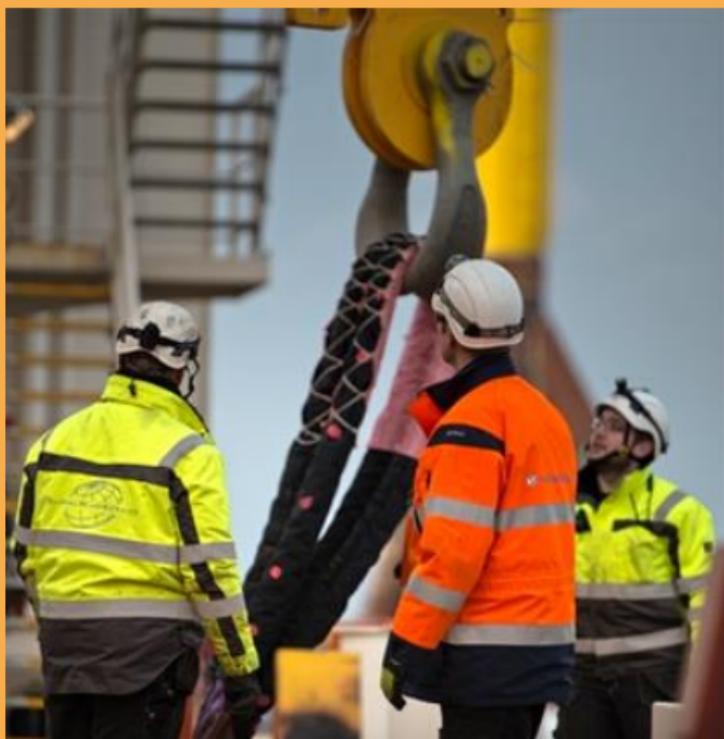


Safety handbook

Offshore wind



 Fred. Olsen Ocean

 Fred. Olsen Windcarrier

 Universal Foundation

GLOBAL WIND SERVICE

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Note: This handbook should be considered as a guideline. It does not take precedence over the 'FOO HSE Manual' or applicable procedures.

Think first – Act safely

Stop work policy



You are fully authorised to stop any work that you consider to be unsafe.

This means that you have the right - and the responsibility - to stop your own or other's work if you believe that it threatens the safety for personnel or may result in material damage or an environmental incident.

The person in charge of the operation will review your notification and decide whether it is safe to continue or not.

Stop work should be recorded on Observation Card

Personal Protective Equipment



The standard for minimum Personal Protective Equipment (PPE) on all our vessels and work sites:



Helmet



Eye protection



Gloves



Hi-vis



Safety boots

Depending on the job, and subject to risk assessments and local site regulations, additional PPE shall be used as needed.

The 'FOO HSE Manual' and vessel PPE procedure provide detailed requirements and specify rules for exemptions.

Slips, trips, falls & cuts



Most incidents occur doing normal work in low hazard situations. On a vessel, even a minor injury may require evacuation or lead to stop of operations.

- Good housekeeping prevents accidents!
Tidy up when you work, not afterwards
- Don't rush. Never run!
- Keep walkways free of obstacles
- Clean up oil spills immediately
- Don't walk in stairs carrying things in both hands. Hold one hand to the railing
- Protect your fingers - wear gloves
- Only use knives with proper grip stop



Safety barriers

Tape or chains are used to separate people from hazards. Respect them!

We have two types:



RED/WHITE = No access without permission

Only people directly involved in the operation can be inside the barrier. To enter, ask for permission from the barrier owner.

Typical use: Lifting zones, drop zones, blocking entrances, hatch openings, etc.



YELLOW/BLACK = Hazard zone

You may enter if strictly needed. Observe the hazards inside the barrier.

Typical use: Grinding, welding, slippery surface, etc.

Important: Barriers should be put up immediately before work starts, and taken down immediately after work is finished.

Dropped objects



Our work involves a constant risk of dropped objects, often potentially fatal.

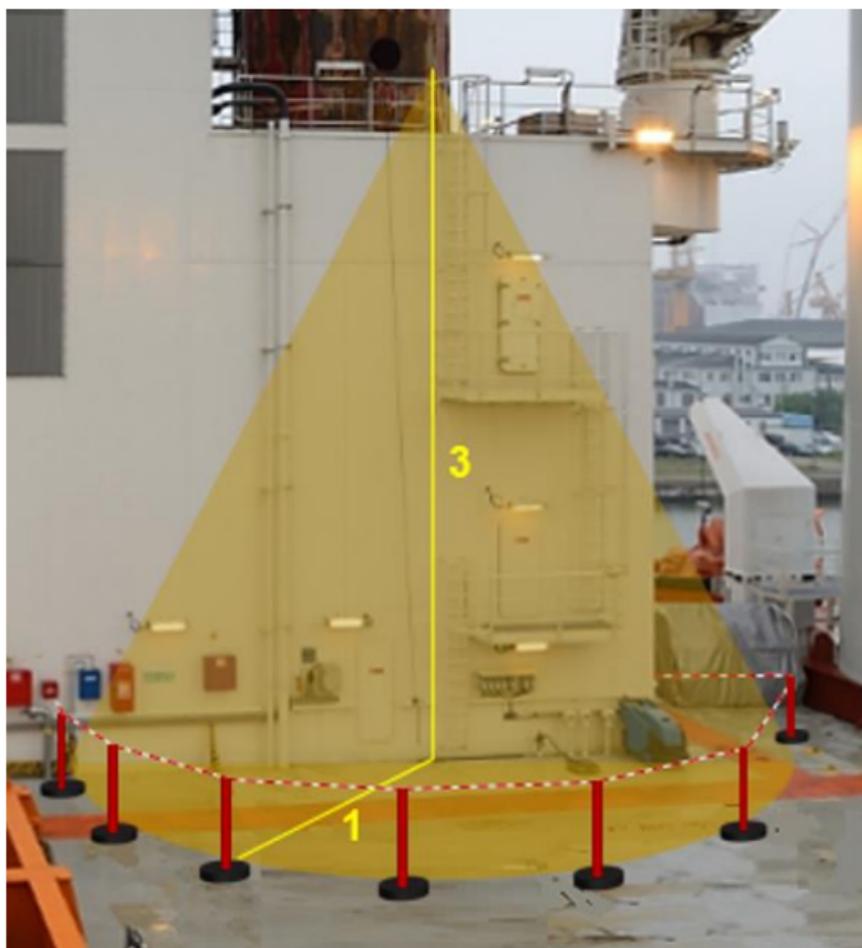
Prevent dropped object accidents:

- Working above people underneath is not allowed. Working under people above is not allowed
- Two independent safety barriers. Always!
- Secure tools and loose objects with lanyards suitable for stopping a fall
- Fence off the drop zone (radius $1/3$ of fall height)
- Check loads for loose objects before lifting
- Stand clear of hanging load – min 2 meter
- Inspect work area before finishing. No tools or equipment to be left at height

Drop Zone

Always two independent barriers! In addition to securing tools and equipment at height, establish a Drop Zone below. Use red/white fencing – do not enter without permission!

The radius should be 1/3 of the fall height.



Working at heights



You are working at heights when there is a risk of injuries if you fall.

- Working at heights shall be planned carefully. Determine your need for tools, materials and safety equipment
- Check that fall arrest equipment have in-date certificates. Inspect it prior to use
- Prepare how to rescue yourself or your colleague. Provide sufficient rescue equipment
- Check that tools, radios and other loose objects are secured with lanyards, and that pockets are emptied
- Only persons with proper training are allowed to work at heights

Lifting operations



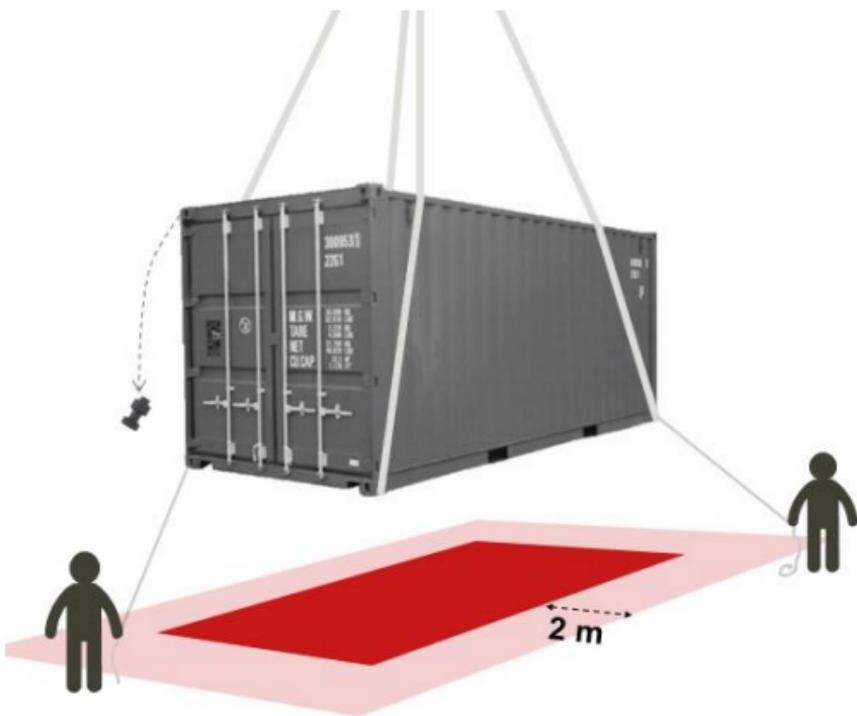
Lifting means risk of dropped load and risk of falling objects.

Observe these basic rules:

- RA, TBT and Take2 prior to start of all lifting. Heavy lifts and non-standard lifts require Lift Plan and PTW
- Fence off the lift zone (red/white barriers)
- Keep people not directly involved in the lifting out of the lift zone
- Agree on communication procedures
- Check that the weather is within the specified limits
- Use only 4-part shackles with cotter pin (lock clips are allowed for temporary rigging)
- All lifting accessories shall be certified and colour coded

The 2-meter rule

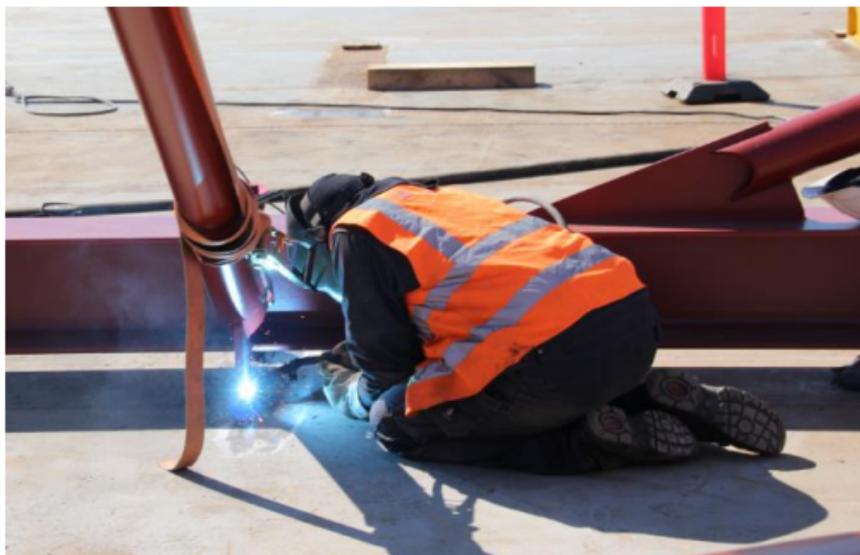
Always stand well clear of the load during lifting!
The load may fall and crush you. And consider the risk of objects falling off it.



Be safe:

- Minimum 2 m distance to the load when lifting
- No direct contact between people and load during the lift! Use taglines or 'lollipop'
- When the load is at 0.5 m from touch-down (knee height) you may contact it for final positioning

Hot works



Hot work is welding, burning, flame cutting, metal grinding, heat shrinking, or other activities causing high temperatures. See the 'Hot works procedure' for detailed requirements.

Basic rules:

- Place oxygen and acetylene bottles apart to minimise risk for explosions
- Equip hoses with flashback arrestors
- Protect electrical equipment against water ingress
- Check that lifting equipment (bottle racks, equipment baskets, etc.) are certified and in order
- Take measures against fire (extinguishers, fire watches, prepare fire hoses, etc.)

Chemicals handling



Almost all work involves handling various chemical products. Many of these may be harmful to your health. Take the necessary precautions.

- Always read the Safety Data Sheet (SDS) thoroughly before you use any chemical
- Use proper PPE (nitril gloves, face mask, visor, goggles, etc.). The SDS tells you what you need. Follow the requirements!
- Make sure that you have eye wash station ready for use near the work place
- Always store chemicals in their original containers or in containers marked with original labels. Never fill chemicals on drinking bottles

Observation Technique



Is it safe? Observation Technique is an accident prevention tool. Key points:

- Get into the “what if” mindset
- How many safety barriers protect you? Always minimum two independent barriers to stop incidents from happening!
- Develop individual skills to observe unsafe conditions at an early stage
- Do "hazard hunts": Systematic walk-through of the site to discover potential risks

Use Observation Cards to report hazards, unsafe conditions, positive safety related observations, best practices and to suggest improvements.

Permit to Work (PTW)

The Permit to Work (PTW) systems are implemented to control hazardous work and to coordinate simultaneous operations.

Work that requires PTW (see the PTW procedure):

- **Hot works:** Welding, grinding, flame cutting' use of powered metal cutting tools, use of powered steel wire brushes), etc.
- **Cold work:** Heavy lifts or special lifts, work at heights, risk of dropped objects, work over water, using FRC, MEWP, pressure equipment, etc.
- **Special PTW:** Work affecting LSA or FFE, enclosed space, hot works in Hazard Zone, man-basket operations, vessel-to-vessel transfer.

The image shows a sample Permit to Work (PTW) form. The form is titled "Permit to Work (PTW)" and includes a reference number "09532". It is divided into several sections:

- 1. Specification of Work:** Includes fields for "Location", "Description of work", and "Nature of change or circumstances affecting the work".
- 2. Safety:** Includes a "Prepared by" field and checkboxes for "No work", "No hot work", and "No cold work".
- 3. Risk Assessment:** Includes a "Risk assessment to be carried out" field and a table for "Risk assessment to be carried out". The table has columns for "Activity", "Risk level", "Control measures", "Residual risk", and "Residual risk level".
- 4. Risk Treatment:** Includes a "Risk treatment to be carried out" field and a table for "Risk treatment to be carried out". The table has columns for "Activity", "Risk level", "Control measures", "Residual risk", and "Residual risk level".
- 5. Authorization:** Includes fields for "Authorized by", "Authorized on behalf of", "Authorized on behalf of", and "Authorized on behalf of".
- 6. Completion:** Includes fields for "Work completed", "Work not completed", "Work not completed", and "Work not completed".

'Take2'

'Take2' is a last-minute risk assessment at the point of work, done either alone or together with your colleagues. It's informal – no records are required.

Make it a habit to take a short step back before you start, observe the work site, and ask yourself:

1. What is the task?

Step-by-step work procedure?

Do you have the right tools?

Do you have the right knowledge?

Which requirements and rules apply?

2. What can go wrong?

What are the risks?

What is different today?

What else is happening nearby?

3. How can we protect ourselves?

How can the risks be treated?

RA, PTW, TBT needed?

Do you have the right PPE for this job?

4. Is it safe to start?

Are all risk treatment actions in place before work begins? If "no" – don't start the work!