

PROPER SELECTION AND USE OF LIFE JACKETS CAN SAVE LIVES

In February 2021, a worker drowned after falling into the sea while descending the pilot ladder of a marine vessel. The worker was wearing an inflatable life jacket, but it failed to keep him afloat.

A similar case occurred in May 2022 where another worker also fell into the sea while transferring between vessels. The worker was wearing a manual inflatable life jacket but he did not activate it after falling into the water. He drowned as a result.

Life jackets are essential personal protective equipment for workers exposed to the risk of falling into water and drowning. Persons working near water must put on suitable life jackets as they significantly increase the chances of survival should one fall into the water.

Regulation 23(11) of the Workplace Safety and Health (General Provisions) Regulations specifies the duty of an employer to provide suitable life jackets or other flotation equipment to all persons exposed to the risk of falling into water and of drowning.

To ensure that life jackets will work as intended in an emergency, employers are advised to carry out the following:

- Provide workers with a suitable life jacket of the right performance level;
- Familiarise workers on the proper use of life jackets; and
- Periodically inspect and maintain life jackets as part of a preventive maintenance programme.

Selecting appropriate life jackets for work activity

There are two common types of life jackets – foam life jackets and inflatable life jackets. The type of work activity and water conditions must be considered before selecting a suitable life jacket.

Companies must decide on the type most suited for the intended work activity. For work at the open sea (where the shore is not visible), ISO 12402 recommends the use of life jackets with a performance level at least 150 and above.

ISO 12402 Performance Levels

Level 100

- For use in calm waters when the shore is visible.
- Not suitable for rough conditions.
- Ideal for situations where waiting for rescue may be necessary.

Level 150

- Suitable for coastal and offshore waters.
- Helps to turn the user (conscious or otherwise) face up and into a safe position onto their back. This keeps users' airways clear and reduces the risk of drowning.
- Automatic activation of life jacket which ensures inflation regardless of user's condition.

Level 275

- For use in offshore or rough weather conditions.
- Helps to keep the user's face up and above water, even when wearing bulky clothing or carrying heavy items. This keeps users' airways clear and reduces the risk of drowning.
- Automatic activation of life jacket which ensures inflation regardless of user's condition.

[The MPA Guidelines for Safe Transfer of Persons between Vessels at Anchorages](#) recommends the use of a working SOLAS type-approved life jacket or a life jacket meeting ISO 12402 Personal Flotation Devices performance level 100 or higher.

Life jacket inspection and maintenance

Life jackets need to be regularly inspected and maintained to ensure their reliability and effectiveness during an emergency. The records of purchase and maintenance of the life jackets should be kept along with other maintenance records.

Foam life jackets

Inspect foam life jackets for any sign of damage or wear and tear before each use, and ensure that the securing straps can be properly fastened. Inspect foam life jackets that are not often used at least once a year.

Inflatable life jackets

Inspect inflatable life jackets for any sign of damage or wear and tear before each use, and ensure that the securing straps can be properly fastened. Send inflatable life jackets for functionality inspections/maintenance checks by the manufacturer or its certified agent at least once a year. Functionality inspection includes leak tests, checking and replacing defective or expired components, as well as checking the inflation mechanism(s), harness, buckles and bladder cover.

Proper selection and maintenance of life jackets are necessary to ensure the safety of persons working near water. The WSH Council urges all employers to implement robust WSH policies and procedures on the selection and use of life jackets and their maintenance.

Further Information

1. [Workplace Safety and Health Act](#)
2. [Workplace Safety and Health \(Risk Management\) Regulations](#)
3. [Workplace Safety and Health \(General Provisions\) Regulations](#)
4. [WSH Council's Code of Practice on WSH Risk Management](#)
5. [International Convention for the Safety of Life at Sea \(SOLAS\), 1974](#)
6. [ISO 12402 – 2 to 10: 2020 Personal Flotation Devices](#)
7. [Maritime And Port Authority's Guidelines for Safe Transfer of Persons Between Vessels at Anchorages](#)
8. [WSH Council's Guide to WSH for Service Providers on Safe Working on Ships at Anchorages](#)
9. [WSH Council's Case Studies on Working in and Around Water](#)