



OFFSHORE STANDARDS

DNV-OS-E301

Edition July 2021

Position mooring

The PDF electronic version of this document available at the DNV website dnv.com is the official version. If there are any inconsistencies between the PDF version and any other available version, the PDF version shall prevail.

FOREWORD

DNV offshore standards contain technical requirements, principles and acceptance criteria related to classification of offshore units.

© DNV AS July 2021

Any comments may be sent by e-mail to rules@dnv.com

This service document has been prepared based on available knowledge, technology and/or information at the time of issuance of this document. The use of this document by other parties than DNV is at the user's sole risk. DNV does not accept any liability or responsibility for loss or damages resulting from any use of this document.

CHANGES – CURRENT

This document supersedes the July 2020 edition of DNVGL-OS-E301.

The numbering and/or title of items containing changes is highlighted in red.

Changes July 2021

<i>Topic</i>	<i>Reference</i>	<i>Description</i>
General updates and clarifications	Ch.2 Sec.1 [2.1.1]	Specified the applicable duration of environmental states.
	Ch.2 Sec.1 [2.3.3]	Deleted reference to NPD wind spectrum.
	Ch.2 Sec.1 [3.4.3]	Added a definition of shallow water.
	Ch.2 Sec.1 [3.4.4]	Updated the text to clarify which requirements are applicable for ship shaped units, and which are applicable for column stabilised units.
	Ch.2 Sec.2 [2.1.7]	Updated the proposed mooring line stiffness to be used in mooring analysis.
	Ch.2 Sec.2 [2.1.8]	Added reference to published papers for modelling of fibre rope behaviour.
	Ch.2 Sec.2 [4.5] and Ch.2 Sec.2 [4.6]	Added guidance for selection of consequence class for marine fish farms.
	Ch.2 Sec.3 [3.5]	Deleted the reference to DNV GL ship rules for consequence analysis.
	Ch.2 Sec.4 [1.2]	New subsection specifying applicable limit states for equipment in long term mooring.
	Ch.2 Sec.4 [15.2]	Added requirements for foundation chocking.
	Ch.2 Sec.4 [18]	Removed the factor 0.95 to be applied in the bearing capacity assessment.
	Ch.2 Sec.6 Table 1	Added a requirement for load cell calibration on the assembled units.
	Ch.3 Sec.1 Table 2	Clarified the specific paragraphs applicable for thruster assistance with heading control only.
Ch.3 Sec.2 [12]	Specified the requirements and focus areas for DNV GL survey attendance during installation of mooring systems.	
Mooring system model testing	Ch.2 Sec.2 [2.2.1]	Included additional description on the background for requiring model testing and some guidance on when it may be omitted.
Assessment of mooring line wear	Ch.2 Sec.2 [5.3]	Added a new subsection with requirements for wear assessment in mooring line components.
Turret bearings	Ch.2 Sec.4 [2.2]	Included requirements and guidance for design of turret bearings.
	Ch.3 Sec.2 Table 2	Included certification requirement for turret bearings.