GRINDROD SHIPPING

Safety // FIRST

A GRINDROD promise

Personal Safety Booklet

ISLAND VIEW SHIPPING

UNICORN SHIPPING

1. H.S.E. Protection Code.
2. Employees Responsibilities.
3. Good Advice for Safe Behaviour.
4. Risk Assessment.
   a. Fleet Risk Assessment.
   b. “3 What’s” Risk Assessment.
5. H.S.E. Rules.
6. Permit to Work.
7. Tag Out/Lock Out System.
8. Enclosed Space Entry.
9. Hot Work Policy.
10. Preventing Injuries.
    a. Mooring Hazards.
    b. Avoiding “Line of Fire”.
11. Emergency Response.
12. Finally Remember.

Give new work a Safe start
Don’t just hope they are smart

Section 2 - Duties

1. Company Duties
2. Duties of seafarer

1. HSE CODE

HSE Protection Code:

The safety of human life is paramount ranked above all other considerations including commercial and operational factors. The Company recognises that no commercial advantage is worth the risk of lost lives or pollution of the marine environment.

Grindrod SHEQ Portal/SMS/Policy/H.S.E. Protection Code

Your safety suggestion might turn us in the right direction……Want Safety! Speak out!

2. EMPLOYEES RESPONSIBLITIES

1. All employees have a duty to act responsibly and to take precautions to protect themselves, their colleagues and others from injury or preventable illness that might arise from their actions.
2. The following points are provided to assist you in this:

• Make every effort to carry out your job in an orderly and safe manner.
• Carryout a TOOL BOX MEETING prior commencement of the job.
• Ask questions if you have any doubts as to what is expected of you.
• Always wear the specified protective clothing and equipment.
• Where applicable, follow the vessel's "Permit to Work" system.
• Always think about the safety aspects of the job and ask yourself the "Three Whats" Risk Assessment before starting to work.
• Use only safe and appropriate tools or equipment. See the PPE matrix for minimum PPE requirement.
• Be appreciative of any colleague who corrects you when you work unsafely - remember, he may have saved your life.
• Correct others tactfully when you see them working unsafely. Stop the job if you are uncertain of the safe working conditions or if you observe an unsafe act.
• Immediately report all accidents, near misses or unsafe practices.
• Ensure that subcontractors such as stevedores or technicians wear correct PPE and comply with safety standards.
• Comply with the company Drug and Alcohol Policy.

3. GOOD ADVICE FOR SAFE BEHAVIOUR

- **Look** where you put your feet.
- **Look** out for trip and slip situations.
- **Look** out for missing gratings, railings or covers. (These hazards should be repaired, marked or isolated).
- **Look** out for wet floors and wet deck areas.
- **Look** up for suspended objects.
- **Look** out for damaged or unsafe electrical cables or connections. (These hazards should be repaired, marked or isolated).
- **Never** walk under suspended objects.
- **Never** stand in bights of wire or rope.
- **Never** step over wires or ropes that are moving or under tension.
- **Always** use the correct safe route between two locations.
- **Never** enter a designated “enclosed space” before completing a permit to work and taking appropriate control measures as defined in the “Enclosed Space Entry Procedure”.
- **Do not** cut corners.
- **When** you work with electrical, hydraulic, compressed air, or water driven tools, use them according to the manufacturer’s instructions.

You don’t work alone!
Watch out for others.
Safety is Teamwork

FLEET RISK ASSESSMENT

Fleet Risk Assessment is a proactive analysis of day to day shipboard operations to assess the potential risks to the health and safety of those on board, to the environment, the ship, and the control measures you can take to minimise them.
Fleet Risk Assessments are required to be completed in the following instances:

1. When maintenance or failure will affect the functioning of Critical Equipment.
2. When failure of Safety Equipment has occurred.
3. If Under Keel Clearance is less than the Company Policy.
4. Prior to hot-work being conducted outside of a designated hot-work area.
5. If a vessel is entering a High Risk area (as designated by the ISPS Code).
6. Contravention of the content of the HSEQ Management Manual.
7. Any operation onboard the vessel not covered by the HSEQ Manage ment Manual.
8. Any operation which has not been accounted for by a Fleet Risk Assessment. In this instance the vessel shall complete a special risk assessment.

Before starting a task or maintenance procedure:

- Make sure that a Fleet Risk Assessment is in place. If not a risk assessment shall be completed.
- Make sure that you are aware of the control measures and precautions identified in the risk assessment and that they are implemented.
- Conduct your own “3 What’s” risk assessment.
- If when starting maintenance certain current hazards have not been adequately covered, stop and re access to mitigate the newly identified hazard before recommencing.

Risk assessment completed?
It may be your last chance

3 What’s Risk Assessment

This is an informal proactive risk assessment tool that is quick and easy to use by all and can be applied mentally by you asking a few simple questions before starting a task or operation such as:

- **“What can go wrong?”**
- **“What can cause it?”**
- **“What can prevent it?”**

It will assist you in identifying hazards and precautions that can be taken to minimize the risk.

You should make habit of asking the “Three What’s” even for routine tasks- it may save you or your fellow seafarers from serious injury.

Grindrod SHEQ Portal/SMS/H.S.E./ ”Three What’s” Risk Assessment

6. HEALTH, SAFETY AND ENVIRIONMENTAL RULES

1. Smoking is prohibited except in designated smoking areas.
2. Unlawful drugs, alcohol or other intoxicants must not be brought on board. The Drug and Alcohol Policy adopted by the Company will be strictly enforced and disciplinary action taken as necessary.
3. Company approved personal protective equipment – safety helmets, safety shoes, coveralls, eye and ear protection – must be worn correctly whenever necessary.
4. Safety and environmental protection devices must only be operated by authorised personnel. They must not be isolated, by-passed or have their settings changed without authorisation.
5. Pollution of the marine environment is not permitted. The International Convention for the Prevention of Pollution from Ships, 1973, and the 1978 Protocols, (MARPOL) sets out the requirements for disposal of the following categories of shipboard waste:

- Annex I – Petroleum and products in bulk
- Annex II – Noxious chemicals in bulk
- Annex III – Hazardous packaged goods
- Annex IV – Sewage
- Annex V – Garbage and solid waste
- Annex VI – Vapour emissions

6. In accordance with Company policy and MARPOL requirements:
• Oily water may only be discharged via the oily water separator in strict accordance with MARPOL Annex 1, Chapter 3, Regulation 15 / Chapter 4 Regulation 34, or retained on board until it can be landed ashore to an approved waste disposal facility.
• Bunker procedures are to be strictly complied with.
• Garbage is to be separated and disposed of in strict accordance with the Garbage Management Plan.
• No plastics or prohibited materials may be thrown overboard into the sea.
• Waste and the remains from harmful substances must not be thrown overboard and shall be kept separate from other garbage.
• Take note of special area requirements when the ship is transiting these zones.
7. Tools that are defective or incorrect for the job must not be used.
8. Horseplay, fighting or malicious damage on or to Company property is prohibited.
9. Whenever you notice unsafe conditions, unsafe equipment, unsafe tools, unsafe working practices or other potential risks, you must report it immediately to an appropriate Officer or your Safety Representative in order to get safe conditions restored as soon as possible.
10. All personal injuries or incidents must be reported to the Responsible Officer immediately.
11. Report all near misses to the responsible Officer / Safety representative; do not wait for the next safety meeting. The company adopts the “no blame” approach with respect to all reported safety related matters.

Safety suggestions go a long way
Don’t keep them to yourself.

7. PERMIT TO WORK (HSE 4.11.2)

There are many types of operation on board ship where the routine actions of one person may inadvertently endanger another or when a series of action steps need to be taken to ensure the safety of those engaged in a specific operation. In all instances it is necessary before the work is done, to identify the hazards and then to ensure that they are eliminated or the risk is effectively managed.

The Permit to Work system is an organised and predefined safety procedure. A Permit-to-work does not in itself make the job safe, but contributes to measures for safe working, and placing safety barriers between us and an incident from occurring.

A "Permit to Work" is required for work involving:

- Hot work (outside of the designated hot work space).
- Enclosed space entry.
- Pumproom entry.
- Working aloft.
- Working over the ship's side.
- Electrical Work.
- Isolation of machinery.
- Pressure vessels or pipelines including valves.
- Lift maintenance.
- Asbestos work.
- Diving operations.
- Crane lifting.
- Lifeboat operations.
- Work involving Critical Equipment.

(Check with an appropriate Officer if a "Permit to Work" is required before starting to work.)

Safety precautions specified in the "Permit to Work" must be strictly followed and a copy of the permit must be available for inspection.

Grindrod SHEQ Portal/SMS/H.S.E./Permit to Work

PPE: It's your LAST Defence

Want Safety? The choice is yours.

8. TAG OUT/LOCK OUT SYSTEM (HSE 4.11.12)

When carrying out repairs or maintenance on systems which have been electrically isolated or de-pressurised and drained the system should be protected by a “Tag-out or Lock-out” to prevent electrical power from inadvertently being switched on or from the system being pressurised.

TAG-OUT SYSTEM

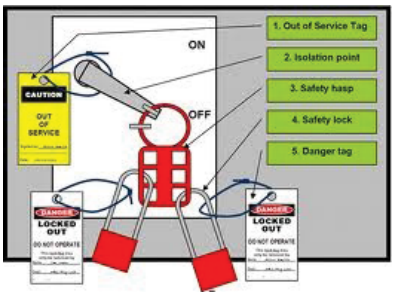
1. Company numbered PVC seals should be used and the appropriate tie-tag attached to the switch or valve etc, which isolates the system.
2. The name of the person(s) working on the system and the person supervising the work should be written on the tie-tag and together with the date and time.
3. When more than one person is working on the system then each person should use their own tie-tag. Each person may remove only their own tie-tag when their job is complete. The system is not to be powered up or pressurised until all tie-tags have been removed indicating that all persons have completed their work.

Or

Alternatively the person supervising the job can place his/her own name on the tie-tag. Before the Supervisor removes the tie-tag he/she must check that everyone has completed their work and that the area is safe to energise the system.

LOCK-OUT SYSTEM

1. Is the same as a “tag-out” system except that a pad lock is used instead of a tie-tag.
2. Each person has their own pad lock which is used to lock the system to prevent its use.
3. If more than one person is working on the system then a chain should be used allowing each person to use their own pad lock to lock the system. The system cannot be used until everyone has unlocked and removed their own pad lock.



9. ENCLOSED SPACE ENTRY (HSE 4.10)

Be careful, the atmosphere of any enclosed or confined space is potentially dangerous. The space may be deficient in oxygen and/or contain flammable or toxic fumes, gases or vapours. Do not enter until the space has been checked by a Responsible Officer and declared safe for entry, and a "Permit to Work" has been issued.

The attempted rapid rescue of personnel who have collapsed in an enclosed space has resulted in far too many additional deaths from impulsive or ill-prepared rescue attempts. It is a human reaction to go to the aid of a colleague in difficulties. Do not attempt it – call for assistance and wait for a properly prepared and kitted rescue team.

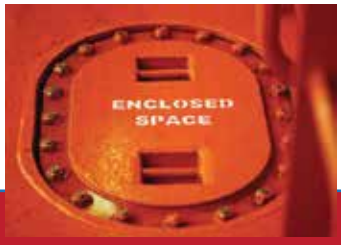
An enclosed space is a space that has any one of the following characteristics:

a. Restricted access;
b. Unfavourable natural ventilation; or
c. Atmosphere that may be hazardous due to the presence of hydrocarbon gas, toxic gases including fumigation gas, inert gas or oxygen deficiency.

This definition includes cargo tanks, ballast tanks, fuel tanks, water tanks, lubricating oil tanks, slop and waste oil tanks, sewage tanks, cofferdams, duct keels, void spaces, trunkings, cargo pumprooms, chain lockers, pipelines or fittings connected to any of these. It also includes inert gas scrubbers and water seals, exhaust pipes and silencers, boiler furnaces and drums, engine crankcases and scavenge trunks, condensers and any other item of machinery or equipment that is not routinely ventilated and entered.

Cargo holds containing hazardous cargo, toxic cargo or oxygen depleting cargo are also considered enclosed spaces.

Grindrod SHEQ Portal/SMS/Policy/H.S.E./Enclosed Space Entry

HOT WORK POLICY

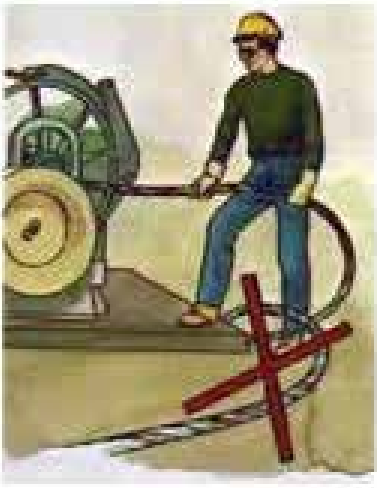
1. Hot work is any work involving welding or burning, and other work including certain drilling and grinding operations, electrical work and use of non-intrinsically safe electrical equipment, which might produce an incendive spark.
2. The engine room workshop is the **"designated hot work area".** Hot work is permitted in this area without a hot work permit.
3. A hot work permit and permission of the Master is required whenever hot work is undertaken outside of the "designated hot work area".
4. Hot work outside of the machinery spaces is not permitted without the permission of the Company, when the vessel is carrying hazardous cargo.
5. The hot work procedures listed in the HSE manual, Section 4.11 have to be strictly applied.

Grindrod SHEQ Portal/SMS/Policy/H.S.E./Hot Work

MOORING HAZARDS

Bights

Any rope or wire can be coiled, intentionally or by chance. A loop, coil or a section of loose line can injure or kill if the line suddenly tightens. These hazards are commonly referred to as ‘bights’.
The sudden tension of a line results not only in the tightening of any bights but also the rapid movement of the line towards the line of tension, lifting anyone or anything trapped in its path.



Warning

Bights in lines are dangerous.

• **NEVER** stand inside a bight.
• Know where your feet are while you work and regularly check that your feet are outside any bights.
• Inexperienced crew such as cadets and fresh ratings should only be allowed to handle lines under supervision.
• Only the crew required should be present at the mooring station. Persons not actively involved in the mooring operation (catering, engine or off-duty crew coming on deck) must be kept clear of the mooring station.

Snap-back from breaking mooring lines

Snap-back is the sudden release of the energy stored in a tensioned mooring line when it parts as the mooring line reverts to its original length. The two ends of the line recoil or snap-back towards or past their secured ends. When a synthetic mooring line breaks, the snap-back effect can be extremely powerful and the rope ends may reach a high velocity as they recoil. **Anyone standing within the snap-back zone at either end of the line risks serious injury or death.**

As per CODE OF SAFE WORKING PRACTICE:

Owing to the design of mooring decks, the entire area should be considered a potential snap-back zone. All crew working on a mooring deck should be made aware of this with clear visible signage.

The painting of snap-back zones on mooring decks should be avoided because they may give a false sense of security

"Entire mooring area is potential snap-back zone" is to be marked at a prominent place on forecastle and poop deck.

The following diagrams illustrate the danger zones when mooring lines break and snap backs occur :

That's how long it taken to have an accident

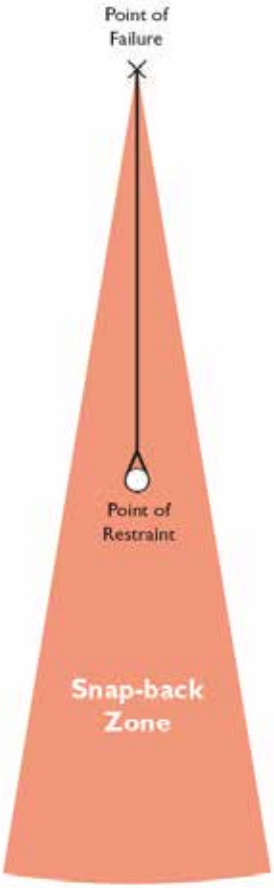


Figure 1 : A simple snap-back recoil area

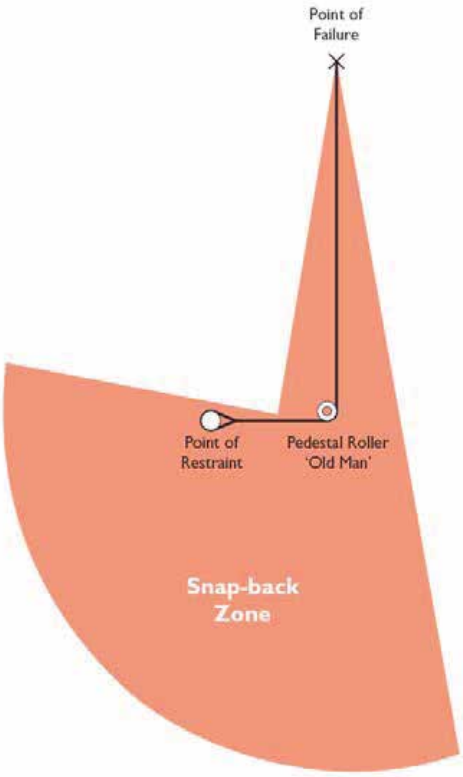


Figure 2: A more complex snap back area with whipping around a roller.

AVOIDING “LINE OF FIRE”

On nearly every job there is something which could hit, spray, pinch or crush you. The first priority should be to eliminate these hazards entirely is possible, but if not, focus on moving out of the line of fire.

“Line of Fire” is the zone within a work area where there is a risk of serious injury of someone being hit or stuck by something which suddenly starts to move or releases unexpectedly. Many Injuries occur on board because crew are positioned in the “Line of Fire” when carrying out their work.

The “Line of Fire” hazards to look for are:

- **Pressure** - Fluids (hydraulic, air, water, hydrocarbons) when a flange, drain or valve is opened, pressurised cylinders.
- **Force and tension** - Torque wrenches or other levers used to apply force.
- **Gravity** - Loads that could fall or tip due to rigging failure **Standing under loads being lifted places you in the line of fire.**
- **Automated machinery** – Automated machinery may start without notice, e.g. air compressors start automatically when the pressure in the storage tank drops too far.
- **Flying debris** – Sharp pieces flying when using a hammer or a grinding disc etc.
- **Contact with stationary hazards** - Contact with exposed live electrical parts.
- **Dropped objects** – Tools like a hammer left loose or unsecured when working at heights which could fall.
- **Tensioned lines** – Snap back zones during mooring operations.
- **Objects with roll/shift potential** - Unsecured pipelines on deck, unsecured objects that may shift when a vessel is moving in a seaway.

Grindrod SHEQ Portal/SMS/Policy/H.S.E./Safety Campaign/Line of Fire

GENERAL RESPONSE TO ANY EMERGENCY

1. SOUND THE ALARM so that others are aware of the nature and location of the emergency.
2. NEVER put yourself in danger or attempt to tackle a problem that is beyond your experience or ability to deal with. If you don't know what to do, GET HELP.
3. DO NOT PANIC – you are far more likely to injure yourself or make the situation worse through inappropriate actions if you panic.

MAN OVERBOARD

1. Sound the alarm by shouting "Man overboard!" as loud as you can.
2. Throw a lifebuoy as close to the person in the water as possible.
3. Keep watching and pointing at the person, but if nothing happens after a minute or so you probably have not been noticed, and will need to approach others urgently and inform them of the situation.

FIRE

1. If you detect a fire or smell burning, remember the word **F I R E**.

F find the fire - and set alarm off
I inform - inform others and superiors of the fire
R restrict - prevent the fire from spreading
E xtinguish - put out the fire with the right equipment and assistance

2. If you see smoke coming from a compartment, NEVER OPEN THE DOOR. Always sound the alarm and get assistance.

MEDICAL EMERGENCIES

1. In event of a fellow seafarer becoming injured, remember the "general response" guidelines above.
2. If you have medical training and know what to do, treat the casualty as you have been told.
3. If you are not sure what to do, **SOUND THE ALARM AND GET HELP**. Do not attempt to treat the casualty as you could make his/her condition worse.

13. FINALLY REMEMBER

REMEMBER

1. Only follow approved safe working practices.
2. Prevent others, whether senior or junior to you, from acting unsafely or dangerously.
3. Always use the equipment and clothing provided for your personal protection.
4. Keep PPE it in good order and report and defects.
5. Keep your workplace clean and tidy.
6. Always inspect equipment and tools before use.
7. When moving around the vessel, never run, jump or take unsafe shortcuts. Take extra care in bad weather conditions.
8. Do not take unnecessary risks or let time pressure you into taking unsafe shortcuts.
9. Never allow anyone to work who is under the influence of alcohol, drugs or fatigue
10. Smoke only in designated and approved places.
11. Look after your health and fitness.
12. Report every "near miss". They are often more important than some accidents.
13. Report every injury, however small.
14. Hold onto the handrail when using stairs on board.
15. When in doubt stop the operation and ask for advice.
16. Trainees should always be accompanied and supervise by other ship's staff when working.

To be able to face tomorrow – Try safety today

Think safety!

Your family will love you for it

The decision is yours

Be a part of the Safety chain and not the missing link

Duties of Company

It is the duty of the company to protect the health and safety of seafarers and others so far as is reasonably practicable. The principles that should underpin health and safety measures are:

• The avoidance of risks, which among other things includes the combating of risks at source and the replacement of dangerous practices, substances or equipment by non-dangerous or less dangerous practices, substances or equipment;
• The evaluation of unavoidable risks and the taking of action to reduce them;
• The adoption of work patterns of the individual, especially in respect of the design of the workplace and the choice of work equipment, to reducing any consequent adverse effect on workers' health and safety;
• The adaptation of procedures to take account of new technology and other changes in working practices, equipment, the working environment and any other factors that may affect health and safety;
• The adoption of a coherent approach to management of the vessel or undertaking, taking account of health and safety at every level of the organisation;
• Giving collective protective measures priority over individual protective measures; and
• The provision of appropriate and relevant information and instruction for workers.

The Company is also responsible for ensuring that seafarers have the appropriate information, training and instruction to enable them to work safely, making arrangements for consultation with seafarers about health and safety matters, and having systems for recording and investigating safety incidents and accidents on board.

Seafarers are required to:

• Take reasonable care for their own health and safety and that of others on board who may be affected by their acts or omissions;
• Cooperate with anyone else carrying out health and safety duties, including compliance with control measures identified during the employer's or company's risk assessment;
• Report any identified serious hazards or deficiencies immediately to the appropriate officer or other responsible person; and
• Make proper use of plant and machinery, and treat any hazard to health or safety (such as a dangerous substance) with due caution.

It is also an offence for any person intentionally or recklessly to interfere with or misuse anything provided in the interests of health and safety.

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