

§ 182.610 Main steering gear.

(a) A vessel must be provided with a main steering gear that is:

(1) Of adequate strength and capable of steering the vessel at all service speeds;

(2) Designed to operate at maximum astern speed without being damaged or jammed; and

(3) Capable of moving the rudder from 35 degrees on one side to 30 degrees on the other side in not more than 28 seconds with the vessel moving ahead at maximum service speed.

(b) Control of the main steering gear, including control of any necessary associated devices (motor, pump, valve, etc.), must be provided from the operating station.

(c) The main steering gear must be designed so that transfer from the main steering gear or control to the auxiliary means of steering required by § 182.620 can be achieved rapidly. Any tools or equipment necessary to make the transfer must be readily available.

(d) The operating station must be arranged to permit the person steering to have the best possible all around vision.

(e) Strong and effective rudder stops must be provided to prevent jamming and damage to the rudder and its fittings. These stops may be structural or internal to the main steering gear.

(f) In addition to meeting the requirements of paragraphs (a) through (e) of this section, a vessel with a power driven main steering gear must be provided with the following:

(1) A disconnect switch located in the steering compartment, and instantaneous short circuit protection for electrical power and control circuits sized and located in accordance with § 58.25-55(d) of this chapter. Overload protection is prohibited;

(2) An independent rudder angle indicator at the operating station;

(3) An arrangement that automatically resumes operation, without reset, when power is restored after a power failure;

(4) A manual means to center and steady the rudder(s) in an emergency; and

(5) A limit switch to stop the steering gear before it reaches the rudder stops

required by paragraph (e) of this section.

(g) In addition to meeting the requirements of paragraphs (a) through (f) of this section, a vessel more than 19.8 meters (65 feet) in length with a power driven main steering gear must be provided with the following:

(1) A visual means, located at the operating station, to indicate operation of the power units; and

(2) Instructions for transfer procedures from the main steering gear or control to the auxiliary means of steering required by § 182.620, posted at the location where the transfer is carried out.

[CGD 85-080, 61 FR 986, Jan. 10, 1996, as amended at 62 FR 51358, Sept. 30, 1997]

§ 182.620 Auxiliary means of steering.

(a) Except as provided in paragraph (c) of this section, a vessel must be provided with an auxiliary means of steering that is:

(1) Of adequate strength;

(2) Capable of moving the rudder from 15 degrees on one side to 15 degrees on the other side in not more than 60 seconds with the vessel at one-half its maximum service speed ahead, or 7 knots, whichever is greater; and

(3) Controlled from a location that permits safe maneuvering of the vessel and does not expose the person operating the auxiliary means of steering to personnel hazards during normal or heavy weather operation.

(b) A suitable hand tiller may be acceptable as the auxiliary means of steering where satisfactory to the cognizant OCMI.

(c) An auxiliary means of steering need not be provided if:

(1) The main steering gear and its controls are provided in duplicate;

(2) Multiple screw propulsion, with independent pilothouse control for each screw, is provided, and the vessel is capable of being steered using pilothouse control;

(3) No regular rudder is fitted and steering action is obtained by a change of setting of the propelling unit; or

(4) Where a rudder and hand tiller are the main steering gear.

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