BHP Mitsubishi Alliance

Quick Reference Guide:
Guidance Notes to assist with completing the Hay Point Terminal Vetting Questionnaire

BHP Mitsubishi Alliance

INTRODUCTION

The Hay Point Terminal Vetting Questionnaire (TVQ) was created to address the risks arising during mooring operations, e.g. the risk of a mooring line parting during mooring operations can result in a fatality or serious injury.

Although it is an extensive questionnaire, it addresses critical safety and operational matters. Once the TVQ has been reviewed and approved, Terminal staff use it for planning and loading operations. Often documents or information will need to be sourced quickly, which is why it is important all answers are recorded correctly and documents are easily accessible.

This Quick Reference Guide (QRG) has been prepared to assist with completing the Hay Point TVQ. Please note the QRG does not provide technical guidance or advice. It is important the completing party have the relevant technical knowledge and experience to answer questions regarding the ship in question. It is extremely important the completing party (if not the Master of the vessel) is in correspondence with the Captain to ensure all information is accurate. A copy of the approved TVQ must be provided to the Master so they are aware of their accountabilities while visiting Hay Point.

Not all questions in the TVQ are detailed in this QRG. Some questions are self-explanatory and require no further explanation, e.g. ship name and IMO.

General Rules and Guidance

- The person completing the TVQ should have detailed technical and working knowledge of the ship. The TVQ is unlikely to be completed correctly if the completing party does not have this knowledge and will result in back and forth correspondence which in turn delays approval.

- All questions in the TVQ are mandatory. Do not submit the TVQ until all questions are answered and all documents are uploaded. Read the questions carefully and ensure the answer/document contains all the information requested. If the TVQ is submitted without all documents requested or documents are not for the correct vessel, the review will stop and the TVQ will be sent back to the completing party.

- It is critical that documents uploaded are for the ship in question. Please note we do check that every document is for the nominated vessel by checking either the IMO or the hull number. Documents for sister ships are not acceptable.

- A comment box is available at the end of each section – please add any details or comments that you think might assist with reviewing the TVQ e.g. intentions to procure lines or chafe protection, perform render testing etc.

- We understand there are some complicated areas addressed in the TVQ, e.g. brake render testing. We are happy to assist where possible – e.g. by reviewing brake render calculations before the crew performs the render test – but we require the completing party to be open and honest regarding these matters.

- We will do our best to work with the completing party to get the TVQ approved but will only do so if the completing party cooperates and makes best efforts in completing the TVQ.

- Please only upload documents in the following formats:

    - PDF

- Word
- Excel
- JPEG
- ZIP

DO NOT upload documents in .rar format.

- Please do not upload documents that are password protected.

- The TVQ is only reviewed during Queensland business hours (AEST, Non-Daylight Saving). Please be aware that if you submit the TVQ outside these hours it may not be reviewed until the following business day. This also applies to submissions on Friday afternoons – the TVQ may not be reviewed until Monday.

SECTION 1: GENERAL

1.1 Name of completing party

This should be the name of the person completing the form and not the name of the Owner / company / management company, etc. It is important the completing party is responsible for the information provided which is why the name of a person is required.

We highly recommend either a Ship's Captain or Technical Manager complete the TVQ. The TVQ covers many technical and ship operational matters – if the completing party does not have experience in these areas, it is likely the TVQ will take several submissions to be approved. Ensure whoever is completing the TVQ is in correspondence with the Master of the vessel.

SECTION 2: VESSEL DETAILS

2.8 What is the vessel's design MBL (tonnes)?

This question is referring to the ship design MBL. The ship design MBL forms the basis of how the ship's mooring system has been designed. It is important for us to know when reviewing the ship's mooring system (e.g. mooring lines and mooring winches).

2.10 Does the vessel have a vessel specific fire plan?

In the unlikely event of an emergency on the ship, emergency services will require a fire plan to quickly identify the location of firefighting and lifesaving equipment. As such, a fire plan specific to the ship must be uploaded to q9.11.

The fire plan must identify the ship by either IMO or hull number. The document uploaded should be in colour and include a plan of the vessel with the locations of all fire related equipment. The details in the document must be easily read when zoomed in.

2.12 Does the Vessel have any Conditions of Class, Recommendations or Memoranda enforced by class that would affect cargo operations? If yes, please attach details below (section: ATTACHMENTS).

You are only required to answer 'yes' if the condition impacts loading or towing operations at Hay Point. E.g. is there a condition that results in a slower loading rate or some requirement on how the ship is loaded or towed.

If so, please upload details of the condition in section 9.

2.13 What is the Hull number of the vessel?

The TVQ requires several technical documents be uploaded in section 9. It is critical these documents apply to the ship in question. Not all documents include the ship's name and IMO. If they don't, they should include the ship's hull number. Documents that don't identify the vessel will not be accepted.

SECTION 3: VESESL MOORING DETAILS

3.2 How many lines will the vessel use for mooring?

Most vessels will moor with mooring lines run from a winch drum (addressed in q3.1) however some ships only have 10 winches with the 2 additional spring lines secured to bitts – in this example, the answer would be 12.

It is important we can quickly identify this information when planning for the ship to berth.

3.2 b How many spare mooring lines are kept onboard?

As there is a risk that a mooring line will part or need to be replaced while the ship is at Hay Point, it's important there are several spare lines available that meet Hay Points requirements. The requirements for spare mooring lines are the same for mooring lines in use.

If the ship is running various types of mooring lines (e.g. different construction / MBL / diameter), the ship must have adequate spares to replace lines and still ensure all lines in each lead are uniform. Any spares that are not uniform with existing mooring lines will not be accepted. The concept of uniformity is discussed in q3.6 below.

Please ensure your answer aligns with your mooring line record uploaded to q9.6.

3.3 Are all lines onboard the vessel detailed on The Mooring Line Arrangement Document

This is referencing the document uploaded to q9.6. It is often titled Mooring Line Inventory Record or Vessel Evaluation.

All mooring lines and mooring line tails on board must be included in the record – this includes mooring lines/tails in use, loose mooring lines/tails and spare mooring lines/tails.

3.6 Are all mooring line types uniform in MBL, Size and Construction within each lead?

'Each lead' refers to the grouping of lines in the same direction – e.g. head lines, forward breast lines, aft spring lines, etc. For example, all head lines are a lead and should be uniform. The forward breast lines are a lead and should be uniform.

MBL refers to the design MBL of the mooring line and not the actual breaking load during testing. Hay Point requires all mooring lines in each lead are within 5t MBL.

Size refers to the diameter of the mooring line. Hay Point requires all mooring lines in each lead are within 5mm diameter.

Construction refers to the material the line is constructed of (e.g. polypropylene, HMPE, nylon, etc.). Hay Point expects all mooring lines in each lead be of similar construction to be considered uniform – e.g. all polypropylene.

3.7 Is the vessel prepared to replace lines older than 5 years old from certificate date?

Hay Point has strict requirements regarding the age of mooring lines – only lines that are less than 5 years from date of certificate are permitted to be used (not date of installation or first use). Should

your mooring lines be older than 5 years from date of certificate, they must not be used while at Hay Point. If you are not prepared to replace old lines, please consider raising this with your BHP contact before proceeding.

3.9 What is the vessels MAXIMUM mooring winch brake holding capacity (tonnes)?

Winch brake holding capacity (BHC) is an important consideration when reviewing the brake render test and render set point. Your answer must be supported by a document that is uploaded to q9.15.

Please note the max BHC is separate to the ship design MBL and the render set point of the winch – it is the capacity of the mooring winch brakes to hold line under tension. As the max BHC is referring to the braking capacity of the mooring winch, it is critical the brake render set point does not exceed this parameter – doing so may cause damage to the brakes or winch unit.

An example of max BHC is noted below – "Brake holding power (1st layer)" 364kn. Note the below is referring to the brake capacity at the first layer of mooring line on the drum. It is critical this is considered when setting the brake render set point.

B2-a

SPECIFICATION
OF
HYDRAULIC DRIVEN DECK MACHINERY

[redacted]

2. Windlass and mooring winch

1) Particular		DM No.	Cable lifter	Mooring winch
Quantity per ship	right type	DM 1	1 set(s)	1 set(s)
	left type	DM 2	1 set(s)	1 set(s)
Type			J-18CU	NS160HW
Hauling load (1st. layer)	kN		312.0	127.6
Max. hauling load (at no specified speed)	kN		468	-
Nominal hauling speed (1st. layer)	m/min.		9	15
Max. hauling speed (at light load)	m/min.		28.1	-
Hydraulic motor			-	HMC125
Speed ratio of hydr. motor (high/low)			-	3.12
Gear ratio			43.923	7.389
Required differential pressure	MPa		15.9	17.9
Required oil flow	L/min.		266	131
Chain dia. (Kenter shackle)	mm		φ81 Q3	-
Drum size (dia. × length)	mm×mm		-	φ508×900L
No. of drum			-	2
Storage capa. of drum (rope dia.×length)	mm×m		-	φ82×200L (within 7 layers)
Slack chain / rope speed (1st. layer)	m/min.		15	46.8
Brake holding power (1st. layer)	kN		2169	364
Warping drum pull load	kN		-	127.6
Warping drum size (dia. × length)	mm×mm		-	φ500×800L

3.10 Has a brake render test been completed on all winches within the last 12 months?

The ability for a ship's mooring winch brakes to 'render' or pay out mooring line when the tension in the mooring system reaches a pre-determined value is a crucial safety system on board modern merchant vessels.

As implied by the question, Hay Point requires brake render testing be performed on all mooring winches every 12 months. We understand brake render testing is a complex matter and not all crews have experience in this area. Brake render testing can also be a dangerous task to perform.

Please advise at the earliest point if you're unsure about brake render testing as we can assist with the following:

- Review brake render calculations before the test is performed to ensure it will meet our requirements.

- Provide details of external consultants that can assist with the testing.

Due to the complexity of brake render testing, we are unable to sufficiently address the topic in this guidance note. Please refer to the HPCT Brake Render Testing Guidelines for further information.

3.12 What is the rated pulling power of the mooring winch (tonnes)?

This is separate to the max BHC of the mooring winch. It is often referred to as tonnes x m/min. Whereas the max BHC of the mooring winch is the capacity of the brakes to hold line under tension, the rated pulling power is the ability of the mooring winch to wind / pull the mooring line.

Examples are noted below:

Example 1: Hauling load (1st layer) 127.6kn

B2-a

SPECIFICATION
OF
HYDRAULIC DRIVEN DECK MACHINERY

[redacted]

2. Windlass and mooring winch

1) Particular		DM No.	Cable lifter	Mooring winch
Quantity per ship	right type	DM 1	1 set(s)	1 set(s)
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Max. hauling load (at no specified speed)		kN	468	-
Nominal hauling speed (1st. layer)		m/min.	9	15
Max. hauling speed (at light load)		m/min.	28.1	-
Hydraulic motor			-	HMC125
Speed ratio of hydr. motor (high/low)			-	3.12
Gear ratio			43.923	7.389
Required differential pressure		MPa	15.9	17.9
Required oil flow		L/min.	266	131
Chain dia. (Kenter shackle)		mm	φ81 Q3	-
Drum size (dia. × length)		mm×mm	-	φ508×900L
No. of drum			-	2
Storage capa. of drum (rope dia.×length)		mm×m	-	φ82×200L (within 7 layers)
Slack chain / rope speed (1st. layer)		m/min.	15	46.8
Brake holding power (1st. layer)		kN	2169	364
Warping drum pull load		kN	-	127.6
Warping drum size (dia. × length)		mm×mm	-	φ500×800L

Example 2: Mooring winch capacity: 15.0 ton x 15.0 m/min:

LIST OF DECK MACHINERY

ITEM NO.	DESCRIPTION	CAPACITY	Q'TY/SHIP	REMARK
M1, M2	CABLE LIFTER	31.8 TON x 9.0 M/MIN.	2	
	COMBINED MOORING WINCH	15.0 TON x 15.0 M/MIN.	2	2 M/D + 1 M/H
M1	MOORING WINCH	15.0 TON x 15.0 M/MIN.	1	2 M/D + 1 M/H
M2	MOORING WINCH	15.0 TON x 15.0 M/MIN.	1	2 M/D
M3	MOORING WINCH	15.0 TON x 15.0 M/MIN.	1	2 M/D + 1 M/H
M4	MOORING WINCH	15.0 TON x 15.0 M/MIN.	1	2 M/D + 1 M/H
CP1	AIR CAPSTAN	0.5 TON x 15.0 M/MIN.	2	

3.13 What is the brake render set point of the mooring winches (tonnes)?

This is the point the mooring winch brakes have been set to render (e.g. to release mooring line to shed tension). It is set via a brake render test and marked on the winch. It is a complex area and is addressed in the HPCT Brake Render Testing Guidelines.

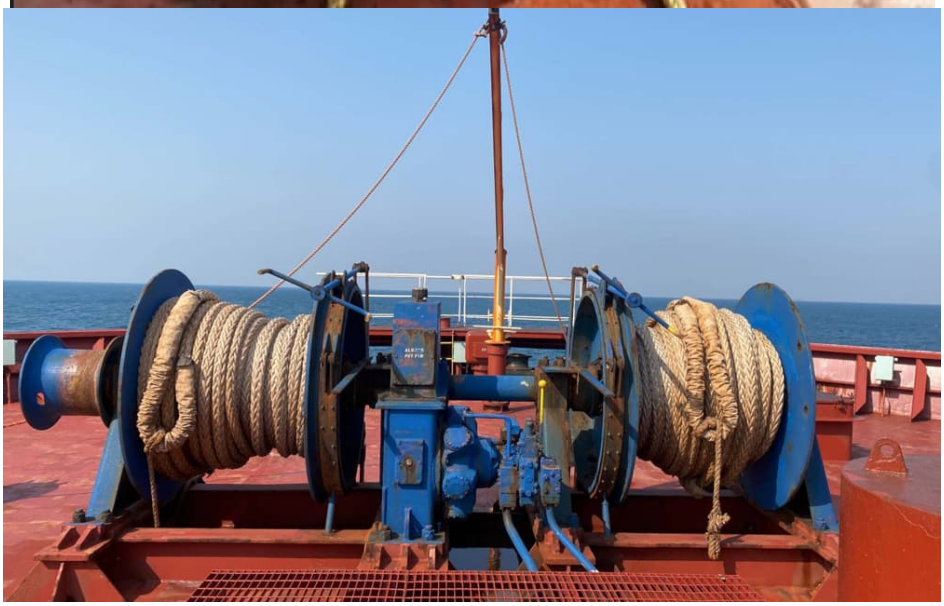
3.14 Are mooring winches of split drum design (e.g. not conventional / single drum design)?

There are two different mooring winch drums generally in use on board most Cape Size, Mini Cape, or Panamax vessels. These mooring winch drums can be described as split drum or conventional/single undivided drums.

The calculation that forms the basis of the brake render test is different for each drum type so it's critical the completing party and crew know which type of drums are in use.

Examples of both types of drums are shown below:

- Example of conventional drums



- Example of split drums (note a single layer only is permitted on the working split drum)

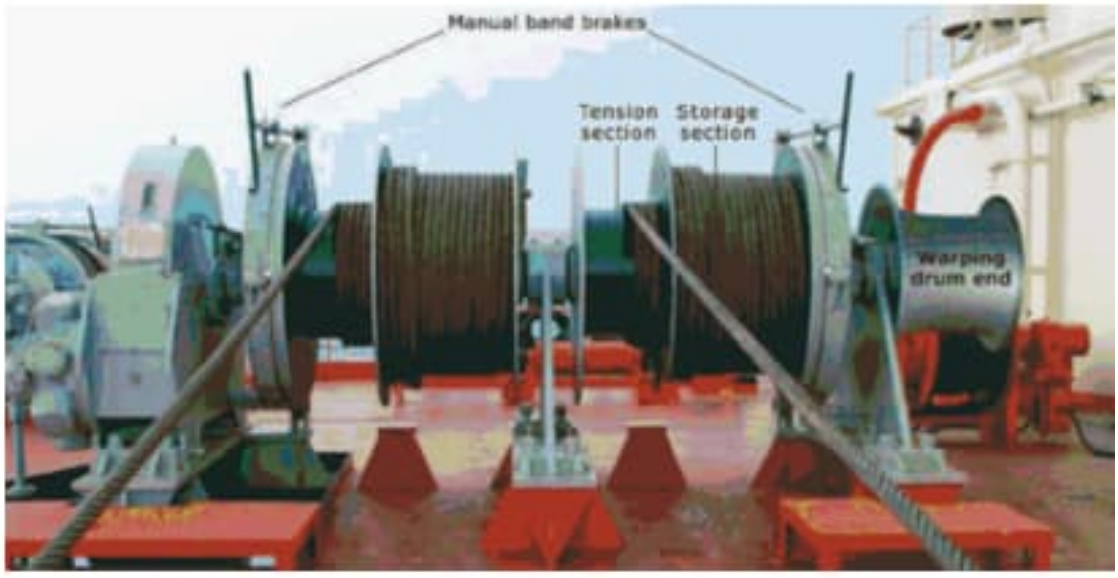


Fig 1b: Split Mooring Drums. (Note one wrap on warping drum)

3.15 Has the vessel allowed for multiple layers of rope on the drum with your render testing?

If the ship has conventional drums, it is reasonable to assume several layers of rope will remain on the drum while the vessel is moored. This must be considered when calculating the brake render set point as layers of rope on the drum impacts the render set point. Hay Point assumes 3-4 layers will most likely be on the drum while the vessel is moored.

If the vessel has split drums, only 1 layer of rope will be on the working part of the drum.
This issue is discussed in detail in the HPCT Brake Render Testing Guidelines.

3.15 b How many layers of rope has the vessel allowed for?

Refer to q3.15.

3.16 Can the vessel deploy:

a. 4 x Headlines
b. 4 x Stern lines
c. 2 x Forward Spring lines
d. 2 x Aft Spring lines
e. 2 x Forward Breast lines
f. 2 x Aft Breast lines

This question is asking the completing party to confirm how many lines can be deployed in each lead – it includes both lines on drums and on bitts. Although a ship may not moor with all 16 lines in normal conditions, Hay Point requires a ship have the capacity to do so should weather or environmental conditions require it.

Vessels that are unable to deploy 16 mooring lines may have weather restrictions applied to their berth prospects.

3.16 a Will the vessel have a minimum of 2 spare mooring lines on-board if Forward and Aft breast lines are run. (Vessels are required to have a minimum of 2 spare lines at all times on-board)

Further to the above question, if the ship is required to deploy 16 lines there must be at least another 2 spare mooring lines on board that meet Hay Point's requirements.
Spare lines must be uniform with other mooring lines on board.

3.17 Has the vessel had a mooring line failure event in the last 6 months?

Answering 'yes' will not result in the TVQ being rejected – we are likely to ask for confirmation on what happened and what actions have been taken to prevent a recurrence. Section 9 will require the vessel to upload information on the event.

3.20 Is there adequate manning on the ship to ensure moorings can be monitored at intervals of no more than 30 minutes?

Hay Point is an open sea port with large tidal ranges and volatile environmental conditions. As such, constant monitoring and tending of mooring lines is mandatory to minimise the risk of a mooring line parting.

The vessel is monitored by the port to ensure the vessel is regularly tending the mooring lines, chafe protection and winch brakes. If the vessel is found to not be adequately tending mooring lines a letter of protest will be issued against the vessel and lodged in Rightship.

3.22 Are Fairleads, Chocks, Bits well maintained and are free from Rust and/or abrasive surfaces?

Equipment that is not maintained creates a potential risk for a mooring line to part. The risk is increased at Hay Point due to the movement of the ships while alongside. Equipment will be inspected while the ship is alongside and any issues reported.

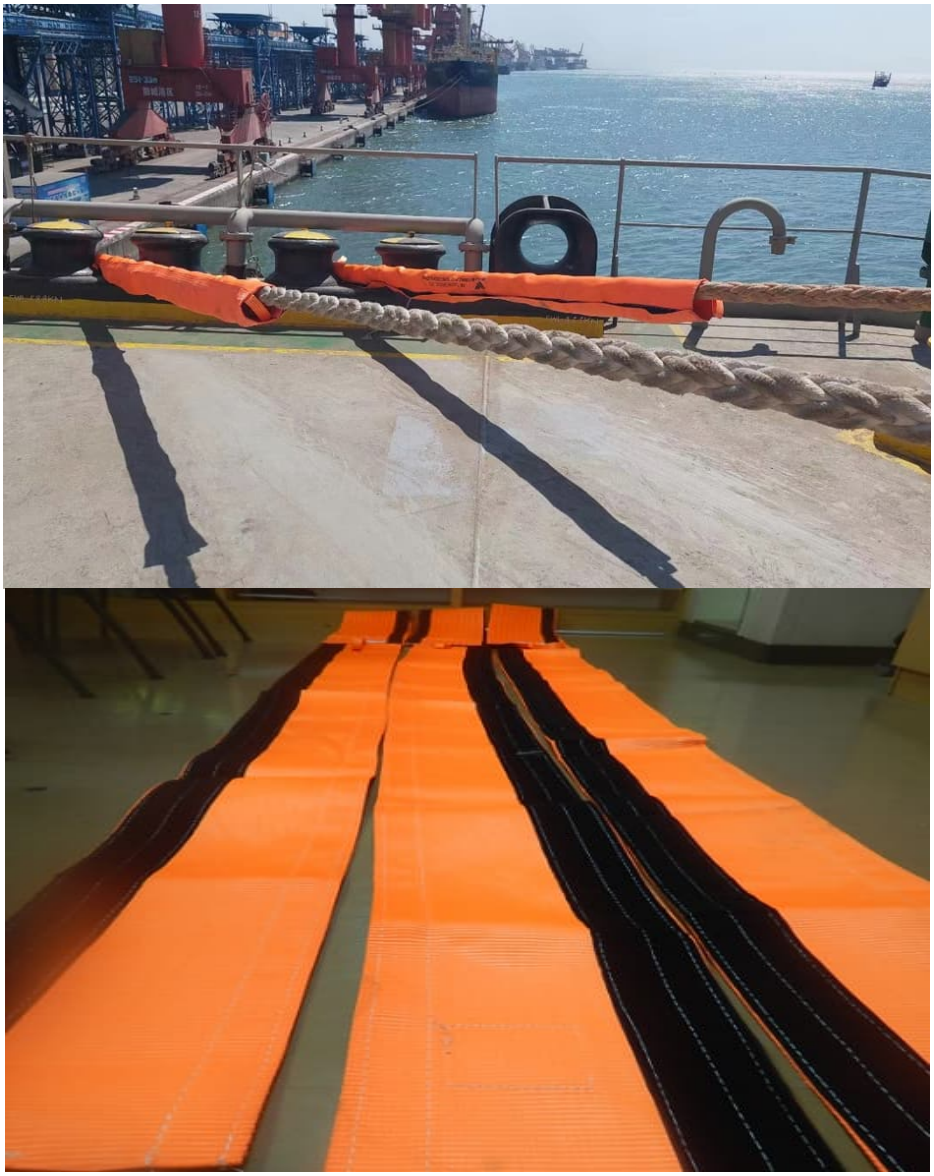
3.24 Does the vessel have chafe protection installed for lines that are run through Chock/Bitt/Roller/Mushroom fairleads? (Chafe Protection must be fit for purpose, fabricated chafe protection is not accepted at the port of Hay Point)

This question is referring to chafe protection that is used on the part of the mooring line that runs through chocks / bitts / rollers and mushroom fairleads. It does not apply to protection used on the end loop / eye of the mooring line.

The use of chafe protection on mooring lines is mandatory at Hay Point. The ship must have fit for purpose chafe protection on board that is in good working order.

Fabricated chafe protection, e.g. made from hose or canvas, is not acceptable to Hay Point. Answering 'no' to this question will not result in the TVQ being rejected – we expect the completing party to advise a plan of how and when new chafe protection will be sourced before the vessel berths at Hay Point.

An example of fit for purpose chafe protection is shown below:



The below picture shows chafe protection on the end loop / eye of the mooring line. This is not what this question is referring to although the vessel should ensure the eye is protected from abrasion.

3.26 Vessels are to berth at the port of Hay Point with fit for purpose chafe protection, if the vessel berths without or does not install chafe protection, The vessel will be returned to the anchorage with the vessel assuming all costs. Does the vessel acknowledge the requirement?

Please refer q3.24. If the ship does not have fit for purpose chafe protection on board, it must source and receive the chafe protection before it berths at Hay Point. E.g. if the ship sources chafe protection in Australia, the chafe protection must be delivered to the ship while the vessel is at the anchorage.

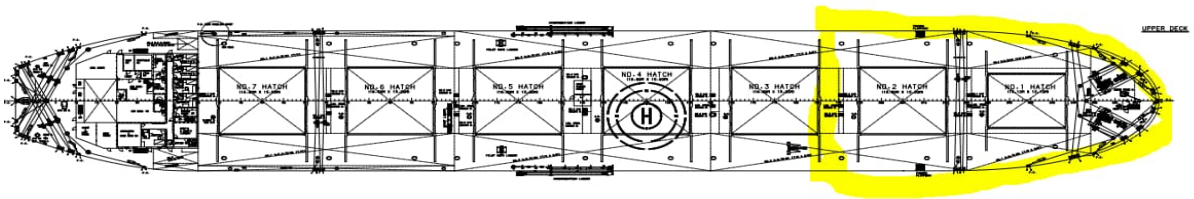
SECTION 4: TUGS

The tugs that operate at Hay Point have safe working load (SWL) limits that a ship must meet to ensure the ship can be towed and berthed safely.

This question does not consider the SWL of equipment used for other operations, e.g. securing provision vessels, Panama canal operations, etc. Please ensure you answers reconcile to the Mooring Arrangement uploaded to q9.3.

4.4 Can a tug make fast between the bow and No. 3 hatch?

Tugs at Hay Point will generally make fast BETWEEN the bow and hatch no. 3 – please refer to diagram below.



SECTION 5: LOADING AND DEBALLASTING PERFORMANCE

BHP aims to ensure that bulk carriers are loaded safely in an appropriate manner, considering the capabilities of the ship and in accordance with international regulation. To ensure a ship is suitable to load at Hay Point, we need to assess the loading capability of each vessel.

Hay Point's expectations vary depending on the size of the vessel.

Hay Point's expectations are not stated in the question or this reference guide as it should not impact the answers provided.

Vessels with LOA of 240m or less will be asked to achieve as close to 12hr deballasting time as possible. To assist in achieving this, the vessel is authorised to:

- Vessel trim up to 3.5m
- 90% or greater propeller immersion on berthing

Please ensure the above requirement is addressed in your loading sequence before submitting to the Terminal.

5.4 Does the vessel have a class approved loading instrument and has it been verified within the past 12 months?

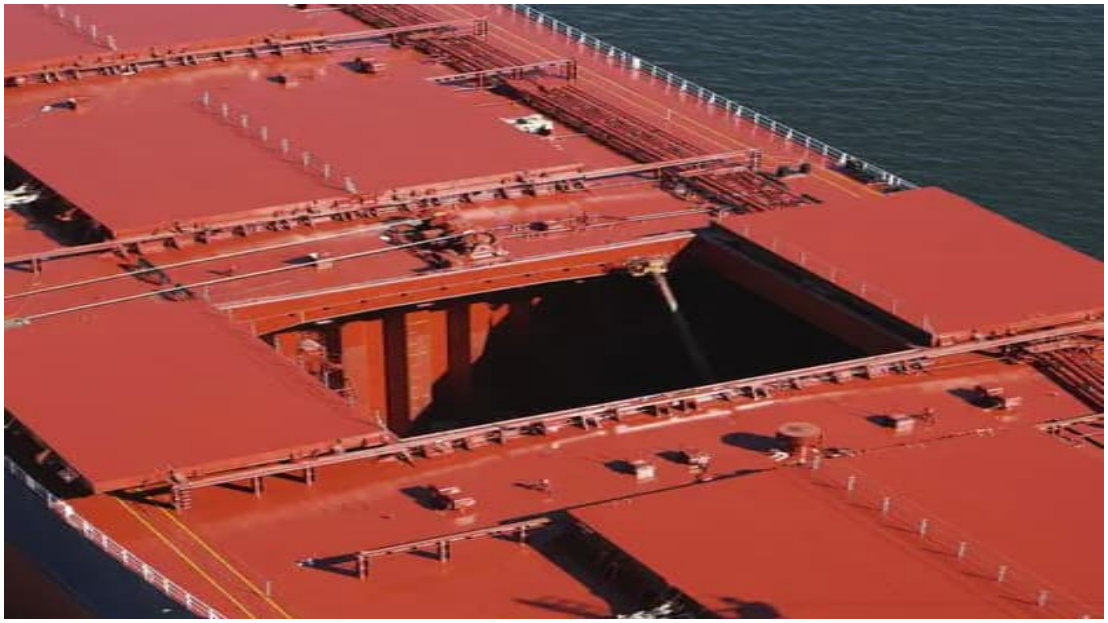
This question is referring to a system or application that assists the Master in creating and monitoring a load sequence, e.g. something that assists with managing ship stresses, deballasting requirements, trim requirements, sequencing of hatch changes, etc.

The question is not referring to deck cranes.

SECTION 6: SHIPLOADER HATCH TRACKING SYSTEM

6.2 Is the vessel fitted with side rolling hatch covers?

Examples of side rolling hatch covers are shown below:



7: HELICOPTER REQUIREMENTS

Most questions in this section are self-explanatory.

We do ask for photos of the helicopter landing area to ensure the Port Pilots can land safely. Should any issues with the helicopter landing area present while the helicopter is trying to land, the vessel is likely to be delayed at anchor while a Pilot launch is organised. This delay will be to the vessel's account.

Helicopter safety events are taken seriously at the Port of Hay Point. The ship should ensure helicopter operation checklists are completed and that all crew are trained and understand what is required for safe helicopter operations. Please see appendix for the NQBP Helicopter checklist.

7.5 Is the designated helipad on No. 1 Hatch or the hatch next to the bridge/ accommodation block?

Please note the question is asking if the helipad is on no.1 hatch OR the hatch next to the bridge.

SECTION 8: CREW EXPERIENCE MATRIX

As Hay Point is an open sea port, it's critical the ship's crew have adequate experience. Hay Point has expectations regarding experience of the senior crew members that will be on board when the ship calls Hay Point.

Hay Point does not look at each role in isolation – e.g. we consider the experience of the Master and Chief Officer combined.

Hay Point will generally only consider experience to be relevant if it's on a similar vessel – e.g. if we're reviewing the experience of the Master and the ship is a Panamax, we would consider the experience of that person in the rank of Chief Officer and Master on Panamax vessels.

SECTION 9: ATTACHMENTS

All attachments MUST be uploaded in high resolution so we can easily read details when zooming in.

Please only upload documents in the following formats:

- PDF
- Word
- Excel
- JPEG
- ZIP

DO NOT UPLOAD DOCUMENTS IN .RAR FORMAT.

Please DO NOT password protect any of the uploaded documents as this will delay the review/approval process.

All documents MUST reference the ship by either IMO or hull number. Documents that do not reference the vessel will not be accepted. Documents for sister ships are not acceptable.

All attachments are MANDATORY.

9.1 Please attach a copy of the vessel Emergency Towing Booklet which identifies the safe working load and location of designated towage bits. Please ensure the full and complete document is attached. Has the document been attached to the TVQ?

The full and complete document must be uploaded to the TVQ.

For reference, if an event occurs where the ship needs to be moved or requires the assistance of the tugs, the booklet will be provided to the tug crews and Port Pilots.

An example of the cover page and some of the contents are shown below:

EMERGENCY TOWING BOOKLET

Table of Communicating Information

(Information to be provided to a towing company)

M/V [redacted] Panamax Bulk Carrier

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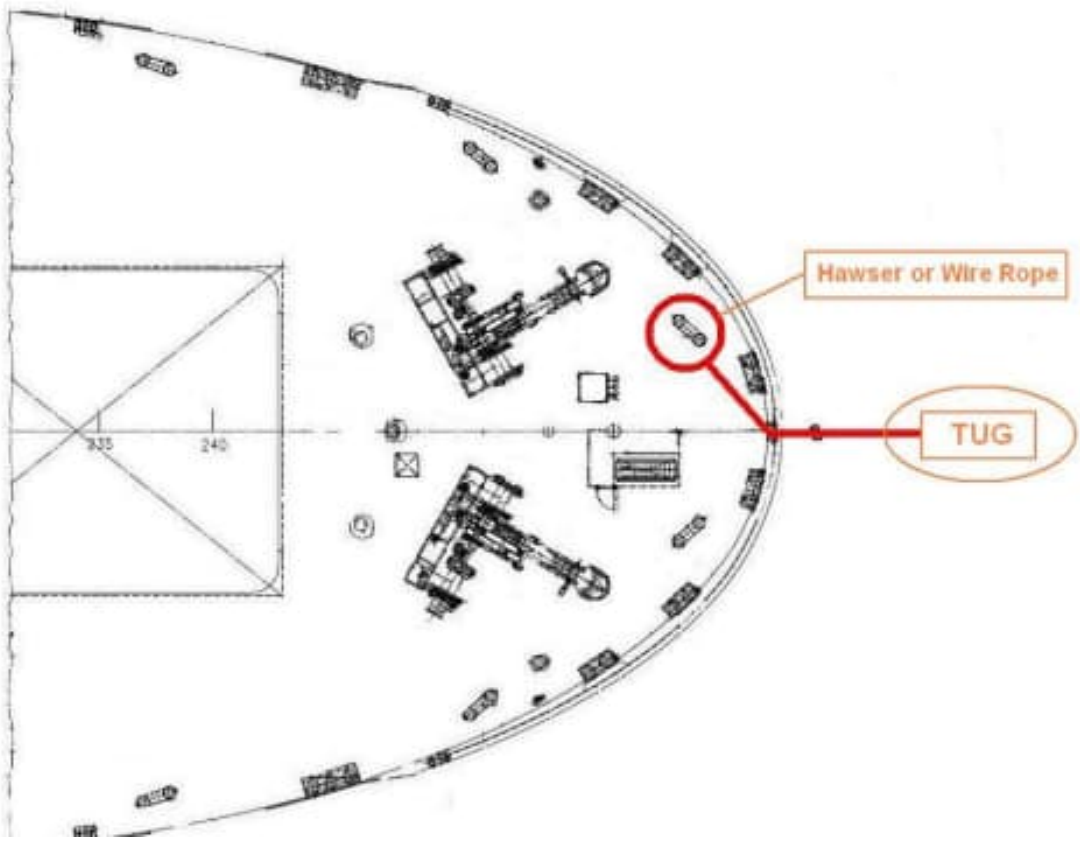
Contents

4. Towing patterns

The towing patterns for this ship are the following patterns in principle. The pattern is determined by the captain or the headquarters in consultation with the towing company, taking into account of the ship status and the surrounding conditions.

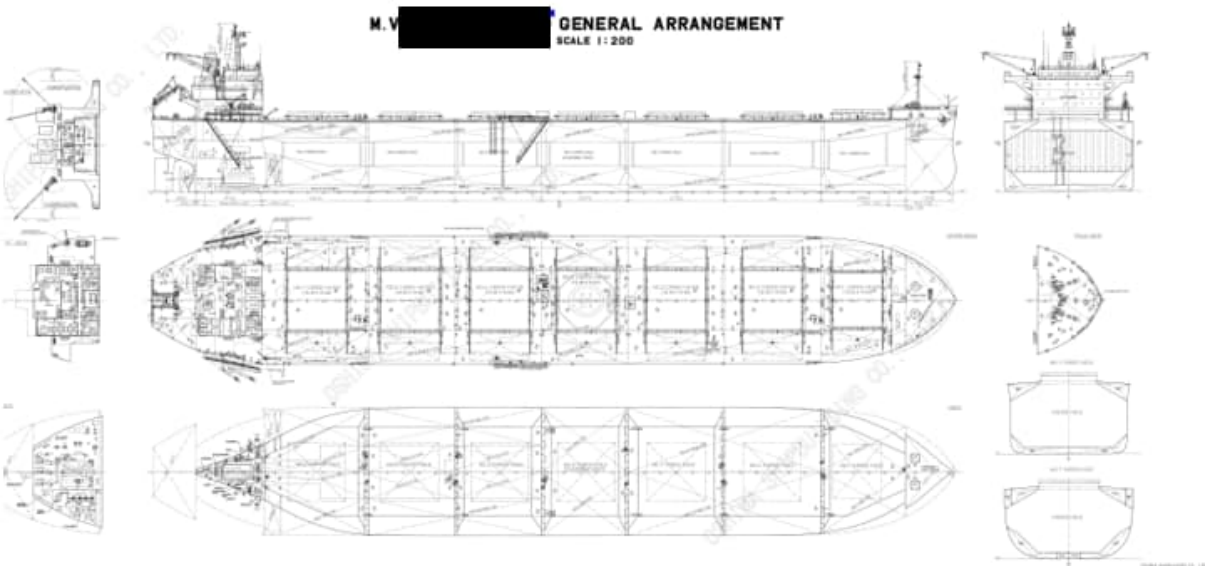
(1)Pattern1-F (towing from the bow)

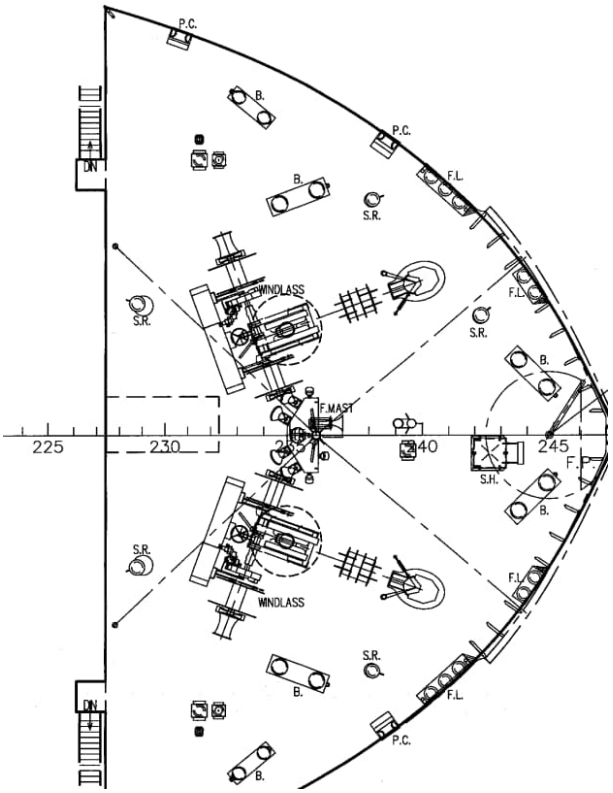
Use a hawser or a wire rope and a bollard



9.2 Please attach vessel GA (General Arrangement) drawing showing location(s) of gear/towers. Has the document been attached to the TVQ?

An example of a GA is shown below along with part of the document zoomed in. Please ensure details of all winches, cranes and other obstructions can be viewed clearly when the document is zoomed in.



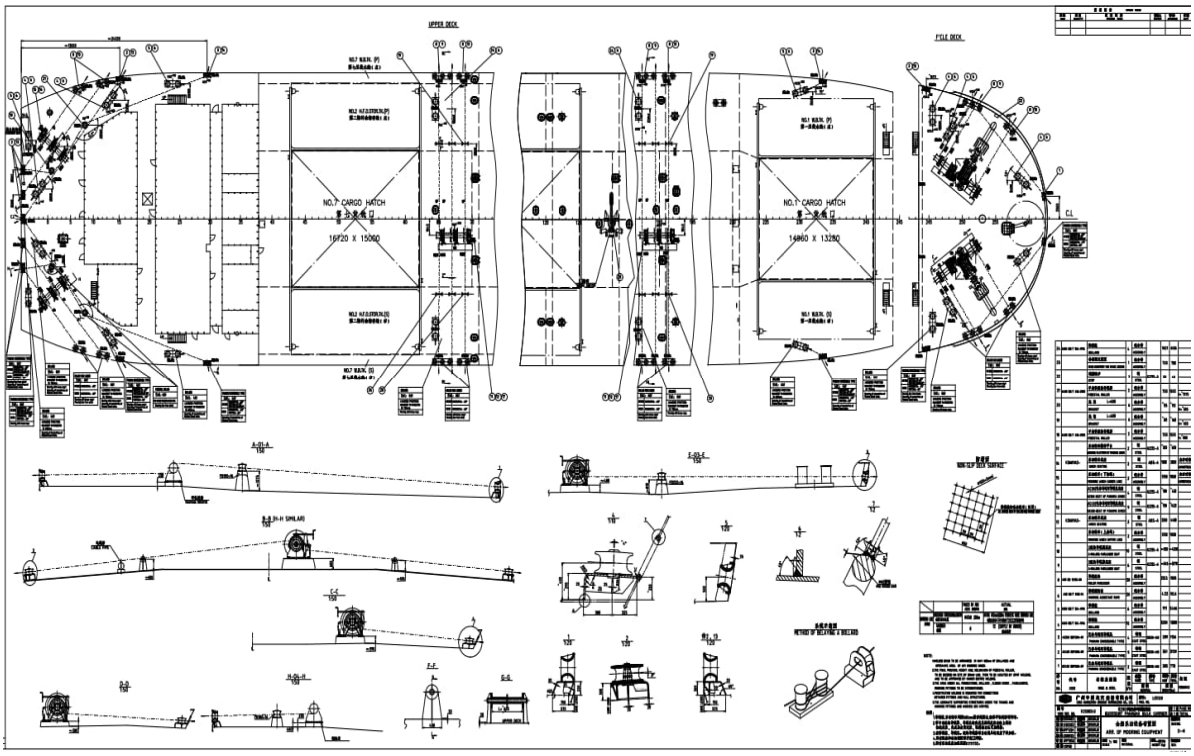


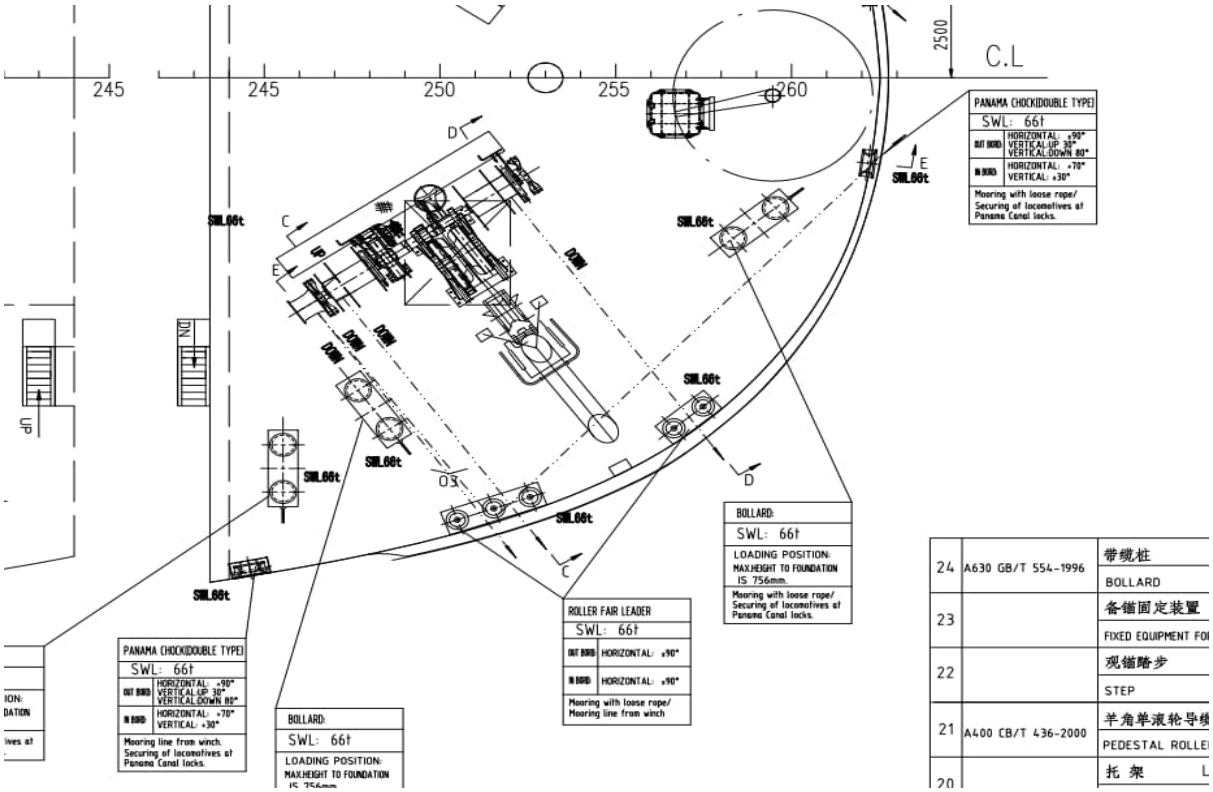
9.3 Please attach the Mooring Arrangement as per the ships plan. Please ensure the safe working loads (SWL) of all mooring fittings are clearly marked. Has the document been attached to the TVQ?

Please ensure the Mooring Arrangement covers the full ship. The document is often split into forward, mid and aft plans.

Ensure the information on the document reconciles to section 4 and that safe working loads are clearly marked. All SWL's should be clearly identifiable on the plan.

An example of a Mooring Arrangement is shown below along with part of the document zoomed in.





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9.5 Please attach the ships particulars. Please ensure hold capacity information is included (in cubic meters). Has the document been attached to the TVQ?

The Ship's Particulars should be a 1 or 2 page summary of the vessels details.

Please ensure the Ship's Particulars includes:

- Hull number
- Load line information for all conditions inclusive of freeboard.
- Cargo holds capacity in cubic meters.

An example of this information is shown below:

D. LOAD LINE	MARK	FREEBOARD mtrs	TPC m/ton	DRAFT mtrs	DISPLACEMENT m/ton	DEADWEIGHT m/ton
TROPICAL FRESH WATER	TF	5.736 m	121.0	19.123 m	212,386.60	187,504.60
FRESH WATER	F	6.117 m	120.8	18.742 m	207,780.50	182,898.50
TROPICAL	TF	6.155 m	120.8	18.703 m	207,309.50	182,427.50
SUMMER	S	6.536 m	120.6	18.322 m	202,712.00	177,830.00
WINTER	W	6.917 m	120.4	17.941 m	198,122.30	173,240.30

CARGO HOLDS CAPACITY IN M3	
NO.1 CARGO HOLD	18713
NO.2 CARGO HOLD	21831.3
NO.3 CARGO HOLD	22574
NO.4 CARGO HOLD	21866.7
NO.5 CARGO HOLD	22467.1
NO.6 CARGO HOLD	22466.5
NO.7 CARGO HOLD	22573.4
NO.8 CARGO HOLD	21780.6
NO.9 CARGO HOLD	19906.5
SUBTOTAL	194179

9.6 Please attach the most recent mooring line inventory record or vessel evaluation. Please ensure the following detail is included: Certificate number and date, composition of mooring line, length of mooring line, mooring line MBL, mooring line diameter, date line installed, date line end to ended, condition of line, date of last inspection. Please ensure all mooring lines and tails are included (e.g. lines in use, loose lines and spares).

We can provide a template for the mooring line inventory but we would expect the ship is already maintaining this information in an existing document – this document is often the vessel evaluation.

We are happy to review your existing document assuming all the above information is included. Please note all mooring lines and mooring line tails on board the ship must be included – this includes lines/tails in use, loose lines/tails and spare lines/tails.

Please ensure you also include the position of each line, e.g. headline, fwd spring line, etc.
Hay Point is very strict on mooring line information, as the parting of mooring lines is one of our biggest safety risks at the Terminal.

Please ensure all information in the document provided reconciles to the certificates uploaded to q9.13. Ideally the certificates are uploaded in the same order as shown on the mooring line record.

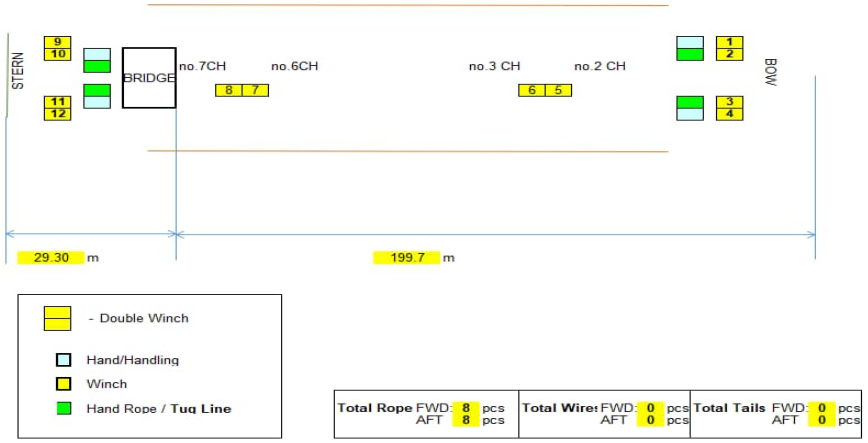
An example of mooring line information in a mooring line inventory record is shown below:

Mooring Lines in use:													
Winch no.	Certificate date	Certificate NO.	Date of installation	Composition of mooring line	Minimum breaking load	Length	Diameter	Date mooring line end to ended	Scheduled replacement date	Winch brake rendering capacity	Date of winch brake rendering test	Date of last inspection	Condition of mooring line
Head line/Fwd in drum 1	8/09/2020	2008006	17/10/2022	Polypropylene Multifilament	853KN	220	80	N/A	17/10/2027	480KN	27/03/2023	27/03/2023	GOOD
Head line/Fwd in drum 2	8/09/2020	2008007	17/10/2022	Polypropylene Multifilament	853KN	220	80	N/A	17/10/2027	480KN	27/03/2023	27/03/2023	GOOD
Head line/Fwd in drum 3	8/09/2020	2008008	17/10/2022	Polypropylene Multifilament	853KN	220	80	N/A	17/10/2027	480KN	27/03/2023	27/03/2023	GOOD
Head line/Fwd in drum 4	8/09/2020	2008009	17/10/2022	Polypropylene Multifilament	853KN	220	80	N/A	17/10/2027	480KN	27/03/2023	27/03/2023	GOOD
Fwd Spring line/no. 1-2 Hatch drum 5	8/09/2020	2008010	12/11/2020	Polypropylene Multifilament	853KN	220	80	18/10/2022	12/11/2025	480KN	27/03/2023	27/03/2023	GOOD
Fwd Spring line/no. 1-2 Hatch drum 6	8/09/2020	2008011	12/11/2020	Polypropylene Multifilament	853KN	220	80	18/10/2022	12/11/2025	480KN	27/03/2023	27/03/2023	GOOD

9.7 Please provide a document showing winch numbering and location

It can sometimes be difficult to reconcile the position of each mooring line from the mooring line record. As such, we ask for a simple document showing us the winch numbering so we can clearly identify which mooring line is on each drum. This enables us to confirm that all mooring lines in each lead are uniform.

An example is noted below:



9.8 Please upload the following helicopter information:

1. Helicopter landing hatch rating certificate or technical drawing confirming your answer to q7.8

Examples are shown below:

BHP Mitsubishi Alliance

ClassNK
NIPPON KAIJI KYOKAI HULL DEPARTMENT
4-7, Kioi-cho, Chiyoda-ku, Tokyo 102-8567, JAPAN
TEL : +81-3-5226-2017 FAX : +81-3-5226-2019
E-mail : hld@classnk.or.jp

ONE(1)
March 5, 2013
[redacted]

Strength of Helicopter Landing Site

It is confirmed that the Helicopter Landing Site on board the vessel

MV [redacted]

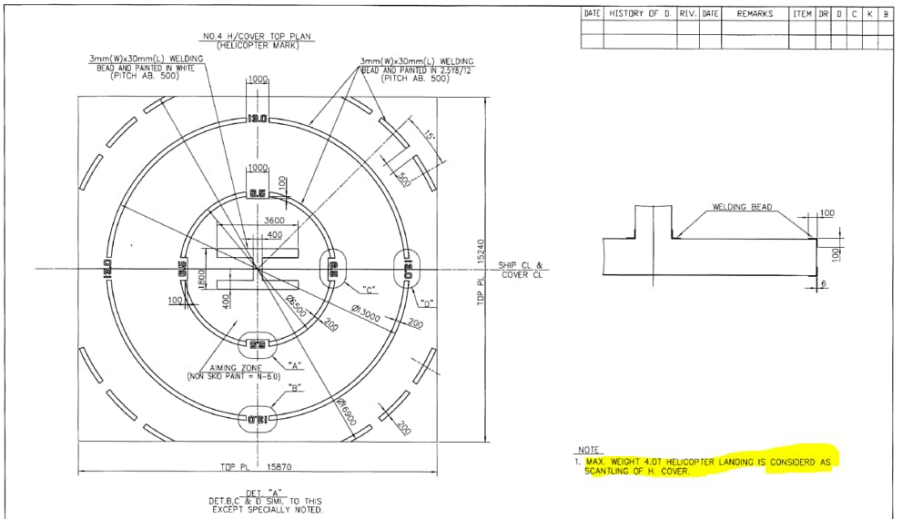
Class No.
IMO No. [redacted]

was examined of strength for landing by helicopter which has following maximum take-off weight on following location and found satisfactory .

Maximum take-off weight: 4.00 (ton)
Location: No.4 Hatch Cover

Yours sincerely,

H. Ochi
Manager of Hull Department



2. photos of the helicopter landing hatch showing the hatch rigged and ready

3. photos of the wind sock

4. photos of the Marine Pilot's access from the helicopter hatch to the deck

BHP Mitsubishi Alliance

5. photos of top of the hatch

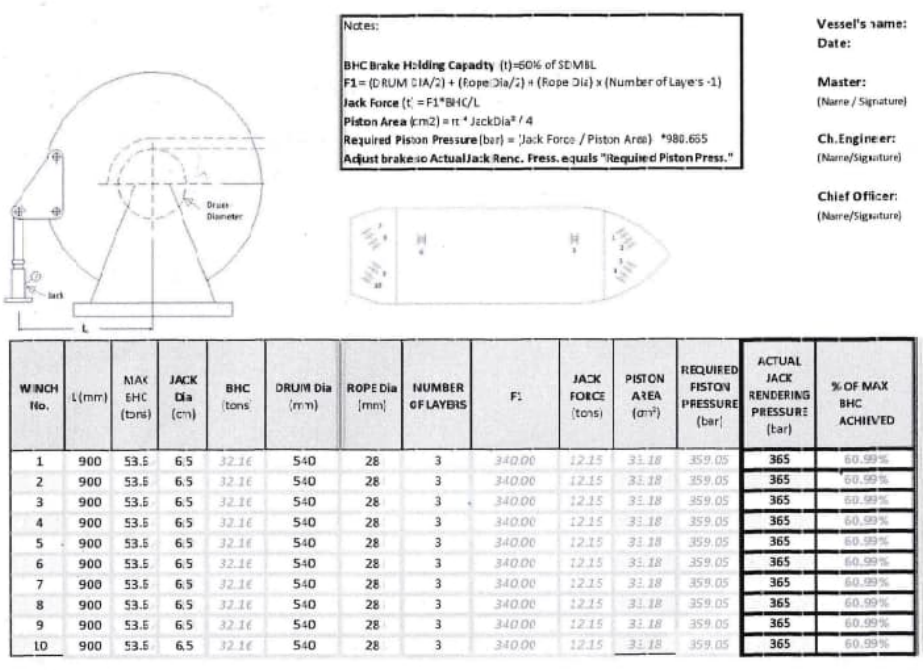
6. photos of the helicopter approach - please ensure the photos are taken from both port side and starboard side

9.9 Please provide the latest brake rendering test report. Please also upload photos of test including photos of the pressure gauge.

Please ensure the brake render test report is signed and dated.

Hay Point expects photos of the test and photos of the pressure gauge are provided – we consider this to be standard practice. We also expect the photos to be time stamped as confirmation of the test date and result.

Please see examples below:



Notes:

BHC Brake Holding Capadty (t)=60% of SDMBL
F1= (DRUM DIA/2) + (RopeDia/2) + (Rope Dia) x (Number of Layers -1)
Jack Force (t) = F1*BHC/L
Piston Area (cm2) = π * JackDia² / 4
Required Piston Pressure (bar) = 'Jack Force / Piston Area) *980.665
Adjust brake so ActualJack Renc. Press. equals "Required Piston Press."

Vessel's name:
Date:

Master:
(Name / Signature)

Ch.Engineer:
(Name/Signature)

Chief Officer:
(Name/Signature)

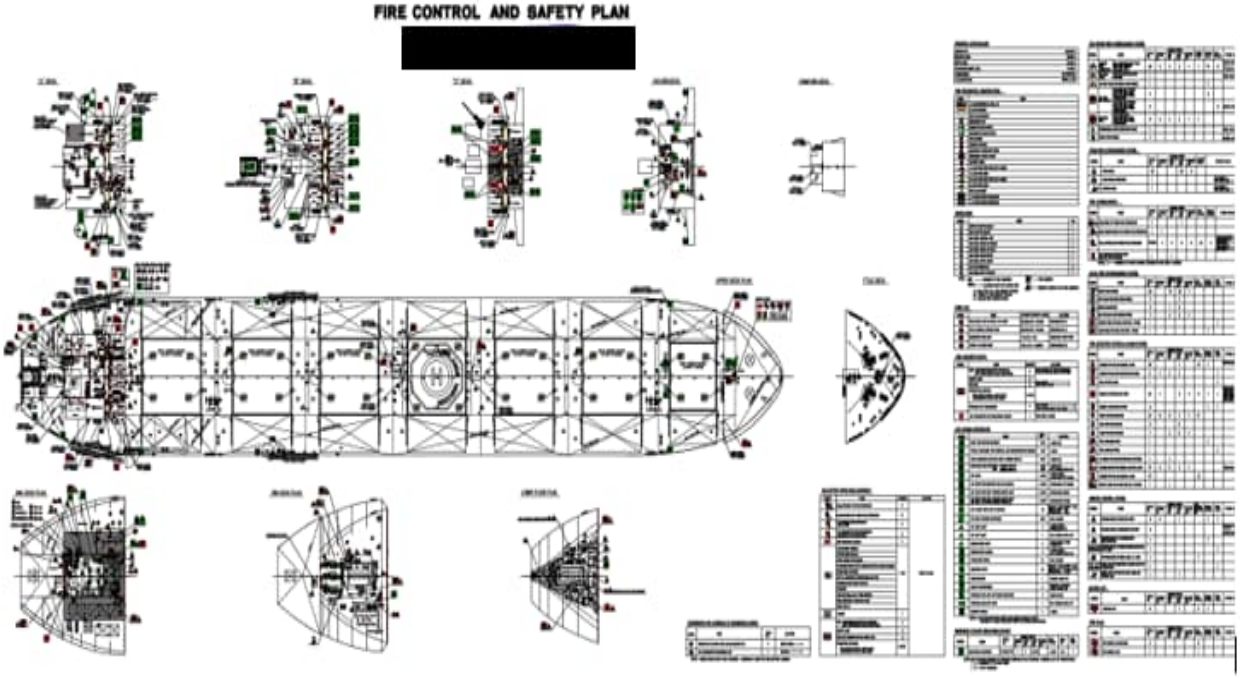
WINCH No.	L(mm)	MAX BHC (tons)	JACK Dia (cm)	BHC (tons)	DRUM Dia (mm)	ROPE Dia (mm)	NUMBER OF LAYERS	F1	JACK FORCE (tons)	PISTON AREA (cm²)	REQUIRED PISTON PRESSURE (bar)	ACTUAL JACK RENDERING PRESSURE (bar)	% OF MAX BHC ACHIEVED
1	900	53.6	6.5	32.16	540	28	3	340.00	12.15	33.18	359.05	365	60.99%
2	900	53.6	6.5	32.16	540	28	3	340.00	12.15	33.18	359.05	365	60.99%
3	900	53.6	6.5	32.16	540	28	3	340.00	12.15	33.18	359.05	365	60.99%
4	900	53.6	6.5	32.16	540	28	3	340.00	12.15	33.18	359.05	365	60.99%
5	900	53.6	6.5	32.16	540	28	3	340.00	12.15	33.18	359.05	365	60.99%
6	900	53.6	6.5	32.16	540	28	3	340.00	12.15	33.18	359.05	365	60.99%
7	900	53.6	6.5	32.16	540	28	3	340.00	12.15	33.18	359.05	365	60.99%
8	900	53.6	6.5	32.16	540	28	3	340.00	12.15	33.18	359.05	365	60.99%
9	900	53.6	6.5	32.16	540	28	3	340.00	12.15	33.18	359.05	365	60.99%
10	900	53.6	6.5	32.16	540	28	3	340.00	12.15	33.18	359.05	365	60.99%

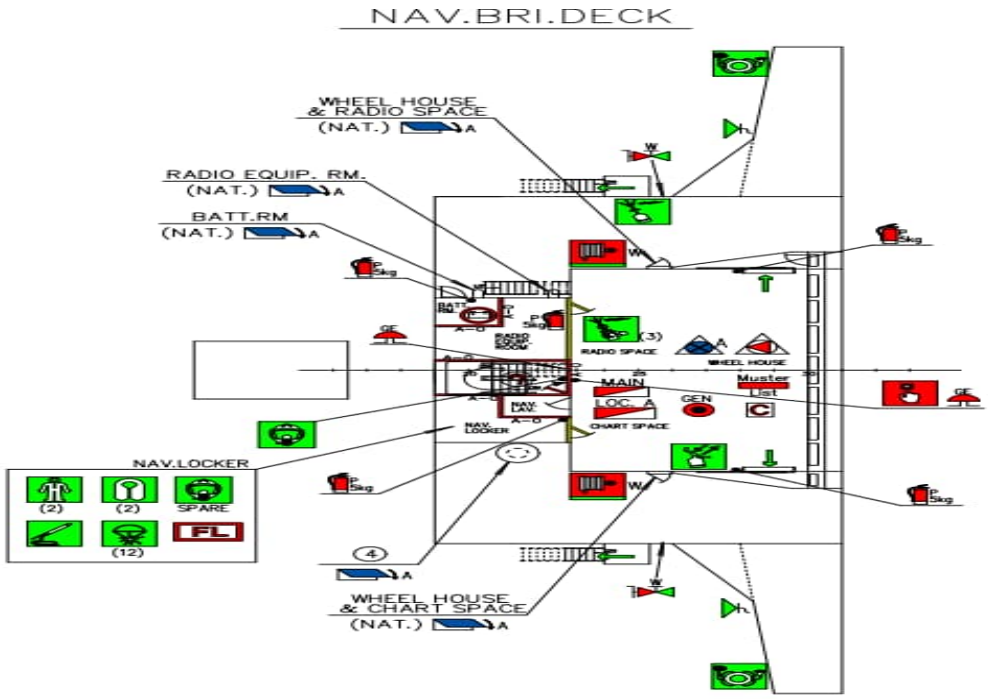
9.11 Please attach a copy of the vessels fire plan

The fire plan must identify the vessel by IMO or hull number. It must be a PDF or digital file equivalent – photos of the fire plan are not acceptable. It should only be 1 or 2 pages.

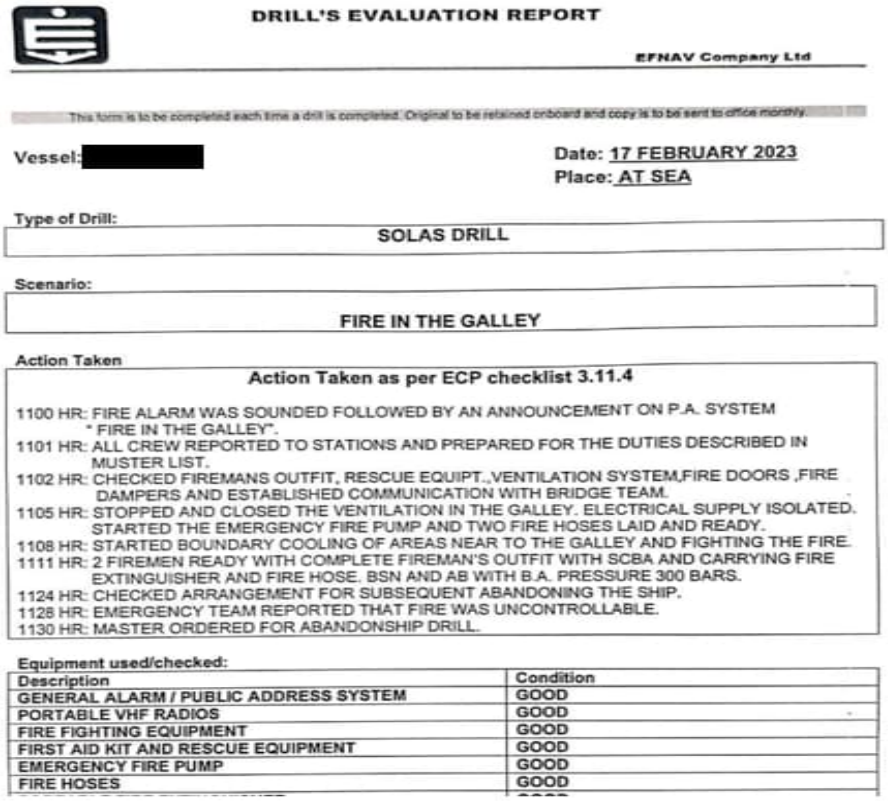
Please ensure the document is uploaded in colour and details easily viewed when zoomed in.

Please see examples below:





9.12 Please attach a copy of the vessels most recent fire drill (e.g. notes, assessment, photos that are signed and dated).
An example is shown below:



DRILL'S EVALUATION REPORT

EFNAV Company Ltd

This form is to be completed each time a drill is completed. Original to be retained onboard and copy is to be sent to office monthly.

Vessel: [redacted]

Date: 17 FEBRUARY 2023
Place: AT SEA

Type of Drill:
SOLAS DRILL

Scenario:
FIRE IN THE GALLEY

Action Taken
Action Taken as per ECP checklist 3.11.4

1100 HR: FIRE ALARM WAS SOUNDED FOLLOWED BY AN ANNOUNCEMENT ON P.A. SYSTEM " FIRE IN THE GALLEY".
1101 HR: ALL CREW REPORTED TO STATIONS AND PREPARED FOR THE DUTIES DESCRIBED IN MUSTER LIST.
1102 HR: CHECKED FIREMANS OUTFIT, RESCUE EQUIPT.,VENTILATION SYSTEM,FIRE DOORS ,FIRE DAMPERS AND ESTABLISHED COMMUNICATION WITH BRIDGE TEAM.
1105 HR: STOPPED AND CLOSED THE VENTILATION IN THE GALLEY. ELECTRICAL SUPPLY ISOLATED. STARTED THE EMERGENCY FIRE PUMP AND TWO FIRE HOSES LAID AND READY.
1108 HR: STARTED BOUNDARY COOLING OF AREAS NEAR TO THE GALLEY AND FIGHTING THE FIRE.
1111 HR: 2 FIREMEN READY WITH COMPLETE FIREMAN'S OUTFIT WITH SCBA AND CARRYING FIRE EXTINGUISHER AND FIRE HOSE. BSN AND AB WITH B.A. PRESSURE 300 BARS.
1124 HR: CHECKED ARRANGEMENT FOR SUBSEQUENT ABANDONING THE SHIP.
1128 HR: EMERGENCY TEAM REPORTED THAT FIRE WAS UNCONTROLLABLE.
1130 HR: MASTER ORDERED FOR ABANDONSHIP DRILL.

Equipment used/checked:

Description	Condition
GENERAL ALARM / PUBLIC ADDRESS SYSTEM	GOOD
PORTABLE VHF RADIOS	GOOD
FIRE FIGHTING EQUIPMENT	GOOD
FIRST AID KIT AND RESCUE EQUIPMENT	GOOD
EMERGENCY FIRE PUMP	GOOD
FIRE HOSES	GOOD

9.13 Please attach certificates for all mooring lines in use, spare mooring lines and mooring line tails.

If possible, please upload all certificates in 1 PDF document (ideally in the order detailed in the mooring line inspection record). Please ensure details are clear and easily read when zoomed in. If details cannot be read on a certificate the line will not be accepted for use at Hay.

Ensure you include certificates for all mooring lines and mooring line tails – this includes mooring lines/tails in use, loose lines/tails and spare lines/tails. An example of a mooring line certificate is shown below:

中国船级社
CHINA CLASSIFICATION SOCIETY
船用产品证书
CERTIFICATE OF MARINE PRODUCT

兹证明本证书所列产品经本社署名验船师检验，符合本证书注明标准的要求。
This is to certify that the following products have been inspected by the undersigned surveyor of the Society and are found to comply with the requirements of the specified standards.

产品名称 / **Product**: 船用纤维绳 **Marine fiber ropes**

申请方 / Applicant: 扬州神龙绳业有限公司 Yangzhou Dragon Rope Co., Ltd.

制造厂 / Manufacturer: 扬州神龙绳业有限公司 Yangzhou Dragon Rope Co., Ltd.

订货方 / Purchaser:

认可证书号/Certificate No. of Approval: JS20PWA00066 图纸批准号/Approval No. of Drawings: 无/Nil

用于/Intended for: 国际航行海船/International sea-going ship 船用纤维绳/Marine fiber ropes

产品编号/Serial No.: 2302007-2302009

产品检验标准/Product Inspection Standard

1. 中国船级社《材料与焊接规范》(2022) 及其变更通告第2篇第7章
Chapter 7, Part Two of China Classification Society Rules for Materials and Welding 2022 and its Change Notices

产品明细/Product Description

船用纤维绳/Marine fiber ropes (M0001)

名称/Name	属性(值) /Value	单位/Unit
材料/Material	丙纶长丝复合线 /Polypropylene Filament	
结构/Structure	8	股/Strand
公称直径/Nominal Diameter	80	mm
长度/Length	220	m
线密度/Linear density	2890	ktex
额定破断载荷/Rated breaking load	815	kN
实测破断载荷/Actual breaking load	850	kN
数量/Quantity	3	条/pcs

备注/Remarks

本社已审核了产品厂无石棉声明，但本社的审核不免除产品厂按照合同关系向订货方保证产品无石棉的责任。
The declaration of asbestos-free submitted by manufacturer has been reviewed by the Society. However, liability of the manufacturer to guarantee the products are asbestos-free to purchaser under contract will not be exempted.

中国船级社泰州办事处
CCS Taizhou Office

产品标志/Marking

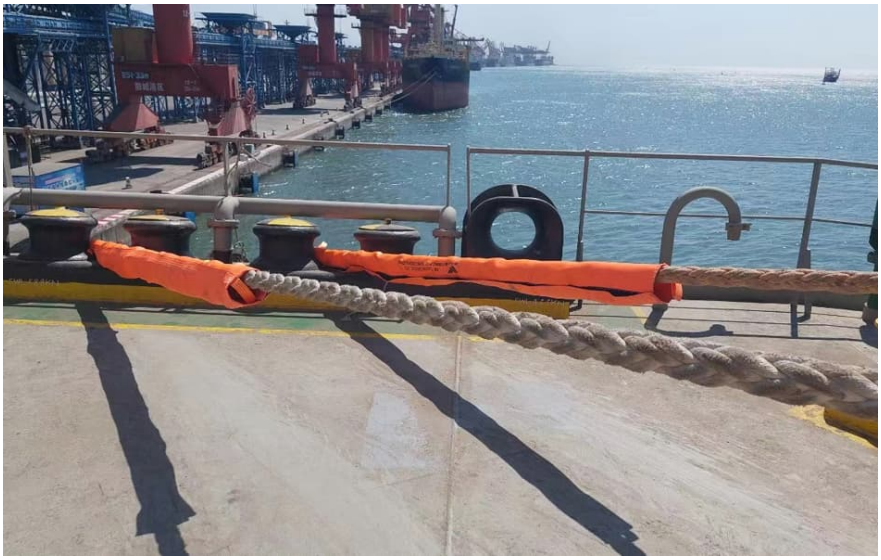
位置/Position: 产品包装上 / On the packing of the product
标志种类/Type of marking: 防伪标志 / CCS anti-forgery label

发证日期 / Date of issue: 2023年02月05日 Feb. 05, 2023 验船师 / Surveyor: Li Guangrui

9.14 Please attach photos of the vessels chafe protection for mooring lines.
An example of acceptable photos is shown below:

BHP Mitsubishi Alliance

BHP Mitsubishi Alliance



9.15 Please attach Deck Machinery document showing max BHC and drum diameter of the mooring winch.

Please ensure the document provided includes details for all winches. This information can be found in several documents, some of which are shown below.

B2-a

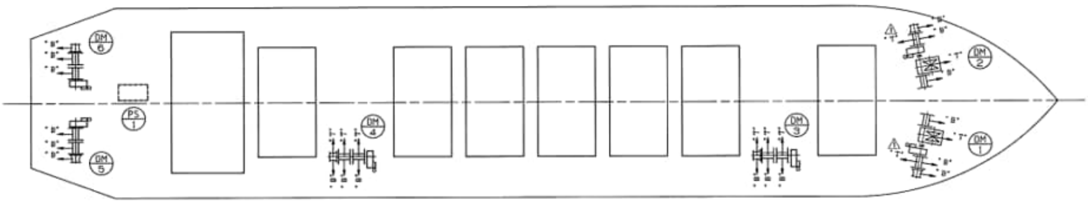
SPECIFICATION
OF
HYDRAULIC DRIVEN DECK MACHINERY

[redacted]

2. Windlass and mooring winch

1) Particular		DM No.	Cable lifter	Mooring winch
Quantity per ship	right type	DM 1	1 set(s)	1 set(s)
	left type	DM 2	1 set(s)	1 set(s)
Type			J-18CU	NS160HW
Hauling load (1st. layer)	kN		312.0	127.6
Max. hauling load (at no specified speed)	kN		468	-
Nominal hauling speed (1st. layer)	m/min.		9	15
Max. hauling speed (at light load)	m/min.		28.1	-
Hydraulic motor			-	HMC125
Speed ratio of hydr. motor (high/low)			-	3.12
Gear ratio			43.923	7.389
Required differential pressure	MPa		15.9	17.9
Required oil flow	L/min.		266	131
Chain dia. (Kenter shackle)	mm		φ81 Q3	-
Drum size (dia. × length)	mm×mm		-	φ508×900L
No. of drum			-	2
Storage capa. of drum (rope dia.×length)	mm×m		-	φ82×200L (within 7 layers)
Slack chain / rope speed (1st. layer)	m/min.		15	46.8
Brake holding power (1st. layer)	kN		2169	364
Warping drum pull load	kN		-	127.6
Warping drum size (dia. × length)	mm×mm		-	φ500×800L

S. No. : [redacted]
KIND OF [redacted]
RULE : [redacted]



DM No.	No. OF SET	ITEM	TYPE	DRUM (AND CHAIN WHEEL) No.	CAPACITY	DIA. X LENGTH	CLUTCH / BRAKE	DIA. X LENGTH OF ROPE	BRAKE FORCE	WARPING END No.	CAPACITY	DIA. X LENGTH	DIA. OF ROPE	CLUTCH / BRAKE	REMARKS
DM 1 DM 2	2	WINDLASS AND MOORING WINCH	[illegible]	1	312.0kN x 9m/min.	P.C.D1053mm	WITH / WITH	ϕ81mm U3	[illegible]kN	1	127.6kN	ϕ500mm x 800mm	-	WITH / WITH	KENTER SHACKLE
				2	127.6kN x 15m/min.	ϕ500mm x 900mm	WITH / WITH	ϕ82mm x 200m	364kN						
DM 3, 4, 5 DM 6	4	MOORING WINCH	[illegible]	2	127.6kN x 15m/min.	ϕ500mm x 900mm	WITH / WITH	ϕ82mm x 200m	364kN	1	127.6kN	ϕ500mm x 800mm	-	WITH / WITH	
PS 1	1	PUMP STATION	[illegible]							-	-	-	-	-	ELECTRIC MOTOR [illegible] 3SETS/SHIP

REMARK : (1) IN THE ABOVE ARRANGEMENT, "T" MEANS TAKING THE ROPE FROM ABOVE THE DRUM AND "B" MEANS TAKING THE ROPE FROM BELOW THE DRUM.

[redacted]

ROUGH ARRANGEMENT OF DECK MACHINERY

[redacted]

3. PARTICULARS

6

3-1 WINCHES

WINDLASS (ITEM 10, 11)

Drum		Unit	Chain drum	Hawser drum	Warping end
Winding load		kN	494	200	200
(Rated point)		(Layer)	—	(1st)	—
Winding speed	Rated	m/min	9.2	15	—
	No load	m/min	abt. 29	abt. 49	—
Type		—	Independent		
Quantity		Set(s)	Right-hand type = 1 Left-hand type = 1	Total = 2	
Chain	Dia. (Grade)	ϕ mm	102 (U3)	—	—
	Shackle	—	Kenter	—	—
Rope	Diameter	ϕ mm	—	80	—
	Length	m	—	200	—
Drum	Diameter	ϕ mm	—	450	450
	Length	mm	—	1050	500
	Flange dia.	ϕ mm	—	1580	—
	Quantity	Piece(s)	1	2	1
Gear	Ratio	—	39.5	5.27	
	Type (1st/2nd)	—	Enclosed / Open (with cover)		
Brake	Capacity	kN	3289	590	—
	Operation	—	Manually (at gear side)		—

BMA
BHP Mitsubishi Alliance

1.1 Technical Data - Combined Anchor- and Mooring Winch

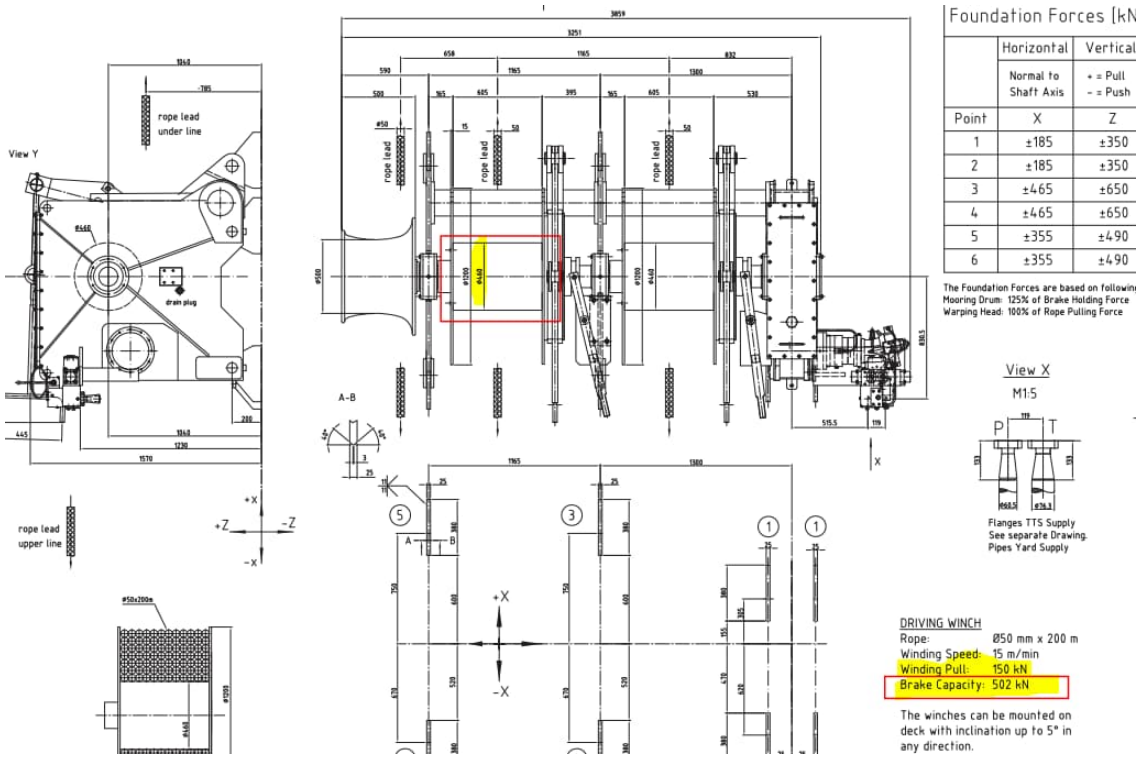
Similar to drwg. No.	03-149.582/0	W1
	03-149.583/0	W2

Windlass

Type of Windlass	1907	
Chain Cable Diameter	Ø 81 mm Grade 3	
Nominal Pull	312 kN	According to ISO 4568
Max. Pull	468 kN	According to ISO 4568
Nominal Speed	9 m/min	
Brake Capacity	2169 kN	

Driving Winch

Type of Winch	8812/16
Rope Size	Ø 56 mm x 220 m
Winding Pull	160 kN at 1st Layer
Winding Speed	15 m/min
Light Line Speed	45 m/min
Brake Capacity	500 kN at 1st Layer
Dimension of Drum	Ø 460/1200 mm x 975mm long / With Split Flange
Type of Motor	A6VM 80
Oil Flow	160 l/min
Operation	Non-Autotension



Foundation Forces [kN

	Horizontal	Vertical
	Normal to Shaft Axis	+ = Pull - = Push
Point	X	Z
1	±185	±350
2	±185	±350
3	±465	±650
4	±465	±650
5	±355	±490
6	±355	±490

The Foundation Forces are based on followin
Mooring Drum: 125% of Brake Holding Force
Warping Head: 100% of Rope Pulling Force

9.16 Please attach photos of the vessels mooring winches. Please ensure some of the photos are taken front on to the winch.

Please upload a photo for each mooring winch on the ship. As stated in the question, please ensure some of the photos are taken front on to the winch. Some examples are shown below:

9.17 Please upload photos of bitts/bollards/chocks with the SWL clearly shown.

Please upload photos of all deck equipment. Please ensure details of the equipment are easily viewed when zooming in. Examples are shown below:

SECTION 10: ACKNOWLEDGEMENT

Does the vessel acknowledge they may be audited against the TVQ whilst alongside at Hay Point

Hay Point audits ships while alongside – your ship may be audited for compliance. Failing an audit may result in the TVQ being cancelled and Letter of Protest issued.

Hay Point audits all ship with less than 12 mooring lines run from drums due to the potential safety risk these ships present.

NQBP Helicopter Checklist

PILOT HELICOPTER SAFETY COMPLIANCE CHECKLIST PORT OF HAYPOINT

NORTH QUEENSLAND BULK PORTS CORPORATION

Ships Name:_____ **Ships Agent:**_____ **Landing Hatch Number:**_____

1.	Do you accept the helicopter to land on your hatch? Note: there is **NO WINCHING** at this port.	YES/NO
2.	Do you understand that all helicopter communications will be on VHF Ch.10?	YES/NO
3.	Do you understand that any helicopter transfer during the hours of darkness will require your ship to switch on all deck and accommodation lighting?	YES/NO
4.	Will all hatches be closed and the landing hatch washed clean? (Vessels MUST avoid discharging deck residues into the sea. Scuppers and Drains will remain CLOSED when washing down hatches)	YES/NO
5.	Will there be a pennant or windsock rigged at least 50m away from the landing hatch? (See figure 1)	YES/NO
6.	Do you understand there are to be no crew members or loose equipment such as rags, paint tins, brooms, covers or rubbish ON or AROUND landing hatch?	YES/NO
7.	Will a fire party with pressurised hoses, dry powder fire extinguishers, foam equipment, proximity suits and rescue equipment be on station one hatch clear and upwind of the landing hatch? (See figure 1)	YES/NO
8.	Do you and your crew understand that crew members are not to approach the helicopter, unless in an emergency or as directed by the helicopter pilot?	YES/NO
9.	Do you and your crew understand that the fire and emergency parties are to remain on standby until 2 minutes after the helicopter has departed?	YES/NO
10.	Will a rescue boat be ready for immediate lowering?	YES/NO
11.	Will there be a clearly marked path to a safe access ladder with hand holds rigged from the landing hatch to the deck for the pilot?	YES/NO
12.	Are there any obstructions higher than 30cm ON the landing hatch? If yes, please advise obstruction.....	YES/NO
13.	Will your ship comply with the international Chamber of Shipping Guide to Helicopter/Ship Operations, as per Marine Order 57?	YES/NO
14.	**CAN YOUR VESSEL ACCEPT HELICOPTER WEIGHT 2.9 T?**	YES/NO
15.	**DOES YOUR VESSEL HAVE MINIMUM 22 METRES ROTOR CLEARANCE? (refer figure 2)**	YES/NO
16.	**DOES YOUR VESSEL HAVE MINIMUM 20.8 METRES ROTOR CLEARANCE? (refer figure 2)**	YES/NO

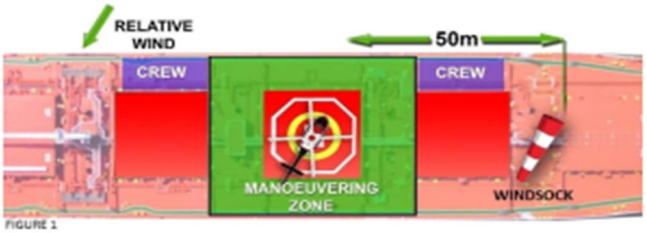


FIGURE 1

FIGURE 2

MASTERS SIGNATURE:	
MASTERS PRINTED NAME:	
DATE:	
SHIPS STAMP:	

Vessels are required to return completed form to Hay Point VTS at least 24-48 hours prior to arrival

BMA
BHP Mitsubishi Alliance