevented. All necessary walkways at winches or towing hooks must be at least 0.6 m wide.

Subsection 2. From the manoeuvring positions of the winch or winches and from the wheelhouse, there shall be sufficient visibility, if necessary by means of CCTV, of the winch or the moving parts of the winch, including the spooling device, drums and cables.

Subsection 3. The manoeuvring area shall also be located in such a way that the operator is protected in the event of a wire break.

Subsection 4. Subsections 2 and 3 shall apply mutatis mutandis to the release points for towing hooks.

Subsection 5. Hangers, brackets, pad-eyes, guide rollers or similar shall be fitted as necessary. These must be dimensioned and fixed taking into account the maximum forces that can occur during their use.

Section 7. The movement of the wire or towline shall be restricted as necessary by bollards, shackles, supports or the like, rounded to ensure at all times good manoeuvrability of the tow and to prevent the wire or towline from becoming entangled or otherwise damaged.

Subsection 2. Where stop rollers are provided, they shall be so designed as to be capable of stopping the towline in an inappropriate movement.

Section 8. Manoeuvring handles for hoisting and firing shall automatically move to neutral position when released.

Subsection 2. Towing and anchor-handling winches shall be fitted with manually operated emergency stops that cut off the power supply and quickly apply the brakes.

Subsection 3. An emergency release shall be possible from all manoeuvring consoles of the deck, from the steering position and from appropriate positions on deck.

Subsection 4. After the emergency release, the brakes of the winch shall be immediately operable in the normal manner.

Subsection 5. Control buttons or similar devices for emergency release shall be secured against accidental operation.

Translation: Only the Danish document has legal validity.

*Order No. 160 of 28 of January 2022
issued by the Danish Maritime Authority*

Subsection 6. Emergency release shall be possible, even in the event of failure of the ship's main source of power, under all existing conditions of heel and trim of the ship and in any possible direction of pull of the wire.

Specific for anchor handling

Section 9. Vessels used for anchor handling shall have stern rollers of sufficient diameter or equivalent arrangement.

Subsection 2. Vessels used for anchor handling shall be fitted with remote controlled wire and chain stoppers. These shall be capable of emergency release from the wheelhouse or from an operating position from which there is communication with the bridge. Emergency response must be possible even in the event of a blackout of the ship's main power supply.

Requirements for towing hooks

Section 10. Towing hooks shall be so placed on board that operation and work in connection therewith can be carried out safely.

Subsection 2. Movable parts must be shielded to such an extent that accidents are prevented. All necessary walkways by towing hooks must be at least 0.6 m wide.

Subsection 3. There shall be sufficient visibility of the towing hook from manoeuvring positions and from the wheelhouse. Release points for the towing hook must also be located in such a way that the crew is protected in the event of a wire break.

Subsection 4. Hangers, brackets, pad-eyes, guide rollers or similar shall be fitted as necessary. These must be dimensioned and fixed taking into account the maximum forces that can occur during their use.

Section 11. The movement of the wire or towline shall be restricted as necessary by bollards, hoops, supports or the like, which shall be rounded, so as to ensure at all times good manoeuvrability of the tow and to prevent the wire or towline from being entangled or otherwise damaged.

Section 12. The towing hook shall be placed as low and close to midships as practicable, and the whole towing arrangement shall be so arranged that the pull of the towline or wire, when it points across the ship, gives the least possible heeling moment. The towing hook arrangement shall be fitted with a guardrail where necessary.

Section 13. The towing hook shall be fitted with a mechanism for releasing the towline or wire when loaded. This release shall be possible from the wheelhouse or the operating position. The release mechanism shall not be capable of being blocked and shall be such that release cannot occur inadvertently due to jerking or shaking of the towline.

Section 14. The movement of the towline in the transverse direction shall be limited by bollards or supports corresponding to the greatest swing of the towing hook, so that the pull of the towing hook always falls in its longitudinal direction. Stop rollers must be designed in such a way that they can "catch" the wire or towline.

Translation: Only the Danish document has legal validity.

*Order No. 160 of 28 of January 2022
issued by the Danish Maritime Authority*

Subsection 2. In the vicinity of the towing hook there shall be one or two axes placed in hooks fit for the purpose. The axe shall be suspended in such a way that it can be reached from both sides of the ship.

Section 15. Control buttons or similar devices for emergency release shall be secured against accidental operation.

Subsection 2. Emergency release shall be possible even in the event of failure of the ship's main source of power and under all conditions of heel and trim of the ship and any possible direction of pull of the wire.

Testing and approval

Section 16. All towing, tug and anchor handling winches and towing hooks shall, before being put into service, be tested and approved by the Danish Maritime Authority or a classification society, cf. Section 3(4).

Subsection 2. Towing and anchor handling winches and towing hooks shall be supplied with a certificate stating that they have been designed, installed and tested in accordance with the rules of a classification company.

Subsection 3. Hooks and loose equipment shall be test loaded and certified in accordance with recognised standards and marked with the maximum SWL.

Subsection 4. On-board testing shall demonstrate, among other things, that the wire winds satisfactorily on the winch drum. This must be tested in both loaded and unloaded conditions.

Maintenance and inspection

Section 17. Before each towing, tug or anchor handling task, the winch shall be function-tested in accordance with a programme developed by the winch manufacturer or the shipping company, cf. Subsection (3)(4). The result shall be recorded in the ship's lifting and unloading register or the ship's logbook.

Subsection 2. At least once a year, a thorough inspection of the towing hook and towing winch and their associated equipment and fittings, including bolts and welds, shall be made for wear, deformation, cracking and similar damage. This inspection shall be carried out under the direction and responsibility of the master or chief engineer officer of the ship. The result shall be recorded in the ship's lifting and unloading register or the ship's logbook.

Subsection 3. All necessary instruction books and drawings, etc., for the current winch, as well as towing hooks, including the following, shall be kept on board the ship:

- 1) Information necessary for understanding the operation of the winch or towing device and for making necessary and routine adjustments, repairs and replacements.
- 2) Any information on the limitations of the winch or towing hook when used under normal conditions.
- 3) Bollard pull certificate.
- 4) A single functional test programme for winches and towing hooks for the execution of the emergency solution.
- 5) A lubrication schedule.
- 6) Winch arrangement drawings.

Translation: Only the Danish document has legal validity.

*Order No. 160 of 28 of January 2022
issued by the Danish Maritime Authority*

7) Certificates for wires, towlines, shackles, towing and lifting hooks and all other loose equipment forming part of the towing and anchor handling arrangement.

Loose equipment

Section 18. All loose equipment used in the towing and anchor handling arrangement, such as shackles, rings, wires, towlines, pelican-hooks and the like, shall be tested as specified in Section 16 and certified.

Subsection 2. Cutting torch equipment shall always be ready for immediate use during towing and anchor handling operations where an axe cannot be used due to the dimension of the wire.

Subsection 3. In conditions of heavy loading on towing and anchor handling equipment, the master shall take care to keep personnel off the deck as far as practicable.

Penalties and entry into force, etc.

Section 19. Violation of Sections 4 to 18 of this Order is punishable by a fine or imprisonment for up to 1 year.

Subsection 2. The penalty may increase to imprisonment for up to 2 years if

- (1) The infringement, including in connection with causing an accident at sea or sailing in breach of good seamanship, has caused injury to life or health or has created a danger thereof,
- (2) A prohibition or an order has previously been issued in respect of the same or a similar matter; or
- 3) The infringement has resulted in or is intended to result in a financial benefit for the person concerned or for others.

Subsection 3. It shall be regarded as a particularly aggravating circumstance that, in the case of a young person under 18 years of age, harm to life or health has occurred or danger thereof has been caused, cf. Subsection 2(1).

Subsection 4. Where no confiscation of the proceeds of the offence is ordered, the amount of any financial advantage obtained or intended shall be taken into account, in particular, in the assessment of any fine, including any additional fine.

Subsection 5. Criminal liability may be imposed on companies or other legal persons in accordance with the rules laid down in Chapter 5 of the Criminal Code.

Section 20. If the relationship is covered by the order on the entry into force of the law on safety at sea for Greenland, measures may be taken in accordance with the Criminal Code for Greenland.

Subsection 2. The circumstances referred to in Section 19(2) and (3) shall be regarded as aggravating circumstances.

Subsection 3. If no confiscation of proceeds is made, cf. Section 120 of the Criminal Code, the amount of any financial advantage obtained or intended shall be taken into account, in particular, when imposing a fine, including an additional fine.

Subsection 4. Where an infringement is committed by companies or other legal persons, the legal person as such may be held liable to pay a fine. If the infringement is committed by the State, the Government of Greenland, a municipality, or a settlement board, the public authority as such may be held liable to a pay fine.

Translation: Only the Danish document has legal validity.

*Order No. 160 of 28 of January 2022
issued by the Danish Maritime Authority*

Subsection 5. If the person concerned is not resident in Greenland, or their connection with Greenlandic society is of such a loose nature that the conditions for the application of measures are not met, the case may be brought or referred for prosecution in Denmark, cf. Section 7 of the Criminal Code for Greenland.

Section 21. The Order shall enter into force on 2 February 2022.

Subsection 2. Technical regulation of 13 September 2006 on towing and anchor handling winches and towing hooks on ships is repealed.

The Danish Maritime Authority, 28 January 2022

Martin Hvid John

/ Malene Loftager Mundt

Official notes

¹⁾ The technical regulation of 13 September 2006 on towing and anchor handling winches and towing hooks on ships, which this Order replaces, has been notified in draft form in accordance with Directive 2015/1535/EU laying down a procedure for the provision of information in the field of technical regulations and of rules on Information Society services (codification).