



AMERICAN PETROLEUM INSTITUTE

API Recommended Practice 2SIM

Structural Integrity Management of Fixed Offshore Structures

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This recommended practice provides guidance for the structural integrity management (SIM) of existing fixed offshore structures used for the drilling, development, production, and storage of hydrocarbons in offshore areas. However, the general principles of SIM apply to any structure.

The SIM process described is based on internationally recognized industry standards including API 2A-WSD, 22nd Edition and ISO 19902:2007, and on global industry best practices. This recommended practice details engineering practices for the evaluation, assessment, and inspection of existing fixed offshore structures to demonstrate their fitness-for-purpose.

Specific guidance is provided for the evaluation of structural damage, above- and below-water structural inspection, fitness-for-purpose assessment, risk reduction, mitigation planning, and the process of decommissioning. This recommended practice incorporates and expands on the recommendations of Section 14, "Surveys" and Section 17, "Assessment of Existing Platforms" as previously provided in API 2A-WSD, 21st Edition. See Annex A for additional information and guidelines on the provisions stated in the numbered sections of this document.

The SIM process provided in this recommended practice is applicable to existing platforms installed at any location worldwide. However, the recommended practice provides specific metocean criteria, which are only applicable for use in fitness-for-purpose assessments of platforms located in the U.S. Gulf of Mexico and the U.S. West Coast.

For guidelines, recommended practices, and other requirements relating to planning, designing, and constructing new offshore floating production systems, including reuse and change-in-use of existing floating production systems, reference should be made to the latest edition of API 2FPS.

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Contents

	Page
1	Scope 1
2	Normative References 1
3	Terms, Definitions, Acronyms, and Abbreviations 1
3.1	Terms and Definitions 1
3.2	Acronyms and Abbreviations 5
4	Structural Integrity Management Overview 6
4.1	General 6
4.2	Competency 7
4.3	Risk 7
4.4	Limitations 7
5	Structural Integrity Management Process 8
5.1	General 8
5.2	Data 8
5.3	Evaluation 10
5.4	Strategy 16
5.5	Program 17
5.6	Decommissioning 17
6	Surveys 18
6.1	Inspection Strategy 18
6.2	Personnel Qualifications 18
6.3	Level I Surveys—Routine Above-water Inspection 18
6.4	Baseline Underwater Inspection 20
6.5	Level II, III, and IV Surveys—Routine Underwater Inspection 21
6.6	Special Inspections 24
6.7	Survey Work Scope 26
6.8	Inspection Specification 26
6.9	Data Records 27
7	Damage Evaluation 27
7.1	General 27
7.2	Degradation Mechanisms 27
7.3	Component Evaluation 29
7.4	System Evaluation 30
8	Structural Assessment Process 30
8.1	General 30
8.2	Assessment Category 31
8.3	Assessment Initiators 31
8.4	Assessment Information 33
8.5	Assessment Method 34
8.6	Performance Criteria 38
8.7	Risk Reduction 38

Contents

	Page
9 Assessment for Metocean Loading	38
9.1 General	38
9.2 Assessment Criteria	39
9.3 Assessment Loading	40
9.4 Design Level Method	43
9.5 Ultimate Strength Method	44
9.6 Risk Reduction	46
10 Assessment for Fatigue Loading	46
11 Assessment for Seismic Loading	46
11.1 General	46
11.2 Simplified Analysis	47
11.3 Design Basis Check	47
11.4 Extreme Level Earthquake	47
11.5 Abnormal Level Earthquake	47
11.6 Risk Reduction	47
12 Assessment for Ice Loading	48
12.1 General	48
12.2 Design Basis Check	48
12.3 Simplified Analysis	48
12.4 Design Level Method	48
12.5 Ultimate Strength Method	48
12.6 Risk Reduction	48
13 Risk Reduction	49
13.1 General	49
13.2 Exposure Reduction	49
13.3 Likelihood Reduction	50
14 Platform Decommissioning	56
14.1 General	56
14.2 Decommissioning Process	57
Annex A (informative) Commentary on Structural Integrity Management	59
Bibliography	95
Figures	
1 SIM Process	6
2 SIM Process and Document Organization	9
3 Risk Categorization Matrix Example	12
4 Assessment Within the SIM Process	15
5 Fitness-for-Purpose Assessment Process	32
6 Deck Silhouette Definition	42
7 Wave Heading and Direction Convention	43
8 SMR Techniques	51

Contents

	Page
A.1 Schematic Load vs Deformation Diagram of an X-braced Platform	67
A.2 Schematic Load vs Deformation Diagram of a Diagonally Braced Platform	68
Tables	
1 Exposure Category Matrix	13
2 Risk-based Inspection Program Intervals	21
3 Default Inspection Program	23
4 Drag Coefficient, C_d , for Wave/Current Platform Deck Forces	43
5 Design Level Metocean Criteria, U.S. Gulf of Mexico	44
6 Ultimate Strength Metocean Criteria, U.S. Gulf of Mexico	45
A.1 Decommissioning Activities	89