

Fully Online Maritime Safety Training

Lithium-Ion Battery Safety Awareness

for Superyachts













About

Lithium-ion batteries are becoming increasingly common in everyday items such as smartphones, laptops, and electric vehicles.

They are also found on yachts, in power tools, remote controls, UPS, servers, personal watercraft, and tenders. Despite their many benefits, these batteries can also present significant dangers.

Tailored specifically for yacht crew, officers, captains, and yacht managers, the Lithium-ion Battery Safety Awareness on Superyachts course helps Learners identify and implement suitable Li-ion fire prevention measures and considerations for responding to battery-related emergencies.

Lithium-ion battery Safety Awareness on Superyachts is essential for all yacht crew, staff and shoreside managers of yachts that carry Lithium-ion battery-powered tenders, toys, and equipment.

Entirely online, the course consists of eight short lessons that provide an in-depth study of the electrochemistry and hazards of Li-ion batteries.

The philosophy underpinning this course is that prevention is better than a cure, and the course sets out best practices that can be easily implemented to mitigate any risks associated with Li-ion technology.

Target Audience

This course is ideal for anyone involved in yacht operations who wishes to improve their knowledge of Li-ion battery safety and is specifically helpful for:

- Superyacht crew who use Li-ion batteryoperated equipment.
- Competent Persons responsible for battery charging operations.
- Safety Officers and Emergency Response Teams.
- Yacht Captains and Officers who must provide confident leadership in implementing safe operating procedures for Li-ion batteries.
- Yacht Managers who must manage and document their safety culture for Li-ion batteries.

Course Duration

The course lasts for approximately 3 to 4 hours depending on the learner's abilities and reading speed, and whether you use the voiceover facility. You can enter and exit this course as often as you require.



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Li-ion Competent Person - MGN 681

In their recent MGN 681, the UK's Maritime and Coastguard Agency introduced the requirement that competent persons undertake battery charging operations.

Drawing from the UK's Code of Safe Working Practices and MGN 681, this course helps define the role and duties of this person when working with Li-ion batteries.

The course will provide the Learner with the detailed knowledge required to safely conduct battery charging operations, identify hazardous or suspect batteries and recognise the necessary steps to mitigate the risk until these batteries are removed from the yacht.

Course Learning Outcomes

Selected learning outcomes of this course include:

- Identifying where lithium-ion batteries may be encountered on yachts.
- Understanding the basic electrochemical processes of lithium-ion batteries
- Understanding the requirements for identifying hazards on yachts.
- Appreciating the toxic and explosive gases emitted from Li-ion batteries.
- Understanding the hazards of thermal runaway and battery fire.

- Recognising the challenges of responding to a thermal runaway event.
- Recognising the suitability of water-based fire suppression systems for battery fires.
- Introducing specialist equipment for containing and suppressing Li-ion fires.
- Identifying battery abuse conditions and hazardous battery defects.
- Appreciating their requirements for battery stowage compartments.
- Understanding the requirements for battery charging stations.
- Appreciating the knowledge required of the Competent Person overseeing battery charging operations.

Compliances

1. Compliance with ISM Code

ISM Code 6.3 mandates yacht managers to establish procedures for personnel, especially those in safety and environmental roles, ensuring proper familiarisation with their duties.

Our course addresses this by offering comprehensive lithium-ion battery safety training, showcasing a commitment to fulfilling ISM Code obligations and keeping personnel updated on safety protocols.



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Compliances Continued

2. Meeting ISM Code 6.5 Requirements

ISM Code 6.5 stresses the importance of identifying and providing necessary training to support safety management systems.

The "Lithium-ion Battery Safety Awareness for Superyachts" course aligns with this mandate, offering in-depth insights into lithium-ion battery safety to ensure all personnel have essential training for safe superyacht operations.

3. STCW Convention Regulation I/14 - 5 Compliance

STCW Convention Regulation I/14 - 5 highlights the need for companies to familiarise seafarers with their duties, ship arrangements, equipment, and relevant procedures.

Our course surpasses theoretical frameworks by providing practical knowledge crucial for routine and emergency situations involving lithium-ion batteries, empowering yacht managers to enhance crew competency in line with the STCW Convention.

Course Benefits

The benefits of the **Lithium-Ion Battery Safety Awareness on Superyachts** eLearning course are:

Enhanced Safety Knowledge

The course equips crew members, safety officers, and competent persons with the knowledge and skills to identify and mitigate lithium-ion battery hazards on superyachts.

Tailored for a Yachting Audience

The course is explicitly designed for individuals in the yachting industry, ensuring that the content is relevant and applicable to their needs.

Delivered Entirely Online

The course's online format allows participants to conveniently access the material anywhere, making it suitable for busy yacht professionals.

Real-World Examples

Learners have access to real-world examples and case studies that help them relate theoretical knowledge to practical situations they may encounter in their roles.

Flexible Duration

The course is designed to be completed within 2.5 hours, offering flexibility for customisation based on participants' specific needs and organisational objectives.

Comprehensive Course Outline

The course covers essential topics, from the fundamentals of lithium-ion batteries to identifying hazardous conditions, proper stowage, and safe charging practices.



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Course Benefits Continued

Regulatory Compliance
 It ensures that participants understand and comply with relevant regulations and guidelines for lithium-ion battery safety on yachts.

Preventative Focus

The course emphasises the prevention and early identification of hazardous conditions, reducing the risk of battery-related incidents on board yachts.

Safety Culture Promotion

By providing knowledge about battery safety, the course fosters a safety- culture among crew members and staff, ultimately enhancing overall safety on superyachts.

Course Partner

VIRSEC Ltd have built this fully online, Lithium-Ion Battery Awareness Safety Course in Partnership with Seascope France.





Course Bulk Purchase Offer

If you wish to place more than one crew member or staff member on this course, we offer bulk discount packages. Email us at training@virsec.org to learn more about the amazing discounts available.



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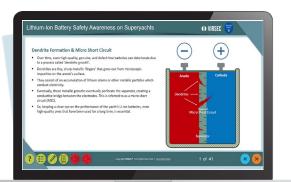


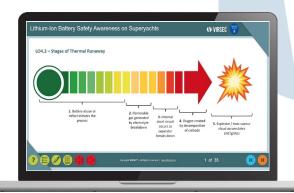


Sample Course Slides

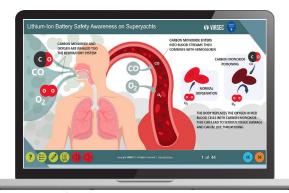


























Contact Us

VIRSEC Ltd.
Units 2a(i) & 2a(ii)
Beehive Mill
Jersey Street
Manchester
M4 6JG
United Kingdom

T: +44 (0)161 763 4427

E: training@virsec.org

W: www.virsec.org









