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**Ships and marine technology —  
Hydraulic oil systems — Guidance for  
assembly and flushing**

*Navires et technologie maritime — Les systèmes hydrauliques de  
pétrole — Directives pour assembler et rincer*



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## Contents

Page

Foreword.....	iv
1 Scope .....	1
2 Normative references .....	1
3 Recommended guidelines on assembly .....	1
3.1 General .....	1
3.2 Shock test .....	2
4 Recommended guidelines for flushing .....	2
5 Pressure testing .....	2
6 Commissioning .....	3

## Foreword

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The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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ISO 28522 was prepared by Technical Committee ISO/TC 8, *Ships and marine technology*, Subcommittee SC 3, *Piping and machinery*.

# Ships and marine technology — Hydraulic oil systems — Guidance for assembly and flushing

## 1 Scope

This International Standard provides guidance for assembly and flushing of hydraulic oil systems. The aim of the flushing process is twofold:

- to remove dirt from the erection, installation, and
- to demonstrate that the pipes and the system as a whole are sufficiently clean.

This International Standard gives guidelines to ensure that pipes and components are mounted and tested correctly. It also gives practical conditions for the flushing oil and filter.

## 2 Normative references

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

ISO 28521:—<sup>1)</sup>, *Ships and marine technology — Hydraulic oil systems — Guidance for grades of cleanliness and flushing*

## 3 Recommended guidelines on assembly

### 3.1 General

Before assembling it shall be checked that blank-offs on pipes and components are undamaged. If blank-offs are damaged, cleaning shall be repeated.

After the pipe system is assembled, it shall be blown through with dry high-pressure air or nitrogen. In order to remove loose dirt and/or dry out the pipes, lint-free cloths may be pulled through the pipes before connection to components.

Testing for leakage of the pipe system is done with dry high-pressure air, and/or soap and water (with bypassed/blanked-off components). Leakage tests may be postponed during the shock and pressure testing procedure.

Specified flush oil (system or special oil) shall be used to fill the system. System components shall be bypassed.

Flush oil, pumped through a filter when filling, is to be checked carefully. Breathing and refilling shall be secured.

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1) To be published.