

GENERAL SPECIFICATION

STRUCTURAL

GS EP STR 110

Structure Integrity Management System Requirements

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1. Scope

This specification aims at defining the minimum requirements for the implementation of a Structures Integrity Management System.

It is intended to be used by:

- Company Affiliate and Headquarters teams responsible for Structure Integrity Management
- Contractors mandated by Company to assist in tasks related to Structural Integrity Management.

This General Specification applies to Steel Offshore Jacket and Topsides structures both on Fixed and Floating Units.

Concrete Offshore Structures are not in the scope of this document.

2. Reference documents

The reference documents listed below shall be considered as an integral part of this General Specification.

External Documents

Unless otherwise stipulated, the applicable version of these documents, including relevant appendices and addendums, shall be the latest revision published at the effective date of this document.

Reference	Title
API RP 2SIM	Structural Integrity Management of Fixed Offshore Structures
ISO 19900	Petroleum and natural gas industries - General requirements for offshore structures
ISO 19901-9	Petroleum and natural gas industries - Specific requirements for offshore structures - Part 9: Structural Integrity Management

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Unless otherwise stipulated, the applicable version of these documents, including relevant appendices and addendums, shall be the latest revision published.

Reference	Title
GS EP EXP 311	Plant integrity - Minimum inspection requirements
GS EP STR 001	Weight Monitoring and Weighing of Offshore and Onshore Units
GS EP STR 100	Offshore Steel Structures - General
GS EP STR 106	Assessment of Existing Fixed Offshore Platforms

3. Abbreviations and Definitions

3.1 Abbreviations

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

CVI	Close Visual Inspection
ERS	Emergency Repair System
GVI	General Visual Inspection
NDE	Non-Destructive Examination (including visual inspection)
NDT	Non-Destructive Testing
RBI	Risk-Based Inspection
SIM	Structural Integrity Management
SMR	Strengthening, Modification and/or Repair
SSSV	Sub-Surface Safety Valve

3.2 Definitions

Assessment Initiators: Changes in platform condition or operating experience, such as storms, which require an existing platform to undergo an assessment to demonstrate fitness-for-service.

Deck Elevation: The measured distance from the underside (bottom-of-steel) of the support structure of a topside deck structure to a confirmed datum, such as the mean sea level (MSL).

Exposure Level: Classification system used to establish relevant criteria for a structure based on consequences of failure.

Fitness-for-service: Fulfilment of defined structural integrity and performance requirements.

Note: A structure not meeting all the specific provisions can be fit-for-service, provided it does not cause unacceptable risk to life-safety or the environment.