

Marine Engineer Class 1 (MEC 1)

This guideline is for new applicants for a
Marine Engineer Class 1 certificate of competency

SeaCert

Marine Engineer Class 1 (MEC 1)

Last updated: June 2016.

This document is uncontrolled if printed, please refer to the Maritime New Zealand website for the latest version.

In this guide

1. Overview	2
2. Requirements	3
2.1 Prior certification	3
2.2 Sea service	4
2.3 Training and experience	8
2.4 Fit and proper person	11
2.5 Medical examination and eyesight tests	12
2.6 Age and identity	13
3. When and how to apply	14
3.1 Copies of supporting documents	14
3.2 Fees and payment options	15
3.3 Application process	16
3.4 Checklist	18
3.5 Where to send your application	20
4. Contact us for help	21
5. Forms	22

1. Overview

Marine Engineer Class 1 (MEC 1) certificate of competency

This guideline is for new applicants for the Marine Engineer Class 1 (MEC 1) certificate of competency. It does not cover recognition of an equivalent certificate obtained outside New Zealand.

The information in this guideline covers training, sea service and other requirements for the certificate, how to apply and pay for your certificate, and where to find more information.

Your MEC 1 certificate is valid for five years.

For more details about the requirements for recognition and renewal (revalidation) of certificates, refer to the Maritime New Zealand (MNZ) website:

maritimenz.govt.nz/seafarers

The MEC 1 certificate corresponds with the certificate for chief engineer on ships with main propulsion machinery of 3000kW propulsion power or more, issued under Regulation III/2 of the International Convention on the Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended in 2010 (STCW).

With this certificate, you can perform the functions and duties of a chief engineer on ships of any main propulsion power in any operating area. A chief engineer is the senior engineering officer responsible for the ship's mechanical propulsion, and for the operation and maintenance of its mechanical and electrical installations.

You can qualify on motor-powered (diesel) or steam-powered main propulsion systems, or on both. Your sea service and training must be appropriate for that type of propulsion power, and your certificate will show the main engine propulsion power you are qualified to operate on as chief engineer.

MEC 1 is the most senior engineering officer certificate.

Disclaimer:

These guidelines provide information and explanations about the requirements set out in the maritime rules, but are not a substitute for the rules themselves, which are the law. These guidelines refer to provisions in the Maritime Rules Part 32, Seafarer Certification. The Director of Maritime New Zealand (MNZ) will grant a certificate only when satisfied that all requirements have been met. In this guideline, any references to 'we' or Maritime New Zealand (MNZ) relating to a decision impacting on the issue or renewal of any seafarer certificate are references to the Director or a person acting under the Director's delegated authority.

maritimenz.govt.nz/rules

2. Requirements

Before you spend time doing sea service and training, we recommend you check that you can meet the medical fitness and eyesight standards (including for colour vision), and that you understand the fit and proper person requirements.

To get this certificate, you need to prove that you meet all of the requirements. In summary, you need to:

- be medically fit and have good eyesight
- be of good character and a fit and proper person
- choose to specialise in steam-powered or motor-powered propulsion systems, or both
- meet the requirements for certification (see *2.1 Prior certification* below)
- prove that you meet the sea service requirements
- attend and pass a MEC 1 training course
- have certificates for the ancillary proficiencies required for MEC 3
- pass MNZ's final exam.

Each of these requirements and how to prove that you meet them is explained below.

You must also have English conversation, reading and writing skills appropriate to the responsibilities and functions for the level of your certificate, so that you can satisfactorily complete training, pass examinations and discharge your duties.

2.1 Prior certification

You must hold a current certificate of competency for Marine Engineer Class 3 (MEC 3), Marine Engineer Class 2 (MEC 2), Marine Engineer Class 2 endorsed chief engineer (MEC 2 ECE), Marine Engineer Class 2 on ships less than 3000kW (MEC 2 <3000kW), or an equivalent STCW certificate.

2. Requirements (continued)

2.2 Sea service

Your sea service must be relevant and appropriate to the requirements set out in the maritime rules. The amount of seagoing service you need depends on:

- your prior experience, including sea service
- the prerequisite certificate you hold
- whether you specialise in a single propulsion system, or both steam and motor power.

You can choose from four options for the sea service requirements, as shown below.

Table 1 Options for sea service

Option	Prerequisite certificate	Minimum sea service	Minimum watchkeeping service
1	MEC 3	36 months as engineering officer on commercial vessels with 750kW or more main propulsion power, while holding MEC 3	18 months as engine room watchkeeper on vessels with main propulsion power of 750kW or more For combined motor and steam, at least 18 months on vessels with each type of power
2	MEC 2	24 months as engineering officer on commercial vessels with 750kW or more main propulsion power, while holding MEC 2	12 months as engine room watchkeeper on vessels with main propulsion power of 750kW or more For combined motor and steam, at least 12 months on vessels with each type of power
3	MEC 2	12 months as second engineer undertaking engine room watchkeeping on commercial vessels with 3000kW or more main propulsion power, while holding MEC 2	12 months as engine room watchkeeper on vessels with main propulsion power of 3000kW or more For combined motor and steam, at least 12 months on vessels with each type of power
4	MEC 2 ECE	As for MEC 2, but may require extra service to be completed towards chief engineer role	12 months as chief engineer on vessels with 750–3000kW main propulsion power plus competencies as set out in STCW A III/2 For combined motor and steam, at least 12 months on vessels with each type of power

Notes:

1. For all four options, you must have completed all of your sea service in the 10 years immediately before your certificate is issued.
2. Your sea service must be gained in the engine department performing the duties appropriate to your certificate, as indicated for each option, on commercial ships or New Zealand warships with propulsion power of at least 750kW or, for Option 3, at least 3000kW propulsion power.
3. Qualifying sea service must be on ships with main propulsion of the type and power indicated.

2. Requirements (continued)

4. The total time shown is for motor-powered or steam-powered certification. For a combined certificate, additional sea service is required for each type of propulsion power, as indicated under watchkeeping.
5. The requirements for holders of MEC 2 <3000kW are the same as for MEC 2, but additional sea service and training may be required to meet MEC 2 training and service standards.

The table below identifies the types of activities that may be considered as qualifying sea service for your MEC 1 certificate.

Table 2 Experience that may qualify as sea service

Experience	Consideration for MEC 1
Combined sea service as engine room watchkeeper and second engineer	<p>It is common for a candidate with MEC 2 to initially gain sea service as an engine room watchkeeper, and then as a second engineer on vessels of 3000kW or more (see Options 2 and 3 in Table 1).</p> <p>Approved sea service as a second engineer is counted at a ratio of 2:1 for the 24 months required under Option 2. For example, 12 months of sea service as a watchkeeper engineer plus six months of sea service as second engineer on vessels >3000kW would meet the 24-month requirement.</p>
Service gained as engineer on superyachts	<p>Provided the sea service meets all of the requirements to qualify for MEC 1, sea service obtained on board superyachts may be accepted (although only the time spent at sea can be counted). You need to provide evidence of this sea service, ensuring that only time spent at sea is recorded (see <i>Proving your sea service</i> below).</p>
Repairs and maintenance	<p>MNZ may allocate up to three months of sea service for properly documented and relevant engineering duties in dry dock or at layby berth, doing repairs or maintenance. However, this time will not be counted towards any of the required engine room watchkeeping.</p>
Service on floating production, storage and offloading facilities (FPSO)	<p>MNZ may allocate up to three months of sea service for properly documented and relevant engineering duties on FPSO. However, this will not be counted towards any of the required engine room watchkeeping.</p>

2. Requirements (continued)

Proving your sea service

You are responsible for ensuring that your sea service is documented and verified by your ship's master or company. The *summary of sea service form* on MNZ's website can be used to help keep track of your sea service. (This form is not required for your certificate application.)

To support your sea service, you must provide at least one of these documents for each vessel you have served on:

- certificate of sea service
- discharge certificate or discharge book (if using a New Zealand discharge book, make sure you get the watchkeeping section signed off).

If it is not included in any of the documents above, you must also provide a reference (on company letterhead), from the ship's master, chief engineer or your employer. The reference must state the start and end dates of your service, your duties while in service, and your experience, conduct, sobriety and ability.

Each of the documents you provide for each vessel must contain:

- your employer's name and contact details
- the name, tonnage details and type of vessel (for example, passenger, non-passenger, fishing)
- the type of cargo carried and area of operation
- the engine type, make, model and output power
- the dates you were employed and the sea time you completed
- your duties.

Any statutory declarations you have made are *not* acceptable as proof of your sea service.

If you are unsure whether you have met the requirements for sea service and engine room watchkeeping, you can ask us to assess your sea service time before you make your full application (refer to *Pre-assessment of sea service* below).

Calculating sea service

Relevant qualifying sea service is expected to be on voyages of 24 hours or more, calculated as follows:

- from the sign-on date of starting work on the ship to the sign-off date of discharge (both dates are inclusive)
- by counting each whole calendar month during this period as one month
- for multiple voyages, by adding together extra days that do not fall within a calendar month, with each addition of 30 days to be calculated as one month.

Extended time in port is generally not counted as sea service, and nor is time on leave.

2. Requirements (continued)

Note:

Voyage means a voyage between a port or place of departure and a ship's final port or place of arrival. It includes a period of 24 hours (or more) where you are signed on or employed on the vessel and you remain on board.

For example: If your service record shows your sign-on date as 3 March and sign-off date as 14 April, your sea service would be calculated as one month (3 March to 2 April) and 12 days (from 3 to 14 April inclusive).

For more information about calculating your sea service, refer to the MNZ website:

maritimenz.govt.nz/seafarers

Pre-assessment of sea service

If you are unsure whether you have met the sea service requirements, you can ask us to assess your sea service time before you make your full application. We charge a fee to do this (see 3.2 *Fees and payment options*).

To have your sea service pre-assessed, you need to:

- apply for pre-assessment using MNZ's *pre-assessment form*
- pay a pre-assessment fee
- send us the documents we need (see *Proving your sea service*) in order to check your sea time.

Note:

If you are pre-assessed and have the required sea service for the MEC 1 certificate, add your pre-assessment reference number to your *seafarer certificate application form*.

2. Requirements (continued)

2.3 Training and experience

Training

You must attend and pass a MEC 1 training course that is acceptable to the Director of MNZ and covers competencies at the management level as a chief engineer on vessels with main propulsion power of 3000kW or more, as specified in section A-III/2 of the STCW Convention.

This training may have been included in your training for the MEC 2 certificate (which is a management-level certificate with second engineer privileges). For example, the New Zealand Maritime School offers the options of completing MEC 2 and MEC 1 training separately or together.

Check with your training provider to find out what training, if any, you must do to fulfill the training requirements for the MEC 1 certificate.

Notes:

1. If you only have a MEC 3 or equivalent certificate, you must complete an approved course that covers all of the training required for MEC 1, which may include some papers at the level of MEC 2.
2. If you have a MEC 2, MEC 2 ECE or MEC 2 <3000kW certificate, you may need to complete some additional papers, depending on your prior learning.
3. If you obtained your prerequisite certificate in a country other than New Zealand, you will need to check with your approved training provider that you have completed all of the relevant prior learning. You may need to complete some additional papers.

For more information about approved training providers and the competency framework for MEC 1, refer to the MNZ website:

maritimenz.govt.nz/seafarers

Final examination

You must pass a final exam to show that you have met the required standards of competency at the management level for a chief engineer, as specified in section A-III/2 of the STCW Code. The final examination is currently an oral examination by an MNZ-approved Maritime Examiner, which is usually arranged by your training provider. Your results will be sent to MNZ.

Refer to the MNZ website for more information:

maritimenz.govt.nz/seafarers

2. Requirements (continued)

Ancillary certificates

You must provide copies of the ancillary certificates you gained as part of your MEC 3 training. These are shown below. Your training provider should also offer this training and will provide you with a certificate to show that you have demonstrated proficiency in the required skills.

If you have ancillary certificates that demonstrate proficiency in the areas listed below and at the required level, you may use them – as long as the specific requirements are met.

Ancillary certificate requirements	Document(s) you must provide
STCW basic training	STCW basic training that complies with STCW A-VI/1 paragraph 2 and covers basic personal survival techniques (A-VI/1-1), fire prevention and fire fighting (A-VI/1-2), elementary first aid (A-VI/1-3) and personal safety and social responsibility (A-VI/1-4). This may be issued as one certificate citing the four elements or as four separate certificates
Proficiency in survival craft and rescue boats other than fast rescue boats (PISC)	STCW survival craft and rescue boats other than fast rescue boats certificate that complies with STCW Code section A-VI/2 paragraphs 1-4 (Table A-VI/2-1)
Advanced fire fighting	STCW advanced fire fighting certificate that complies with STCW Code section A-VI-3, paragraphs 1-4 (Table A-VI/3)
Proficiency in medical first aid	STCW medical first aid on board ship certificate that complies with STCW Code section A-VI/4, paragraphs 1-3 (Table A-VI/4-1)

Your ancillary certificates must:

- be current (not expired) when we issue your MEC 1 certificate
Note: The following ancillary certifications must be less than five years old from the date of issue (or, if older, you must demonstrate that you have maintained the required standard of competency to undertake the tasks, duties and responsibilities specified in the relevant STCW tables):
 - STCW A-VI/1-1 basic personal survival techniques
 - STCW A-VI/1-2 fire prevention and fire fighting
 - STCW A-VI/2-1 proficiency in survival craft and rescue boats other than fast rescue boats (PISC)
 - STCW A-VI/3 advanced fire fighting (section 3.6 and Table A-VI/3).

For more details, including the information you need to provide to demonstrate currency if you already hold an ancillary certificate, refer to the ancillary certificate guidelines on MNZ's website.

Although not an STCW requirement, we encourage you to maintain the currency of your certificates for first aid and medical first aid on board ship, in accordance with the requirements of the issuing organisation.

2. Requirements (continued)

Your certificates must also:

- conform to the STCW regulations and have the appropriate STCW regulation number
- be from a training provider approved under the New Zealand Education Act or by Maritime New Zealand, or from a training provider in a country where MNZ has determined that ancillary training is STCW-compliant. (Refer to the recognition guidelines on MNZ's website for information about recognition of ancillary certificates obtained outside New Zealand)
- be seen by us before we can issue your MEC 1 certificate.

Security awareness training

MNZ strongly recommends that you also get an ancillary certificate for proficiency in security awareness training (STCW A-VI/6-1). This certificate is needed if you wish to work on any ship that the International Ship and Port Facility Security (ISPS) Code applies to.

If you do not provide this ancillary certificate, your MEC 1 certificate will have a condition stating that without a current certificate of proficiency in security awareness training (STCW A-VI/6-1), it is not valid for vessels to which ISPS applies.

We will accept a proficiency in security awareness training certificate that has been approved by the administration of any country with which New Zealand has an agreement for recognition of STCW certificates.

For more information about security awareness training or the recognition process, refer to the ancillary guidelines or recognition guidelines, respectively, on the MNZ website:

maritimenz.govt.nz/seafarers

2. Requirements (continued)

2.4 Fit and proper person

We need to confirm that you are of good character. To help us do this, there are several forms we need from you, which are outlined below.

Requirement	Document(s) you must provide
Be of good character	<ul style="list-style-type: none">• A completed <i>fit and proper person form</i>, which must have been signed and dated no more than three months before we receive your application• A police clearance report for any country or countries outside New Zealand that you have lived in for 12 months or longer in the past five years (covering the entire period you lived in that country or countries)

Refer to 5. *Forms* for all of the forms that you will need to complete your application.

2. Requirements (continued)

2.5 Medical examination and eyesight tests

You need to prove that your medical fitness and eyesight meet the required standard by providing the documents below.

Requirement	Document(s) you must provide
Be medically fit	<p>A certificate of medical fitness for seafarers that is valid at the time we issue your MEC 1 certificate (after you have completed all of your exams and ancillary certificates).</p> <ul style="list-style-type: none">• This is a special medical certificate that complies with STCW regulation I/9. You must get this from an approved medical practitioner, or from a medical practitioner approved for issuing seafarer medicals in another country that is party to STCW.• You may use an existing medical certificate if it will be valid (usually less than two years old) when your MEC 1 certificate is issued.
Have good eyesight	<p>Eye test results showing you have met the required standards for:</p> <ul style="list-style-type: none">• visual acuity (including a letter eyesight test). Your eyesight test results must be less than 12 months old at the time we issue your certificate• colour vision – this may initially be assessed as part of the seafarer’s certificate of medical fitness, using the Ishihara colour vision test. If you fail the Ishihara test, you will need to take an alternative colour vision test with a registered optometrist (for more details, refer to the Advisory Circular for Part 34 on MNZ’s website). Your colour vision test results (of either test) must be less than six years old at the time your MEC 1 certificate is issued.

For more information about the medical and eyesight requirements for this certificate, refer to the guidelines on MNZ’s website:

maritimenz.govt.nz/seafarers

2. Requirements (continued)

2.6 Identity

We need to confirm your identity. To help us do this, there are several forms we need from you, which are outlined below.

Requirement	Document(s) you must provide
Prove your identity	<ul style="list-style-type: none">• Your completed seafarer certificate application form• Either your passport (make sure it has not expired) or your driver's licence and birth certificate• Two passport-sized photographs (or ask the photographer to provide an electronic copy, which you can then forward to MNZ if you are emailing us your application)

Refer to 5. *Forms* for all of the forms that you will need to complete your application.

Links for these requirements

- *Seafarer certificate application form*
- Apply for or renew a passport [Internal Affairs website]
- Get your driver's licence [NZ Transport Agency website]
- Apply for your birth certificate [Internal Affairs website]

3. When and how to apply

Apply when you have completed all of the certificate requirements. Once we have received all of the information we need from you, it may take us up to 20 working days to process your application, so send it in as soon as possible (and at least one month before you need your certificate).

Make sure you include all of the documents we have asked for. Refer to *3.4 Checklist* to make sure you have everything you need for your application.

Note:

If your application is incomplete, it will not be processed and we will return your application and other documents to you.

3.1 Copies of supporting documents

We only need copies of your supporting documents, not the original versions.

The only exception is supporting documents for the *fit and proper person form* (your passport or driver's licence and birth certificate) – these need to be certified copies.

We do not need to see any of the documents you have already sent to us for other applications – just make a note about these documents in your application. However, if any of these documents have expired or will expire before we issue your certificate, we need to see a copy of the new or renewed document.

3. When and how to apply (continued)

3.2 Fees and payment options

The fee for this certificate is \$995, which includes goods and services tax (GST).

If applicable, the sea service pre-assessment fee is \$398, including GST. If your sea service is pre-assessed, your MEC 1 application fee will be \$625, including GST.

You need to include payment by cheque or indicate your other chosen payment method on your *seafarer certificate application form*.

You can pay:

- online using a credit card or debit card, *or*
- by internet banking or bank deposit, *or*
- by cheque (which you include with your application).

Refer to the MNZ website for more information about how to pay your fees:

maritimenz.govt.nz/howtopay

As well as the application fee, you may have other fees and expenses to pay. For example, you may need to pay for your eyesight tests, medical examination, training and ancillary courses.

3. When and how to apply (continued)

3.3 Application process

This is the application process for this certificate of competency. Complete each step before you move on to the next one.

1 Do you meet all of the requirements?

Check that you meet all of the requirements for this certificate.

Decide whether to specialise in a single or both types of propulsion system.

Identify the sea service option that best applies to you. Apply for pre-assessment of your sea service if you are unsure about meeting the requirements.

Move to step 2 when you know what the requirements are and that you can meet them.

2 Do you have the documents we need?

Prove that you meet the requirements. Include all of the documents we have asked for. Use the checklist (see 3.4 *Checklist*) to help you.

Remember: we need copies, not the originals.

Move to step 3 once you have copies of all of the documents we've asked for.

3 Complete the application forms

You need to complete several forms as part of your application. Use the checklist to help make sure you have provided all of the information we need.

Remember: for the *fit and proper person form* we need certified copies of your identification documents.

Move to step 4 once you have completed all of the forms needed for your application.

4 Pay the application fee

You need to pay an application fee.

The options for payment are:

- pay by bank deposit or internet banking, *or*
- pay online using a credit card or debit card, *or*
- include a cheque with your application.

Move to step 5 when you know what you need to pay and have either included a cheque with your application or chosen another payment option.

3. When and how to apply (continued)

5 Send us your application by courier or email

There are two options for you to send your application:

1. Use a courier to send us your completed application forms, supporting documents and cheque for the application fee (if using that payment option).
2. Send your application by email, attaching the scanned documents. (The application form has information about the requirements for electronic copies.)

Move to step 6 when you've ticked everything on the checklist and either couriered or emailed your completed application to MNZ (using the address provided at 3.5 *Where to send your application*).

6 Send confirmation and/or request

We will send you an email or letter to:

- confirm that we have received your application
- give you reference details to pay the application fee (if you did not include a cheque with your application)
- list any documents we need from you before we can assess your application.

We must receive your payment before we can progress your application.

7 Assessment

After you have paid the fee and sent us all the documents we need, we will assess your application and make a decision.

This will usually take 20 working days (about a month).

8 Issue certificate

We will send you:

- your certificate, if your application has been successful, *or*
- an email or letter explaining why your application was unsuccessful.

3. When and how to apply (continued)

3.4 Checklist

Use this checklist to make sure that you have everything you need for your application.

Check that your documents are complete and have been signed, dated and certified as required.

We need to see all of the documents listed below to confirm that you have met each requirement. The only exceptions to this are documents that you have already sent to us for other applications (just note this in your application). However, if a document has expired or will expire before we issue your certificate, we need to see a copy of the new or renewed document.

About you

- Seafarer certificate application form*
- Certified copies of your passport *or* driver's licence and birth certificate
- Two passport-sized photos *or* an electronic copy
- Fit and proper person form*
- Police clearance report for other countries (if applicable)
- Copy of certificate of medical fitness for seafarers
- Copy of eyesight test(s) results
- Your pre-assessment reference number if we pre-assessed your sea service time

3. When and how to apply (continued)

Your MEC 1 training

- Course completion letter and assessment record

Your sea service

Include at least *one* of the following for each vessel/period of sea service:

- Certificate of sea service*
- Discharge book (or discharge certificates)

Include *all* of the following:

- Summary of sea service form*
- Master's and/or employer's reference (testimonial) (unless included in evidence of sea service above)

Your ancillary certificates

- STCW A-VI/1 basic training
- STCW A-VI/2-1 proficiency in survival craft and rescue boats (other than fast rescue boats)
- STCW A-VI/3 advanced fire fighting
- STCW A-VI/4-1 medical first aid
- STCW A-VI/6-1 security awareness training (if completed)

Remember

- Either include a cheque (in \$NZ) *or* indicate which other payment option you'd like to use
- Send your application to us by courier or email
- Send your application to us as early as you can
- Check that your MNZ-approved Maritime Examiner has sent your final exam results to us

3. When and how to apply (continued)

3.5 Where to send your application

To provide extra security, we recommend that you courier your application forms and documents to us.

Alternatively, you can scan and email your application and supporting documents (refer to the application form for information about how to send your documents electronically).

Courier your application to:

Seafarer Certification
Maritime New Zealand
1 Grey Street
WELLINGTON 6011

Or

Email your application to:

seafarers@maritimenz.govt.nz

4. Contact us for help

If you need more information about the requirements for your application, visit the Seafarer Certification section of our website.

maritimenz.govt.nz/seafarers

If you can't find the information you need, send us an email:

seafarers@maritimenz.govt.nz

Tell us what you need help with and remember to include your contact details (email address and phone numbers).

We need your completed application before we can assess whether you meet the requirements for this certificate of competency. However, you may apply for pre-assessment of your sea service (refer to 2.2 *Sea service*).

5. Forms

To apply for a maritime certificate of competency, there are several forms that you must provide and some that you may provide, depending on your situation.

Everyone applying for this certificate of competency must complete and send us all of the following forms:

- *Seafarer certificate application form*
- *Fit and proper person form*

Other forms you may need to use:

- *Seafarer certificate pre-assessment form*
- *Summary of sea service form*
- *Certificate of sea service*

Each of these forms is available on the MNZ website:

maritimenz.govt.nz/seafarers

Note:

You must complete these forms correctly for your application to be valid. Carefully read any notes before you start.