
**Ships and marine technology —
Inflatable buoyancy support systems
against flooding of ships —**

**Part 2:
Buoyancy chamber**

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Foreword

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This document was prepared by Technical Committee ISO/TC 8, *Ships and marine technology*, Subcommittee SC 8, *Ship design*.

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Introduction

This document is intended to support the development and technical implementation of various types of buoyancy support systems.

In case of marine accidents, such as collisions and groundings, excessive damage and flooding can cause the ship to sink, capsize or impede the use of its essential navigation equipment. As a ship has watertight bulkheads, doors, hatches and other equipment, the consequences of flooding accidents can usually be mitigated at the early phases of the accident. Subsequently, the progressive flooding after an important accident can cause the sinking or capsizing of the ship.

To counter these problems, inflatable buoyancy support systems can be used, which are composed of a gas supply system and a buoyancy chamber, where the gas supply system provides the medium for the inflation of the buoyancy chamber. A fixed fire extinguisher can be used as a gas inlet when the ship is at risk of sinking or overturning. When fire extinguishers are used to supply the media into the buoyancy chamber, additional means must be available not to impair fire-fighting, following SOLAS, Chapter II-2A, Regulation 4. Buoyancy chambers have various shapes and capacities to aid a damaged ship's buoyancy.

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