
**Ships and marine technology —
Manoeuvring of ships —**

**Part 1:
General concepts, quantities and test
conditions**

*Navires et technologie maritime — Manoeuvres des navires —
Partie 1: Notions générales, grandeurs et conditions d'essai*



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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2. www.iso.org/directives

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The committee responsible for this document is ISO/TC 8, *Ships and marine technology*, Subcommittee SC 6, *Navigation and ship operations*.

ISO 13643 consists of the following parts, under the general title *Ships and marine technology — Manoeuvring of ships*:

- *Part 1: General concepts, quantities and test conditions*
- *Part 2: Tuning and yaw checking*
- *Part 3: Yaw stability and steering*
- *Part 4: Stopping, acceleration, traversing*
- *Part 5: Submarine specials*
- *Part 6: Model test specials*

Ships and marine technology — Manoeuvring of ships —

Part 1:

General concepts, quantities and test conditions

1 Scope

This part of ISO 13643 applies to manoeuvring tests with surface ships, submarines, and models.

This part of ISO 13643 defines concepts, symbols, and test conditions constituting general fundamentals which are to be applied for the description and determination of certain ship manoeuvring characteristics together with the respective test-specific physical quantities contained in ISO 13643-2 to ISO 13643-6.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 19019, *Sea-going vessels and marine technology — Instructions for planning, carrying out and reporting sea trials*

ISO 80000-1, *Quantities and units — Part 1: General*

ISO 80000-3, *Quantities and units — Part 3: Space and time*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

manoeuvring

all manoeuvres, manoeuvring tests, and tests or other methods, such as computations, simulations, etc. to establish manoeuvring characteristics

Note 1 to entry: Manoeuvring includes measures to maintain cruising conditions under external disturbances.

3.2

manoeuvre

ship operation measures to change course and/or speed, and in case of submarines, depth

Note 1 to entry: Special actions taken, e.g. for casting-off, turning aside, or rescuing (person over board), are included.

3.3

manoeuvring test

test conducted with a full-scale ship, submarine, or a model to determine and evaluate the manoeuvring characteristics under standardized conditions

Note 1 to entry: Manoeuvring tests are often similar to manoeuvres but organized in such a manner that, as far as possible, specific manoeuvring characteristics can be measured individually.

3.4

CC-Code

computer compatible symbols introduced by the 14th International Towing Tank Conference