

Attachment 4 Minimum Safety Manning for Powered and Unpowered Workboat Seafarers (Page 1)

Crew Configuration				Deck Department				Engineering Department				Notes	
Vessel class/Gross tonnage/Sailing area				Master	Chief Mate	Deck Officer	Rating forming part	Chief Engineer	Second Engineer	Engineer Officer	Rating forming part		
Pilot ship or port service ship	Between 20 and 50	Within port area (including outer anchorage)	Staffing	1								1	If a rating from the Engineering Department has one year of sailor experience and the ship has mechanical suspender equipment, the number of sailors may be reduced by one.
			Qualification	Third-class Deck Officer			1						
Other workboats (including towboats)	Between 20 and 50	Coastal	Staffing	1								1	1. In the case of a fireboat or a towboat functioning as a fireboat, one each of a Deck Officer and Engineer Officer shall be added, but one rating may be reduced from the Engineering Department. 2. If hours underway surpass eight, the Engineering Department shall have one Engineer Officer added.
			Qualification	Third-class Deck Officer			1						
	Between 20 and 50	Open sea route	Staffing	1				1				1	1. If the main propulsion power is more than 750 kw but less than 6000 kw, the Chief Engineer shall be required to have a competency certificate over second-class Engineer Officer; if over 6000 kw, the Chief Engineer shall be required to have a competency certificate over first-class Engineer Officer. 2. In the case of a fireboat or towboat functioning as a fireboat, one each of a Deck Officer and Engineer Officer shall be added.
			Qualification	Third-class Deck Officer			1	Third-class Engineer Officer					
	Between 50 and 200	Coastal	Staffing	1				1				1	1. If the main propulsion power is more than 750 kw but less than 6000 kw, the Chief Engineer shall be required to have a competency certificate over second-class Engineer Officer; if over 6000 kw, the Chief Engineer shall be required to have a competency certificate over first-class Engineer Officer. 2. In the case of a fireboat or a towboat functioning as a fireboat, one each of a Deck Officer and Engineer Officer shall be added, but one rating may be reduced from the Engineering Department. 3. If hours underway surpass eight, the ratings of the Deck Department and Engineering Department shall be required to have an on-watch qualification.
			Qualification	Third-class Deck Officer			1	Third-class Engineer Officer					
	Between 50 and 200	Open sea route	Staffing	1		1		1				2	1. If the main propulsion power is more than 750 kw but less than 6000 kw, the Chief Engineer shall be required to have a competency certificate over second-class Engineer Officer; if over 6000 kw, the Chief Engineer shall be required to have a competency certificate over first-class Engineer Officer. 2. In the case of a fireboat or a towboat functioning as a fireboat, one each of a Deck Officer and Engineer Officer shall be added. 3. Rating forming part of deck and engine departments should have at least one member each with an on-watch qualification.
			Qualification	Third-class Deck Officer		Third-class Deck Officer	1	Third-class Engineer Officer					
	Between 200 and 500	Coastal	Staffing	1			2	1				1	1. If the main propulsion power is more than 750 kw but less than 6000 kw, the Chief Engineer shall be required to have a
			Qualification										

	gross tonnage		Qualification	Third-class Master			Third-class Chief Engineer				<p>competency certificate over second-class Engineer Officer; if over 6000 kw, the Chief Engineer shall be required to have a competency certificate over first-class Engineer Officer.</p> <p>2. In the case of a fireboat or a towboat functioning as a fireboat, one each of a third-class Deck Officer and Engineer Officer shall be added.</p> <p>3. The Deck Department and Engineering Department shall have at least one rating with an on-watch qualification.</p> <p>4. When hours underway regularly surpass eight hours, the Deck Department shall add one third-class Deck Officer, and the Engineering Department shall add one rating with an on-watch qualification.</p>
	Between 200 and 500 gross tonnage	Open sea route	Staffing	1		1		1		2	<p>1. If the main propulsion power is more than 750 kw but less than 6000 kw, the Chief Engineer shall be required to have a competency certificate over second-class Engineer Officer; if over 6000 kw, the Chief Engineer shall be required to have a competency certificate over first-class Engineer Officer.</p> <p>2. In the case of a fireboat or a towboat functioning as a fireboat, a third-class Deck Officer shall be added.</p> <p>3. The ratings in the Deck Department and Engineering Department shall have at least one rating with an on-watch qualification.</p> <p>4. If hours underway are greater than 10 hours but less than 20 hours, the Engineering Department shall add one rating with an on-watch qualification.</p> <p>5. If hours underway surpass 20 hours, the Deck Department and Engineering Department shall add a Deck Officer and Engineer Officer, respectively.</p>
			Qualification	Third-class Master		Third-class Deck Officer		Third-class Chief Engineer			

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Crew Configuration Vessel class/Gross tonnage/Sailing area			Deck Department				Engineering Department				Notes			
			Master	Chief Mate	Deck Officer	Rating forming part	Chief Engineer	Second Engineer	Engineer Officer	Rating forming part				
Other workboats (including towboats)	Between 500 and 3,000	Open see route	Staffing	1	1	1	3	1	1	1	2	<p>1. If the main propulsion power exceeds 6000 kw, the Engineering Department shall assign a first class Engineer.</p> <p>2. In the case of a fireboat or a towboat functioning as a fireboat, a second-class Deck Officer shall be added.</p> <p>3. The Deck Department and Engineering Department shall have at least three ratings with an on-watch qualification.</p>		
	Qualification	Second-class Master	Second-class Chief Mate	Second-class Deck Officer	Second-class Chief Engineer	Second-class Second Engineer		Second-class Engineer Officer						
	Between 500 and 1,000	Coastal	Staffing	1			3	1			1		<p>1. If the main propulsion power exceeds 6000 kw, the Engineering Department shall assign a first-class Engineer.</p> <p>2. In the case of a fireboat or a towboat functioning as a fireboat, a second-class Deck Officer shall be added.</p> <p>3. Rating forming part of deck and engine departments should have at least one member each with an on-watch qualification.</p> <p>4. Sailing time of more than eight hours, deck department and the engine department should add one second-class ship deputy and one engineer for each.</p>	
	Qualification	Second-class Chief Mate			Second-class Second Engineer									
	Between 1,000 and 3,000	Coastal	Staffing	1	1		3	1	1		2			<p>1. If the main engine propulsion power is above 6,000 kW, the chief engineer officer should hold a certificate of competency above the first-level executive steering wheel, and the chief steering officer should hold a first-class competent manager certificate of competency. In the case of a fireboat or a towboat functioning as a fireboat, a second-class Deck Officer shall be added.</p> <p>2. Rating forming part of deck and engine departments should have at least two members each with an on-watch qualification.</p>
	Qualification	Second-class Chief Mate	Second-class Deck Officer		Second-class Second Engineer	Second-class Engineer Officer								
Between 3,000 and 5,000	Coastal	Staffing	1	1	1	4	1	1		3	<p>1. If the main engine propulsion power is above 6,000 kW, the chief engineer shall hold the certificate of competency of the Master of the first-class engine. The chief engineer steering wheel shall hold the first-class competent engineer certificate above.</p> <p>2. In the case of a fireboat or a towboat functioning as a fireboat, a second-class Deck Officer shall be added.</p> <p>3. The Deck Department and Engineering Department shall have at least three ratings with an on-watch qualification.</p>			
Qualification	Second-class Master	Second-class Chief Mate	Second-class Deck Officer	Second-class Chief Engineer	Second-class Second Engineer									
Between 3,000 and 5,000	Open see route	Staffing	1	1	1	4	1	1	1	3		<p>1. If the main propulsion power exceeds 6000 kw, the Engineering Department shall assign a first class Engineer.</p> <p>2. In the case of a fireboat or a towboat functioning as a fireboat, a second-class Deck Officer shall be added.</p> <p>3. The Deck Department and Engineering Department shall have at least three ratings with an on-watch qualification.</p>		
Qualification	Second-class Master	Second-class Chief Mate	Second-class Deck Officer	Second-class Chief Engineer	Second-class Second Engineer		Second-class Engineer Officer							
Between 5,000 and 10,000	Coastal	Staffing	1	1	1	4	1	1	1	3			<p>1. If the main propulsion power exceeds 6000 kw, the Engineering Department shall assign a first class Engineer.</p>	

			Qualification	Second-class Master	Second-class Chief Mate	Second-class Deck Officer		Second-class Chief Engineer	Second-class Second Engineer	Second-class Engineer Officer		2. In the case of a fireboat or a towboat functioning as a fireboat, a second-class Deck Officer shall be added. 3. The Deck Department and Engineering Department shall have at least three ratings with an on-watch qualification.
Between 5,000 and 10,000	Open sea route	Staffing	1	1	1		4	1	1	1		1. If the main propulsion power exceeds 6000 kw, the Engineering Department shall assign a first class Engineer. 2. In the case of a fireboat or a towboat functioning as a fireboat, a second-class Deck Officer shall be added. 3. The Deck Department and Engineering Department shall have at least three ratings with an on-watch qualification.
		Qualification	Second-class Master	Second-class Chief Mate	Second-class Deck Officer			Second-class Chief Engineer	Second-class Second Engineer	Second-class Engineer Officer	4	

Remarks

1. When at sea, seafarers of the Deck and Engineering Department shall not on watchkeeping for more than 8 hours per day. If they are required to work 2 hours' overtime, their time on duty must not exceed 16 hours for 2 days in a row. The master (or chief engineer) must also on watchkeeping when necessary.

2. Engineering personnel in the Engineering Department are divided into first-class, second-class and third-class engineering personnel. The main propulsion of their corresponding vessels are as follows:

(1) First engineering personnel' refers to licensed mariners serving in the Engineering Department of vessels with a main propulsion of 3,000 kW or more, and includes first-class chief engineers, first-class second engineers, and first-class engineers.

(2) Second engineering personnel' refers to licensed mariners serving in the Engineering Department of vessels with a main propulsion of 750 kW or more and less than 3,000 kW, and includes second-class chief engineers, second-class second engineers, and second-class engineers. Vessels with a main propulsion of 3,000 kW or more and less than 6,000 kW sailing at 90 degrees east longitude, 150 degrees west, 10 degrees south latitude and 45 degree north latitude in southern coastal areas must contain second engineering personnel.

(3) Third engineering personnel' refers to refers to ratings serving in the Engineering Department of vessels plying domestic shipping routes with a main propulsion of less than 750 kW. It includes third-class chief engineers and third-class engineers.