

Specification for Drilling and Well Servicing Structures

API SPECIFICATION 4F
THIRD EDITION, JANUARY 2008

EFFECTIVE DATE: JULY 1, 2008



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Upstream Segment

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Specification for Drilling and Well Servicing Structures

1 Scope

This specification states requirements and gives recommendations for suitable steel structures for drilling and well-servicing operations in the petroleum industry, provides a uniform method of rating the structures, and provides two PSLs.

This specification is applicable to all new designs of all steel derricks, masts, guyed masts, substructures, and crown blocks.

Annex A provides a number of standard Supplementary Requirements (SRs) which apply only if specified by the purchaser.

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.

API RP 2A-WSD, *Recommended Practice for Planning, Designing and Constructing Fixed Offshore Platforms—Working Stress Design*

API Bulletin 2INT-MET, *Interim Guidance on Hurricane Conditions in the Gulf of Mexico*

API RP 4G, *Recommended Practice for Use and Procedures for Inspection, Maintenance, and Repair of Drilling and Well Servicing Structures*

API Spec 8A, *Specification for Drilling and Production Hoisting Equipment*

API RP 9B, *Recommended Practice on Application, Care and Use of Wire Rope for Oilfield Service*

AISC 335-89¹, *Specification for Structural Steel Buildings—Allowable Stress Design and Plastic Design*

ASCE/SEI 7-05², *Minimum Design Loads for Buildings and Other Structures*

ASTM A370³, *Standard Test Methods and Definitions for Mechanical Testing of Steel Products*

ASTM A578/A 578M, *Standard Specification for Straight-Beam Ultrasonic Examination of Rolled Steel Plates for Special Applications*

AWS D1.1/D1.1M:2002⁴, *Structural Welding Code — Steel*

ISO 9712⁵, *Non-destructive testing — Qualification and certification of personnel*

ISO 10425, *Steel wire ropes for the petroleum and natural gas industries — Minimum requirements and terms of acceptance*

¹ American Institute of Steel Construction, 1 East Wacker Drive, Suite 3100, Chicago, Illinois 60601, www.aisc.org.

² American Society of Civil Engineers, 1801 Alexander Bell Drive Reston, Virginia 20191, www.asce.org.

³ ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, Pennsylvania 19428-2959, www.astm.org.

⁴ American Welding Society, Incorporated, 550 Northwest LeJeune Road, Box 351040, Miami, Florida 33135, www.aws.org.

⁵ International Organization for Standardization (ISO), 1, rue de Varembe, Case postale 56, CH-1211 Geneva 20, Switzerland. www.iso.org.