Secondary Legislation

MARITIME TRANSPORT (ANCHOR AND MOORING EQUIPMENT, INCLUDING CABLES) INSTRUMENT

MTI-404.44-1

This maritime transport instrument is—

(a) made by the Director of Maritime New Zealand under section 452B of the Maritime Transport Act 1994 (the Act), after being satisfied that appropriate consultation has been carried out in accordance with section 452C of the Act; and

(b) referred to in rule 404.130 of Part 404: Design, Construction, and Equipment – New Zealand Cape Town Vessels and Foreign Cape Town Vessels (Part 404).

Maritime New Zealand Annotated Version
17 March 2023

This Maritime Transport Instrument is not yet in force. Several things must happen before it is in force.

The Cape Town Agreement must reach the threshold number of States and vessels. When it has, then the Agreement will enter into force after a transition period of 1 year.

This maritime transport instrument comes into force on the same date that Part 404 comes into force. The entry into force of Rule Part 404 will be at the same time as the Agreement comes into force and be notified in the NZ Gazette soon after the Agreement has reached its threshold.

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Disclaimer:

This document is the current annotated version of Maritime Transport Instrument MTI 404.44-1 produced by Maritime New Zealand, and serves as a reference only. It has been compiled from the official Maritime Transport Instrument that has been signed into law by the Director of Maritime New Zealand. Copies of the official Maritime Transport Instrument and amendments as signed by the Director of Maritime New Zealand may be downloaded from the Maritime New Zealand website. www.maritimenz.govt.nz

History of MTI 404.44-1

Entry into Force

This maritime transport instrument comes into force on the same date that Part 404 comes into force.

Part 404 comes into force on a date applied, either wholly or in part, by notice in the Gazette under section 451(3) of the Maritime Transport Act 1994.

The Part 404 Rules (Part 404) will implement the requirements of the Cape Town Agreement of 2012 (the Agreement) into New Zealand domestic law.

The Agreement will enter into force 12 months after at least 22 States, with a total number of 3,600 fishing vessels of 24 metres in length and over operating on the high seas have acceded. As at this date the entry into force criteria have yet to be met.

Amendment	Effective date
No amendment	Not applicable

Summary of amendments

No amendments

All signed rules can be found on our website:
https://www.maritimenz.govt.nz/Rules/

Section 1 Preliminary provisions

1.1 Title

This maritime transport instrument is the *Maritime Transport (Anchor and mooring equipment, including cables) Instrument* (also referred to as MTI-404.44-1).

1.2 Commencement

This maritime transport instrument comes into force on the same date that Part 404 comes into force.

1.3 What this maritime transport instrument does

This maritime transport instrument (MTI-404.44-1) sets out further requirements in relation to anchor and mooring equipment, including cables.

1.4 Conflicts

(1) If there is a conflict between a provision in this maritime transport instrument and a corresponding provision of a maritime rule, the provision of the maritime rule applies.

(2) If there is a conflict between a provision in this maritime transport instrument and a corresponding provision of material incorporated by reference in this maritime transport instrument, the provision of this maritime transport instrument applies.

Section 2 Definitions

2.1 Definitions

All terms used in this maritime transport instrument and defined in Part 404 but not defined in this maritime transport instrument have the same meaning as set out in Part 404.

Section 3 Application

3.1 Application of maritime transport instrument MTI-404.44-1

This maritime transport instrument applies to a vessel to which rule 404.44 applies.

Section 4 Incorporation by reference

4.1 Materials incorporated by reference in this instrument

n/a

Section 5 Anchor and mooring equipment, including cables,

Compliance either with option 1 or option 2 is required.

Option 1: compliance with the standards for anchor and mooring equipment, including cables, verified by a classification society named in rule 404.30(2)(a):

Option 2: compliance with the standards set out below.

Standards for anchor and mooring equipment

1 The characteristics of anchors, chain, wires, towlines and mooring lines must be determined in accordance with the table in this maritime transport instrument, based on an equipment number "EN" as follows:

$EN = \Delta^{2/3} + 2B(a + \Sigma h_j) + 0.1A$

where:

Δ – is moulded displacement, in tonnes, to the maximum design waterline:

B - is breadth, in m, and is the maximum breadth of the vessel, measured amidships to the moulded line of the frame in a vessel with a metal shell and to the outer surface of the hull in a vessel with a shell of any other material:

a - is distance, in m, from the maximum design waterline to the upper edge of the uppermost complete deck at side amidships:

h_j - is height, in m, on the centreline of each tier of deckhouses having a breadth greater than *B*/4. For the lowest tier h_j must be measured at centreline from the upper deck or from a notional deck line where there is a local discontinuity in the upper deck. When calculating h_j sheer and trim must be ignored:

A - is area, in m2, in profile view of the hull, within L (where L is length) and of superstructures and deckhouses above the maximum design waterline having a width greater than *B*/4. Screens and bulwarks more than 1.5 m in height must be regarded as parts of deckhouses when determining h_j and *A.*

Anchors and chains

2 Vessels must be fitted with at least two anchors that must be located at the bow.

3 The weight of each anchor must be in accordance with the table in this maritime transport instrument.

4 "High holding power anchors" of a design approved by an inspecting organisation under Part 41 may be used as bower anchors; the minimum weight of each such anchor may be 75 percent of the table weight given in this maritime transport instrument.

5 The surveyor may require increased anchor equipment for vessels fishing in very rough waters and may permit reduction in the equipment for vessels operating in sheltered waters.

6 Anchors with a weight of and above 150 kg must be fitted in hawse pipes, skids or a similar arrangement that is suitable for the quick and safe operation in dropping and hoisting the anchors. If the weight of each of the anchors is below 300 kg, but greater than 150 kg, only one of the anchors need be fitted in a hawse pipe or skid. Anchors must also be secured in the stowed position by means of a locking or lashing device.

7 In general, anchors must be fitted with anchor chains. The length and dimension of each anchor chain must be in accordance with the table in this maritime transport instrument.

8 For vessels of less than 45 m in length, the chain of one anchor may be replaced with anchor wires of equal strength provided a chain meeting the standards in the table in this maritime transport instrument is maintained for the second one.

9 Where anchor wires are used as a substitute for anchor chains, their length must be equal to 1.5 times the corresponding tabular length of chain. In addition, a chain of not less than 12.5 m in length and of the same specifications, as set out in the table in this maritime transport instrument, must be provided between anchor and anchor wire.

10 The surveyor may permit the use of trawl warp as anchor wire, if the surveyor is satisfied that the arrangement does not reduce the efficiency required for the quick and safe operation in dropping and hoisting the anchors and for holding the vessel at anchor in all foreseeable service conditions. The standards for a trawl warp must not be less than that required for anchor wire.

Anchor handling

11 Vessels provided with anchors of or above 150 kg must be fitted with a windlass. The windlass must be fitted with a messenger wheel and/or drum for each anchor and means for the release of each messenger wheel or drum.

12 It must not be possible to carry the chains forward to the hawse pipe, skid or similar arrangement without the chain passing over the messenger wheels. When anchor wire is used, it must pass over a roller adjacent to the hawse pipe to avoid chafing.

13 The windlass, its support and its brakes must be capable of absorbing a static tension of at least 45 percent of the breaking strength of the anchor chain or anchor wire without the occurrence of any lasting deformations and without the brake losing its hold. Furthermore, a chain stopper or wire nipper must be fitted between the windlass and the hawse pipe or similar for each anchor

chain or anchor wire capable of holding the vessel while at anchor. If chain stoppers or wire nippers are not fitted, the windlass, its support and its brake must be capable of absorbing a static tension of at least 80 percent of the breaking strength of the anchor chain or anchor wire. The chain stopper or wire nipper and their supports must be capable of absorbing a static tension of at least 80 percent of the breaking strength of the anchor chain/wire without the occurrence of any lasting deformations and without the chain stopper or wire nipper losing its hold.

14 If the trawl winch is fitted with messenger wheels and meets the standards set out in clauses 11, 12, and 13, such a winch may be used as a windlass.

15 Vessels that have been authorised to use trawl warp as anchor wire may use their trawl winch as a windlass provided the trawl warp can be wound on a drum with a braking device that is independent of the actual trawl warps in use for fishing. Lead blocks and guide rollers must be suitably fitted and arranged to prevent the warps from chafing at the deckhouses, superstructures, deck plating and equipment on deck.

16 If a vessel has lost its anchors, and it is not immediately possible to re-acquire them, the surveyor, after having assessed the conditions applying to the vessel, as given in clause 5, may permit other boards/trawl doors with a least the same weight for anchors given in the table in this maritime transport instrument to be used for a limited period of time.

Towing lines

17 Vessels must be provided with at least one tow line with a length and breaking strength in accordance with the table in this maritime transport instrument. It must be appropriately located so that it is possible to make it ready for use at sea. The tow line may be replaced by one of the fishing vessel's trawl warps if this has at least a similar length and breaking strength. If warp is used, a length of rope of at least 12.5 m with a minimum breaking strength as given in the table in this maritime transport instrument for the tow line must also be provided and attached to the warp.

Mooring equipment

18 Vessels must be provided with suitable cleats and bollards as well as hawseholes in order to moor the vessel securely. The number of bollards, must be determined in each individual case dependent on the size and deck arrangement of the vessel. The number must be sufficient to make it possible to fasten both the mooring line and a spring on each bollard on each side forward and aft. At least three bollards must be fitted forward, and at least two abaft of amidships. Cleats and bollards must be of such a size that it is possible to accommodate at least four turns of the mooring lines or tow line below the horns of the cleat or the upper protruding edge of the bollard. The area where cleats and bollards are to be fastened must be securely reinforced.

19 The vessel must be provided with at least four mooring lines, each of a length and breaking strength in accordance with the table in this maritime transport instrument.

Table

Equipment number		Stockless bower anchors		Stud link chain cables for bower anchors			Towline		Mooring lines	
Exceeding	Not exceeding	Number	Weight per anchor (kg)	Total length (m)	Diameter (mm)		Minimum length of each line (m)	Minimum breaking strength (kN)	Minimum length of each line (m)	Minimum breaking strength (kN)
					Mild steel	Special quality steel				
50	60	2	120	192.5	12.5	-	180	98	60	34
60	70	2	140	192.5	12.5	-	180	98	80	34
70	80	2	160	220	14	12.5	180	98	100	37
80	90	2	180	220	14	12.5	180	98	100	37
90	100	2	210	220	16	14	180	98	110	39
100	110	2	240	220	16	14	180	98	110	39
110	120	2	270	274.5	17.5	16	180	98	110	44
120	130	2	300	274.5	17.5	16	180	98	110	44
130	140	2	340	275	19	17.5	180	98	120	49
140	150	2	390	275	19	17.5	180	98	120	49
150	175	2	480	275	22	19	180	98	120	54
175	205	2	570	302.5	24	19	180	112	120	59
205	240	2	660	302.5	26	22	180	129	120	64
240	280	2	780	330	28	24	180	150	120	69
280	320	2	900	357.5	30	26	180	174	140	74
320	360	2	1020	357.5	32	28	180	207	140	78
360	400	2	1140	385	34	30	180	224	140	88
400	450	2	1290	385	36	32	180	250	140	98
450	500	2	1440	412.5	38	34	180	277	140	108
500	550	2	1590	412.5	40	34	180	306	160	123
550	600	2	1740	440	42	36	180	338	160	128
600	660	2	1920	440	44	38	180	371	160	132
660	720	2	2100	440	46	40	180	406	160	137